The Effects of PCB's and Selected Herbicides on the Biology and Growth of 'Platymonas subcordiformis' and Other Algae

Maine Univ., Orono. Land and Water Resources Inst.*Office of Water Resources Research, Washington, D.C.

Project completion rept. 1 Jul 72-30 Jun 73
AUTHOR: Vadas, Robert L.
C4662H1 FLD: 06F, 13B, 57P, 68E, 68D USGRDR7513
30 Jun 73 38p
REPT NO: 2-74
PROJECT: OWRR-A-027-ME
MONITOR: OWRR-A-027-ME(1)

ABSTRACT: Growth rates and carrying capacities for Platymonas subcordiformis were determined using various concentrations of the PCB, Aroclor 1254, and the organophosphate, Malathion. Growth was slightly and completely inhibited by 100 and 1000 ppb respectively of Aroclor 1254. With Malathion growth inhibition was temporary or complete at 50 ppm or greater. At alkaline pH's the recovery of growth, especially at 50 ppm, took 3 to 5 days. At higher concentrations of Malathion recovery took longer if occurring at all. The inhibitory effects of Malathion, Aroclor, and chlorinated hydrocarbons are modified by inoculum densities, phase of algal growth at which the substance is added and in the case of the former possibly by the pH of the media.

DESCRIPTORS: *Algae, *Herbicides, Pesticides, Plants(Botany), Chlorine aromatic compounds, Growth, Phosphorus organic compounds, Malathion, pH, Chlorohydrocarbons, Inhibitors, Water pollution

IDENTIFIERS: Platymonas subcordiformis, Biphenyl/chloro, NTISDIOWRT

PB-241 056/1ST NTIS Prices: PC$3.75/MF$2.25

Theoretical Model and Solubility Characteristics of Aroclor (Trade Mark) 1254 in Water: Problems Associated with Low-Solubility Compounds in Aquatic Toxicity Tests

National Environmental Research Center, Corvallis, Oreg.

Final rept.
AUTHOR: Schoor, W. Peter
C4525B4 FLD: 07D, 99F, 68D USGRDR7511
Sep 74 38p
REPT NO: EPA-660/3-74-013
MONITOR: 18

ABSTRACT: A theoretical model of the behavior of substances having low water-solubility is presented and discussed with respect to aqueous bioassay. Ultracentrifugal techniques were used in an attempt to study size distributions of Aroclor 1254 aggregates in aqueous emulsions. Results indicate strong adsorption from emulsion by surfaces and a water-solubility at 20C of less than 0.1 microgram/l in distilled water and approximately 40% of that value in water containing 30 g/l NaCl. Implications with regard to aqueous bioassay are discussed.

DESCRIPTORS: *Chlorine aromatic compounds, *Solubility, *Water chemistry, Colloids, Emulsions, Adsorption, Water pollution

IDENTIFIERS: *Biphenyl/chloro, Aroclor 1254, NTISEPAORD

PB-240 550/4ST NTIS Prices: PC$3.75/MF$2.25

MONS 212083

Chlorinated Hydrocarbons in the Sargasso Sea Atmosphere and Surface Water

Rhode Island Univ., Kingston. Dept. of Food and Resource Chemistry.*National Science Foundation, Washington, D.C. Office for the International Decade of Ocean Exploration.
AUTHOR: Bidleman, T. F., Olney, C. E.
C4521E1 PLD: 04A, 08J, 68A, 68D USGRDR7511
Aug 73 5p
GRANT: NSF-GX-33777
MONITOR: NSF/IDOE-75-8
Also pub. as Rhode Island Agricultural Experiment Station, Contrib-1500.
Pub. in Science, v183 p516-518, 8 Feb 74.

ABSTRACT: Polychlorinated biphenyls (PCB), DDT, and chlordane concentrations were measured in air sampled from a tower on the south shore of Bermuda and in Sargasso Sea surface water approximately 80 to 320 kilometers south of Bermuda. The atmospheric chlorinated hydrocarbons appeared to be gaseous, and the DDT concentration was two orders of magnitude higher than previously reported particulate values. The PCB and DDT were enriched in the surface microlayer (150 micrometers) relative to their concentrations in water at a depth of 30 centimeters. Atmospheric residence times for PCB and DDT of 40 to 50 days, calculated from the concentrations in the air and water, are 20 times shorter than values previously estimated for DDT from rainfall and DDT production data.

DESCRIPTORS: *Chlorine aromatic compounds, *Air pollution, *Atmospheric composition, *Water pollution, Air water interactions, Sea water, Bermuda, DDT, Chlordon

IDENTIFIERS: Residence time, Biphenyl/chloro, Reprints, NTISIDOE, NTISNSF

PB-239 980/6ST NTIS Prices: Not available NTIS

The Fate of Select Pesticides in the Aquatic Environment

Illinois Univ., Urbana.*National Environmental Research Center, Corvallis, Oreg.*Illinois State Natural History Survey, Urbana. (175 750)

Ecological research series (Final)
AUTHOR: Sanborn, James R.
C4461B2 FLD: 06F, 13B, 68E, 68D, 57H, 48E USGRDR7510
Dec 74 93p
GRANT: EPA-R-800736
MONITOR: EPA/660/3-74-025
Paper copy available from GPO, Stock no. 5501-00995.

ABSTRACT: In this study, 17 organic pesticides and five industrial chemicals were examined in a terrestrial-aquatic model ecosystem in an effort to determine their persistence and accumulation by the organisms of this system. Several classes of pesticides are represented as one or more insecticides, herbicides, miticides or plasticizers were investigated in this system. The use of this system for examining uptake and persistence of widely used agricultural chemicals provides the necessary data for comparison of field data to provide a framework which can be used to assess the potential environmental impact of new pesticides before they are given a recommendation for generalized use. The data obtained from this work suggest that this model ecosystem is useful for the determination of the uptake and persistence of pesticides by the organisms. In general, it was found that most chemicals, with the exception of the persistent soil insecticide, dieldrin, underwent extensive degradation under the experimental conditions of the system.

DESCRIPTORS: *Pesticides, *Biodeterioration, *Water pollution, *Soil chemistry, Fungicides, Accumulation, Residues, Herbicides, Insecticides, Culicidae, Daphnia, Algae, Chemical composition, Soil chemistry, Decomposition, Fishes, Snails, Carbamates, Chlorine aliphatic compounds, Chlorine aromatic compounds, Parathions, Soil microorganisms

IDENTIFIERS: *Ecosystems, Water pollution effects(Animals), *Pesticide residues, Bux Ten insecticide, Carbaryl, Carbofuran, Dieldrin, Lindane , Biphenyl/chloro, Orthene, Alachlor, Propachlor, Bladex, Bentazon, Dicamba, D 2-4 herbicide, Pyrazon, Trifluralin, NTISEPAORD

PB-239 749/5ST NTIS Prices: PC-GPO/MF$2.25-NTIS

Report to International Joint Commission, United States and Canada, Great Lakes Water Quality Status of Pertinent EPA Research

National Environmental Research Center, Corvallis, Oreg.
AUTHOR: Bartsch, A. F., Frank, Charles L., Peterson, Spencer
C4391D2 FLD: 13B, 68D USGRDR7509
Dec 74 22p
REPT NO: EPA/660/9-74-002
MONITOR: 18

ABSTRACT: The report summarizes major segments of research activities that the U.S. Environmental Protection Agency has completed or now has under way that relate to nitrilotriacetate, viruses, disinfection of municipal wastewater and the effects of polychlorinated biphenyls on fish and fish products. The summary highlights research areas which may have impact on objectives of the International Joint Commission and recommended in its 1973 annual report and should not be considered inclusive of all activities presently funded by EPA in the above subject areas.

DESCRIPTORS: *Water pollution, *Great Lakes, Water quality, Viruses, Biphenyl, Chlorine aromatic compounds, Acetic acid, Municipalities, Waste water, Disinfection, Fishes, Toxicity, Potable water

IDENTIFIERS: Biphenyl/chloro, Acetic acid/nitrilo-tri, NTISEPAERC

PB-239 260/3ST NTIS Prices: PC$3.25/MF$2.25

MONS 212086

Sublethal Effects of Oil, Heavy Metals and PCBs on Marine Organisms

Texas A and M Univ., College Station. Dept. of Biology.*National Science Foundation, Washington, D.C. Office for the International Decade of Ocean Exploration. (402 267)
AUTHOR: Anderson, J. W., Neff, J. M., Petrocelli, S. R.
C4165K2 FLD: 06F, 08A, 57H, 48A, 68D USGRDP7506
1974 48p
GRANT: NSF-GX-37344, NSF-GX-37347
MONITOR: NSF/IDOE-74-37
Presented at a Symposium Organized by the American Society of Zoologists Entitled The Mechanisms of Survival in Toxic Environments, held at Academic Press on December, 1974.

ABSTRACT: The review describes what has been and is now being done in the study of the sublethal effects of three major classes of pollutants commonly found in the estuarine environment. Heavy metals and chlorinated hydrocarbons are in general accumulated to a greater extent and bound to organisms much more firmly than petroleum hydrocarbons. Retention of petroleum derived hydrocarbons by animals in clean water may vary from several days to approximately two months, and is species dependent. The class of petroleum hydrocarbons accumulated to the greatest extent and retained the longest is the 'Naphthalenes'. Inorganic mercury, Aroclor 1254 and petroleum hydrocarbons have been shown to effect the respiratory rate and chloride ion regulation of selected marine animals. There is some indication that the levels of petroleum hydrocarbons in the animal tissues may act to temporarily alter the regulatory ability of the test individuals.

DESCRIPTORS: *Water pollution, *Aquatic animals, *Metals, *Oils, *Chlorohydrocarbons, Hydrocarbons, Bays, Estuaries, Naphthalene, Iron, Cadmium, Manganese, Cobalt, Zinc, Mercury(Metal), Toxicity

IDENTIFIERS: *Water pollution effects(Animals), Oil pollution, International Decade of Ocean Exploration, Biphenyl/chloro, NTISIDOE

PB-238 514/4ST NTIS Prices: PC$3.75/MF$2.25

Pesticide Residue Analysis in Water (103.1) Training Manual

Environmental Protection Agency, Cincinnati, Ohio. Office of Water Program Operations.

Final rept.
AUTHOR: Hallbach, Paul E.
C4163G2 FLD: 07C, 14B, 99A*, 68E*, 68D USGRDR7506
Sep 74 282p*
REPT NO: EPA/430/1-74-012
MONITOR: 18

ABSTRACT: The report presents outlines of material for the conduct of a training course on analysis of pesticide residues in the aquatic environment. General extraction, chromatographic, spectroscopic, and analytical techniques are included as well as specific analyses for selected pesticides. Sampling and analyses of water, biological tissues, and industrial effluents are described.

DESCRIPTORS: *Pesticides, *Water analysis, Solvent extraction, Gas chromatography, Chromatographic analysis, Spectroscopic analysis, Industrial wastes, Sampling, Cholinesterase inhibitors, Carbamates, Ureas, Chlorine aromatic compounds, Triazines, Phosphorus organic compounds, Chemical analysis, Tissues(Biology), Laboratory equipment

IDENTIFIERS: *Water pollution detection, Biphenyl/chloro, D 2-4 herbicide, NTISEPAOWP

PB-238 072/3ST NTIS Prices: PC$8.75/MF$2.25

Resource Evaluation Studies on the Matagorda Bay Area, Texas

Texas A and M Univ., College Station.*National Oceanic and Atmospheric Administration, Rockville, Md. Office of Sea Grant. (347 350)
AUTHOR: Ahr, Wayne M., Harry, Harold W., Holliday, Barry, Miloy, John, Vetter, Larry
C3975E4 FLD: 13B, 48B, 68D, 86M USGRDR7503
Sep 73 170p
REPT NO: TAMU-SG-74-204
GRANT: NOAA-04-3-158-18
MONITOR: NOAA-74092303
Report on Sea Grant Program.

ABSTRACT: The study was designed for finding answers to the following: (1) What are the water circulation patterns of Matagorda Bay and how does water circulation affect processes such as coastline change and pollution dispersal among others; (2) what is the chronic pesticide and PCB (polychlorinated biphenyls) level in bay sediments and what are the physical-chemical variables that govern the distribution and retention of chlorinated hydrocarbons in the sediments; (3) what are the occurrences and distribution patterns of selected benthic microfauna and will data on microfaunal populations elucidate processes of coastal change, pollution and water circulation; and (4) what is the economic structure of the Matagorda Bay area.

DESCRIPTORS: *Marine resources, *Coastal zone management, *Land use, *Water pollution, Grants, Policies, Circulation, Pesticides, Matagorda Bay, Chlorohydrocarbons, Biphenyl, Environmental impacts, Water consumption, Sediments, Benthos, Water economy, Texas

IDENTIFIERS: Sea Grant program, *Water circulation, Water use, Biphenyl/chloro, NTISCOMNOA

COM-74-11706/0ST NTIS Price: PC$6.25/MF$2.25

MONS 212089

Marine Studies of San Pedro Bay, California. Part VII. Sediment Investigations. Sediment Compositions in Los Angeles-Long Beach Harbors and San Pedro Basin

University of Southern California, Los Angeles. Allan Hancock Foundation.*National Oceanic and Atmospheric Administration, Rockville, Md. Office of Sea Grant. (400 911)
AUTHOR: Chen, Kenneth Y., Lu, James C. S.
C3914L4 FLD: 13B, 8G, 68D, 47E, 86M USGRDR7502
Aug 74 191p
RPT NO: USC-SG-8-74
GRANT: NOAA-04-3-158-145
MONITOR: NOAA-74102209
See also Part 6, COM-74-11558.

ABSTRACT: Most surface sediments in the Los Angeles-Long Beach Harbors and nearby San Pedro Basin are grossly contaminated, with the exception of a few localities. Restricted dredging of polluted sediments from fractional areas of the harbor complex is probably beneficial to the ecosystem if the polluting substances can be properly disposed of. The Los Angeles County Sanitation District sewer outfall at White's Point is found to contribute substantial amounts of trace metals and chlorinated pesticides to the San Pedro Basin, while the harbor complex is found to be an important source of polychlorinated biphenyls into the San Pedro Basin. Interrelationships of pollution parameters are presented.

DESCRIPTORS: *Water pollution, *Harbors, *Sediments, *San Pedro Bay, Pesticides, Outfall sewers, Dredging, Metals, Chlorohydrocarbons, Chlorine aromatic compounds, Biphenyl, California

IDENTIFIERS: Sea Grant program, *Trace metals, San Pedro(California), Los Angeles Harbor, Long Beach Harbor, Ecosystems, NTISCOMNOA

COM-74-11748/2SL NTIS Prices: PC$7.00/MF$2.25

Estimation of Polychlorinated Biphenyls in the Presence of DDT-Type Compounds

Baird-Atomic, Inc., Bedford, Mass. (388 786)

Environmental monitoring series (Final)
AUTHOR: Brownrigg, J. T., Hornig, A. W.
C328383 FLD: 7C, 6F, 13B, 68E, 99A USGRDR7419
Jun 74 100p
CONTRACT: EPA-68-01-0082
PROJECT: EPA-ROAP-09ABZ-013
MONITOR: EPA-670/4-74-004

ABSTRACT: Earlier studies suggested that the low temperature luminescence properties of PCB's (polychlorinated biphenyls) and DDT compounds could be used to identify these compounds singly or in mixtures. The present investigation was undertaken to develop a relatively simple, rapid method for estimating these compounds in water. The emphasis in this procedure has been on the inherent sensitivity and specificity of luminescence, avoiding chemical separation where possible. The present procedure involves collection of grab samples followed by extraction, drying, concentration, and redilution in a second solvent suitable for luminescence measurement at 77K. Studies include the determination of recoveries and detection sensitivities for some of the compounds of interest and also analyses of several environmental waters. (Modified author abstract)

DESCRIPTORS: *Water analysis, *DDT, *Luminescence, Surface waters, Cryogenics, Sensitivity, Pesticides, Spectroscopic analysis, Emission spectra, Solvent extraction

IDENTIFIERS: *Biphenyl/chloro, *Water pollution detection, NTISEPAERC

PB-233 599/0 NTIS Prices: PC$4.00/MF$1.45

Premature Births in California Sea Lions: Association with High Organochlorine Pollutant Residue Levels

National Marine Fisheries Service, Seattle, Wash. Marine Mammal Div.
AUTHOR: DeLong, Robert L., Gilmartin, William G., Simpson, Joan G.
C2461F1 FLD: 6F, 86Q USGRDR7408
30 Jan 73 5p
MONITOR: NOAA-74012311
Revision of report dated 16 Oct 72.
Pub. in Science, v181 p1168-170, 21 Sep 73.

ABSTRACT: Premature pupping in California sea lions has been noted on the breeding islands since 1968. Organochlorine pesticides and polychlorinated biphenyl residues were two to eight times higher in tissues of premature parturient females and pups than in similar tissues of full-term parturient females and pups collected on San Miguel Island in 1970. The mean total DDT residues in the blubber and liver of premature parturient females were 8.0 and 3.8 times greater, respectively, than the concentrations in the same tissues of normal parturient cows. The brains of premature pups contained twice the residue concentrations as the brains of full-term pups. The (PCB) levels in blubber, liver, and brain of the premature parturient group were 6.6, 4.4 and 2.4 times higher than those in the full-term group. In neither blubber nor liver did the ranges of residue values of total DDT or PCB in premature and full-term groups overlap. Dieldrin residues were not detected in all samples and when present, were low. (Modified author abstract)

DESCRIPTORS: *Seals(Mammals), *Pesticides, *Chlorine organic compounds, Dieldrin, DDT, Pregnancy complications, California, Histology, Pathology, Brain, Liver

IDENTIFIERS: Sea lions, Water pollution effects (Animals), *Biphenyl/chloro, NOAA

COM-74-10457/1 NTIS Prices: Reprint

Adsorption of Chlorinated Hydrocarbons from Seawater by a Crosslinked Polymer

Woods Hole Oceanographic Institution, Mass. (381 000)
AUTHOR: Harvey, George R.
C2393L1 FLD: 7D, 8J, 13B, 99A*, 68D, 47C USGRDR7407
Mar 73 35p*
REPT NO: WHOI-Contrib-2798
PROJECT: EPA-16020GCQ
MONITOR: EPA-R2-73-177
Paper copy available from GPO $0.55 as EP1.23/2:73-177.

ABSTRACT: A synthetic resin, Amberlite XAD-2, has been evaluated as an adsorption medium for chlorinated hydrocarbons dissolved in seawater. The resin was found to be very efficient and the method was developed into a routine analytical procedure for the monitoring of seawater. (Author)

DESCRIPTORS: *Adsorption, *Chlorine organic compounds, *Sea water, *Water analysis, Performance evaluation, DDT, Insecticides, Dieldrin

IDENTIFIERS: Amberlite XAD-2 resin, *Water pollution detection, Biphenyl/chloro, EPAO

PB-227 349/8 NTIS Prices: PC-GPO/MF$1.45-NTIS

Organochlorine Residues from Plankton

Institute for Marine Environmental Research Edinburgh (Scotland) Oceanographic Lab (408290)
AUTHOR: Williams, R., Holden, A. V.
C2124K2 FLD: 8A, 13B, 68D USGRDR7404
1973 3p
MONITOR: 18
Prepared in cooperation with the Department of Agriculture and Fisheries for Scotland, Pitlochry.
Availability: Pub. in the Marine Pollution Bulletin v4 n7 p109-111 Jul 73.

ABSTRACT: Concentrations of PCBs, DDT and dieldrin in plankton at a number of stations from Gouroch in the Firth of Clyde to the International Ocean Weather Station India 400 miles west of Scotland show an unexpected gradient from the polluted estuary to the open ocean levels. The results are consistent with the general assumption that there is progressive concentration of these residues in marine food chains. (Author)

DESCRIPTORS: *Plankton, *Residues, *Chlorine compounds, DDT, Dieldrin, Accumulation, Biphenyl, Water pollution, Atlantic Ocean, Gas chromatography, Great Britain

IDENTIFIERS: Zooplankton, *Chlorine organic compounds, Biphenyl/chloro , SD

AD-771 349/8 NTIS Price: Not available NTIS

Environmental Distribution and Metabolic Fate of Key Industrial Pollutants and Pesticides in a Model Ecosystem

Illinois Univ., Urbana. Water Resources Center.

Research rept.
AUTHOR: Metcalf, Robert L., Lu, Po-Yung, Kapoor, Inder P.
C2105K1 FLD: 13B, 6F, 68D*, 99B, 57H USGRDR7403
Jun 73 102p*
REPT NO: WRC-RR-69
CONTRACT: DI-14-31-0001-3273
PROJECT: OWRR-B-050-ILL
MONITOR: OWRR-B-050-ILL(1)

ABSTRACT: The contamination of water supplies with toxic substances liberated into the environment either accidentally as industrial or household wastes or purposefully as pesticides and food additives is an important problem in environmental quality. Radiolabeled contaminants used in a laboratory model ecosystem provide an elegant method for determining the degradative fate of potential pollutants, indications of their toxic effects to a variety of food chain organisms, and measurement of their ecological magnification in food chain organisms. The results have been expressed in terms of ecological magnification and biodegradability index, and have been examined for correlation with such physio-chemical properties as water solubility, and partion coefficient, and for relationships to electron distribution. (Modified author abstract)

DESCRIPTORS: *Organic wastes, *Chemical industry, *Biodeterioration, *Pesticides, *Water pollution, Industrial wastes, Methodology, Toxicity, Food chains, Carbamates, Organic phosphates, Statistical data, Models, Solubility, Isotopic labeling, Plasticizers, Chlorine organic compounds, Phthalates, Accumulation, Food chains

IDENTIFIERS: *Ecosystems, *Path of pollutants, Biphenyl/chloro, OWRR

PB-225 479/5 NTIS Prices: PC$4.25/MF$1.45

MONS 212095

Biological Models of Freshwater Communities

Washington Univ., Seattle. Coll. of Fisheries. (403 974)

Final rept.
AUTHOR: Taub, Frieda B.
C1992C3 FLD: 6F, 57H, 68D USGRDR74C1
Aug 73 80p
PROJECT: EPA-16050-DXM
MONITOR: W74-00925
Paper copy available from GPO $1.05 as stock no. EP1.23:660-73-008.

ABSTRACT: Data from continuous cultures of an alga (Chlamydomonas reinhardtii) and protozoan (Tetrahymena vorax) have been used to construct a model of algal standing crop over ranges of light intensity, dilution rate, and nutrient concentration both in the absence and presence of predation by the protozoa. The model predicts that predation can reduce algal standing crop only within certain ranges of the environmental variables. The comparative toxicities of Aroclor 1242, a polychlorinated biphenyl, and DDT, were tested on the alga and protozoan, and also on daphnids, ostracods, and guppies. (Modified author abstract)

DESCRIPTORS: (*Fresh water biology, Models), (*Pesticides, Toxicity), Algae, Protozoa, Ciliata, Water pollution, Bacteria, Primary biological productivity, Luminous intensity, Computerized simulation, DDT, Stress(Physiology), Cultures(Biology), Chlorine aromatic compounds

IDENTIFIERS: Chemostats, Tetrahymena vorax, Chlamydomonas reinhardtic, Biphenyl/chloro, *Eutrophication, EPAORM

PB-225 029/8 NTIS Prices: PC-GPO/MF$1.45-NTIS

Chlorinated Hydrocarbons in Plankton from the Gulf of Mexico and Northern Caribbean

Texas A and M Univ., College Station. (347 350)
AUTHOR: Giam, C. S., Wong, M. K., Hanks, A. R., Sackett, W. M., Richardson, R. L.
C1983G2 FLD: 13B, 8A USGRDR7401
1973 8p
MONITOR: IDOE-73-42
Pub. in the Bulletin of Environmental Contamination and Toxicology, v9 n6 p376-382 1973.

ABSTRACT: During 1971 and 1972 a baseline study of pollutants in the open Gulf of Mexico and Northern Caribbean was conducted. Plankton samples were collected and analyzed for DDT, its metabolities and PCBs. The results showed that DDTs and PCBs are widely spread, although the level is generally low. There are few discernible geographic trends in the sampled areas. It was noted, however, that of the six samples containing PCB's above 100 microgram wet weight, four are near coastal areas, including the two samples with the highest PCB values. About 70% of the samples had higher PCB than DDT values. No definite trend can be observed from the PCB/DDT ratio of the samples analyzed. Generally, the total DDT and PCB levels in plankton samples is comparable to that in small whole fish and muscle of some larger fish.

DESCRIPTORS: (*Water pollution, *Mexico Gulf), (*Pesticides, Mexico Gulf), Chlorine organic compounds, Chlorine aromatic compounds, DDT, Plankton, Caribbean Sea, Concentration(Composition), Chlorohydrocarbons, Residues

IDENTIFIERS: Baseline measurements, PCB, Biphenyl/chloro, IDOE

PB-224 521/5 NTIS Prices: Not available NTIS

DDT, DDE and Polychlorinated Biphenyls in Biota from the Gulf of Mexico and Caribbean Sea, 1971

Texas A and M Univ., College Station. (347 350)
AUTHOR: Glum, C. S., Hanks, A. R., Richardson, R. L., Sackett, W. M., Wong, M. K.
C19831?3 FLD: 13B, 8A USGRDR7401
Dec 72 7p
MONITOR: IDOE-73-39
Pub. in the Pesticides Monitoring Jnl., v6 n3 p139-143 Dec 72.

ABSTRACT: Residue levels of DDT, DDE, and PCB's were determined in various species of fish, shrimp, crabs, and other biota from the Gulf of Mexico and Carribean Sea. Samples were collected from the Gulf during two Gulf-wide cruises in May and October 1971 and from part of the Carribean Sea during the October cruise. DDT, DDE, and PCB's were found widely distributed in all biota; however, samples from coastal areas generally had higher levels than samples from the open waters. (Author)

DESCRIPTORS: (*Water pollution, *Mexico Gulf), (*Pesticides, Mexico Gulf), Marine fishes, Shrimps, Crabs, Residues, DDT, Caribbean Sea, Bioassay, Chlorine organic compounds, Chlorine aromatic compounds, Chlorohydrocarbons

IDENTIFIERS: DDE Pesticide, PCB, Biphenyl/chloro, IDOE

PB-224 515/7 NTIS Prices: Not available NTIS

Recommended Methods of Reduction, Neutralization, Recovery, or Disposal of Hazardous Waste. Volume XIV. Summary of Waste Origins, Forms, and Quantities

TRW Systems Group, Redondo Beach, Calif. (354 595)

Final rept.
AUTHOR: Ottinger, R. S., Blumenthal, J. L., Dal Porto, D. F., Gruber, G. I., Santy, M. J.
C1901L1 FLD: 138, 68 USGRDR7324
Aug 73 160p
REPT NO: TRW-21485-6013-RU-00-Vol-14
CONTRACT: EPA-68-03-0089
MONITOR: EPA-670-2-73-053-n
Paper copy also available from NTIS $72.00/set of 16 reports as PB-224 593-SET.

ABSTRACT: This volume provides information on the origins, forms, and quantities of 13 groups of hazardous waste stream constituents, including pesticides, mercury and mercury compounds, arsenic and arsenic compounds, cadmium and cadmium compounds, lead compounds, soluble copper compounds, selenium and selenium compounds, boron hydrides, chromium compounds, inorganic cyanides, hydrofluoric and fluoboric acids, specific organic chemicals, explosive propellant and chemical warfare materiel and radioactive material. Separate reports on paint wastes and wastes from battery manufacture and the electroplating industry are also presented.

DESCRIPTORS: (*Wastes, *Hazardous materials), (*Pollution, Hazardous materials), (*Industrial wastes, Hazardous materials), Classifications, Paints, Pigments, Electroplating, Storage batteries, Lead, Cadmium, Chromates, Cyanides, Selenium, Mercury, Metal finishing, Copper, Chromium, Radioactive wastes, Pesticides, Herbicides, Fungicides, Plant location, Geography, Chlorine organic compounds, Mercury inorganic compounds, Flue dust, Metal industry, Arsenic inorganic compounds, Phosphoric acid, Lead inorganic compounds, Lead organic compounds, Petroleum industry, Printing inks, Textile industry, Xerography, Boron, Boron hydrides, Tanning materials, Iron and steel industry, Hydrofluoric acid, Fluoroboric acid, Acroleins, Aromatic polycyclic hydrocarbons, Phenols, Biphenyl, Explosives, Propellants, Military chemical agents, Water pollution, Air pollution, Inventories

IDENTIFIERS: Cacodylic acid, National Disposal Sites, Mine wastes, Chloropicrin, NERC

PB-224 593/4 NTIS Prices: PC$4.75/MF$1.45

MONS 212099

Study of Electron Capture Behavior of Substituted Aromatics by Plasma Chromatography

Waterloo Univ (Ontario) Dept of Chemistry (407896)
AUTHOR: Karasek, Francis W., Tatone, Oswald S., Kane, David M.
C1064C2 FLD: 7D, 59G, 59A USGRDR7324
30 Jan 73 6p
MONITOR: 18
Revision of report dated 31 Oct 72.
Availability: Pub. in Analytical Chemistry, v45 n7 p1210-1214 Jun 73.

ABSTRACT: The plasma chromatograph can observe experimentally the positive and negative charged species present in the electron capture detector and measure their response and mobility under changing parameters. Experimental evidance of dissociative electron capture is shown for halogenated aromatics with formation of a halogen ion. Aromatics with two different halogen atoms dissociate only the most reactive halogen ion in the order I Br Cl. Simple electron attachment with formation of a negative molecular ion occurs for nitrobenzene. Chloronitrobenzene and decachlorobiphenyl undergo both associative and dissociative electron capture. (Author)

DESCRIPTORS: (*Aromatic compounds, *Electron capture), (*Chromatographic analysis, *Plasma medium), (*Halogenated hydrocarbons, Electron capture), (*Dissociation, Electron capture), Diffusion, Benzenes, Toluenes, Ionization, Chlorine compounds, Fluorine compounds, Bromine compounds, Iodine compounds, Canada

IDENTIFIERS: *Plasma chromatography, Biphenyl, SD

AD-769 011/8 NTIS Price: Not available NTIS

The Use and Effect of Mixed Standards on the Quantitation of Polychlorinated Biphenyls

National Marine Fisheries Service, Seattle, Wash. Pacific Fishery Products Technology Center.
AUTHOR: Beezhold, P. Lee, Stout, Virginia F.
C1792H1 FLD: 7C, 59A, 99A, 86Q USGRDR7323
1973 7p
MONITOR: NOAA-73080101
Pub. in Bull. of Environmental Contamination and Toxicology, v10 n1 p10-15 1973.

ABSTRACT: A study was made of the problems encountered when the chromatogram of a sample being analyzed for polychlorinated biphenyls via GLC cannot readily be compared to a particular Aroclor standard. The use of mixed Arolclor standards was proposed and a study made of the effect of mixed standards on the analytical results. It was found that the choice of a standard could alter the values by more than a factor of 2. In addition, the particular mixture used as a standard should be reported along with resulting values. (Author)

DESCRIPTORS: (*Chlorine aromatic compounds, *Gas chromatography), Quantitative analysis, Chromatographic analysis, Standardization

IDENTIFIERS: *Biphenyl/chloro, NOAA

COM-73-11574/3 NTIS Prices: Reprint

DDT, DDE, and Polychlorinated Biphenyls in Biota from the Gulf of Mexico and Caribbean Sea--1971

Texas A and M Univ., College Station. (347 350)
AUTHORS: Giam, C. S., Hanks, A. R., Richardson, R. L., Sackett, W. M., Wong, M. K.
C1652J1 FLD: 6F, 57H, 52G USGRDR7321
1972 6p
MONITOR: NSF/IDOE-73-25
Pub. in Pesticides Monitoring Jnl., v6 n3 p139-143 Dec 72.

ABSTRACT: Residue levels of DDT, DDE, and PCB's (polychlorinated biphenyls) were determined in various species of fish, shrimp, crabs, and other biota from the Gulf of Mexico and Caribbean Sea. Samples were collected from the Gulf during two Gulf-wide cruises in May and October 1971 and from part of the Caribbean Sea during the October cruise. DDT, DDE, and PCB's were found widely distributed in all biota; however, samples from coastal areas generally had higher levels than samples from the open waters. (Author)

DESCRIPTORS: (*DDT, Aquatic animals), (*Pesticides, *Aquatic animals), Residues, Marine fishes, Crabs, Shrimps, Squids, Crustacea, Gas chromatography, Sharks, Tunas, Chemical analysis

IDENTIFIERS: *Pesticide residues, Biphenyl/chloro, DDE pesticide, Caribbean Sea, Mexico Gulf, IDOE

PB-223 205/6 NTIS Prices: Not available NTIS

Chlorinated Hydrocarbons in Open-Ocean Atlantic Organisms

Woods Hole Oceanographic Institutiton, Mass. (381 000)
AUTHOR: Harvey, George R., Bowen, Vaughan T., Backus, Richard H., Grice, George D.
C16 52I4 FLD: 8A, 13B, 78A USGRDR7321
1972 12p
REPT NO: WHOI-Contrib-2786
GRANT: NSF-GX-28334
MONITOR: NSF/IDOE-73-23
Report on International Decade of Ocean Exploration.
Pub. in Nobel Symposium 20, The Changing Chemistry of the Oceans, p177-186 1972.

ABSTRACT: PCB has been readily demonstrable in all, and DDT in most of a series of organisms collected from the open North Atlantic Ocean. No strong evidence was obtained of an east-west gradient in concentration between the Cape Verde Islands and Bermuda. The data are compatible with a systematic increase in concentration along food chains, although details of the patterns suggest that the mechanisms of uptake may be different for PCB than for DDT. A group of fish and crustacea which feed near the sea surface at night but migrate to considerable depths during the day show DDT and PCB concentrations not greatly different from those of predaceous organisms whose lives are spent mostly in the upper layers. We believe this shows that biological removal processes may help to control chlorinated hydrocarbon concentrations in the open ocean.

DESCRIPTORS: (*Water pollution, *Atlantic Ocean), Food chains, Absorption(Biology), Chlorine organic compounds, DDT, Collecting methods, Sampling, Concentration(Composition)

IDENTIFIERS: Path of pollutants, Biphenyl/chloro, IDOE

PB-223 204/9 NTIS Prices: Not available NTIS.

Environmental Applications of Advanced Instrumental Analyses: Assistance Projects, FY 69-71

Environmental Protection Agency, Athens, Ga. Southeast Environmental Research Lab.

Environmental protection technology series
AUTHOR: Keith, Lawrence H., Hercules, Shirley H.
C1644J2 FLD: 7C, 13B, 59A, 99A, 68D USGRDR7321
May 73 92p
PROJECT: EPA-16020-GHZ
MONITOR: EPA-R2-73-155
Paper copy available from GPO $1.25 as stock no. EP1.23/2:73-155.

ABSTRACT: A multitude of analyses using gas chromatography-mass spectrometry (GC-MS), nuclear magnetic resonance (NMR), infrared, and fluorescence spectroscopy to identify and measure organic pollutants in water are discussed under eleven project categories. In most cases these analyses have helped to solve, or at least understand more clearly, the related pollution incident and in some cases provided for enforcement of regulatory legislation. Projects included indentification of pesticides and PCB's (polychlorinated biphenyls) from natural waters, organics from industrial wastewaters and landfill runoffs, organics from paper mill wastewaters and foam, and analyses of oils from oil spills and suspect sources.

DESCRIPTORS: (*Gas chromatography, Water analysis), (*Mass spectra, Water analysis), (*Nuclear magnetic resonance, *Water analysis), (*Infrared spectra, Water analysis), (*Emission spectra, Water analysis), (*Water pollution, Identifying), Pesticides, Chlorine organic compounds, Oils, Industrial wastes, Paper industry, Organic compounds, Earth fills, Fluorescence, Odors, Rubber industry, Petroleum refining, Chemical industry

IDENTIFIERS: Oil pollution, Biphenyl/chloro, Oil spills, Oil pollution detection, Fishkill, Petrochemical industry, ORM

PB-222 938/3 NTIS Prices: PC-GPO/MF$1.45

MONS 212104

Rule Making on Polychlorinated Biphenyls

Food and Drug Administration, Washington, D.C. (140 700)

Final environmental impact statement.
C0195B4 FLD: 13B, 68 USGRDR7303
18 Dec 72 31p*
MONITOR: ELR-5804
Supersedes report dated 8 May 72, PB-208 960-D.

ABSTRACT: The statement discusses the effects of comprehensive regulations designed to limit human exposure to polychlorinated biphenyls (PCB's) from dietary sources by dealing with known sources and causes of PCB contamination of food. Specifically, the action involves establishments involved in the handling and processing of animal feeds, food, and food-packaging materials; and those reclaiming pulp fiber for food-packaging use. No adverse effects are foreseen except to industries using PCB's and having no immediate substitute or to those whose product (such as recycled wood pulp) is contaminated and cannot be purified.

DESCRIPTORS: (*Environmental surveys, *Chlorine aromatic compounds), (*Government policies, Chlorine aromatic compounds), Food processing, Food packaging, Packaging materials, Biphenyl, Regulations, National government, Public health, Waste paper

IDENTIFIERS: *Environmental impact statements, *Biphenyl/chloro, Recycled paper

FIS-AA-72-5804-F NTIS Prices: PC$3.75/MF$0.95

File Making on Polychlorinated Biphenyls

Food and Drug Administration, Washington, D.C. (140 700)

Supplement to final environmental impact statement.
C1331J2 FLD: 13B, 68H* USGRDR7317
Jul 73 41p*
MONITOR: ELR-73-1141-F-S
See also report dated 18 Dec 72, EIS-AA-72-5804-F.

ABSTRACT: The statement discusses the effects of comprehensive regulations designed to limit human exposure to polychlorinated biphenyls (PCB's) from dietary sources by dealing with known sources and causes of PCB contamination of food. Specifically, the action involves establishments involved in the handling and processing of animal feeds, food, and food-packaging materials; and those reclaiming pulp fiber for food-packaging use. No adverse effects are foreseen except to industries using PCB's and having no immediate substitute or to those whose product (such as recycled wood pulp) is contaminated and cannot be purified.

DESCRIPTORS: (*Environmental impact statements, *Chlorine aromatic compounds), (*Government policies, Chlorine aromatic compounds), (*Food contamination, Government policies), Legislation, Biphenyl, Toxicity, Food packaging, Contamination, Waste paper, Public health, Regulations, Tolerances(Physiology)

IDENTIFIERS: Recycled paper, *Biphenyl/chloro, EIS

EIS-AA-73-1141-F-S NTIS Prices: PC$3.75/MF$1.45

MONS 212106

Analysis of Chlorinated Aromatic Hydrocarbons by Exhaustive Chlorination: Qualitative and Structural Aspects of the Perchloro-Derivatives of Biphenyl, Naphthalene, Terphenyl, Dibenzofuran, Dibenzodioxin and DDE

National Research Council of Canada Halifax (Nova Scotia) Atlantic Regional Lab (045500)
AUTHOR: Hutzinger, O., Safe, S., Zitko, V.
C0742J2 FLD: 7C, 59D, 59A USGRDR7311
17 Apr 72 12p
MONITOR: NRC-12731
Availability: Pub. in Intern. J. Environ. Anal. Chem., v2 p95-106 1972.

ABSTRACT: A number of reagents for the exhaustive chlorination of aromatic compounds were investigated. Antimony pentachloride-iodine and the BMC reagent (sulfuryl chloride-aluminum chloride-disulfur dichloride) were found to be the most effective and convenient reagents. They are liquids which can be used without special precautions to prepare the perchloro-derivatives of biphenyl, terphenyl, naphthalene, dibenzofuran, dibenzodioxin and DDE. The structures, mass spectra and GLC properties of these compounds are discussed. (Author)

DESCRIPTORS: (*Aromatic compounds, *Chlorination), (*Insecticides, Chemical analysis), Synthesis(Chemistry), Chlorides, Antimony compounds, Iodine, Aluminum compounds, Sulfur compounds, Molecular structure, Mass spectrum, Gas chromatography, Canada

IDENTIFIERS: *Chlorine organic compounds, SD

AD-758 539 NTIS Price: Not available NTIS

MONS 212107

PCB (Polychlorinated Biphenyls) in Water: A Bibliography

Office of Water Resources Research, Washington, D.C. Water Resources Scientific Information Center.
C0721D4 FLD: 6F, 13B, 68D*, 57H USGRDR7310
Mar 73 150p*
RPT NO: WRSIC-73-201
MONITOR: W73-06501
Supersedes report dated Jan 72, PB-206 534.

ABSTRACT: This bibliography of 88 abstracts on polychlorinated biphenyls is another in a series of planned bibliographies in water resources produced from the information base comprising Selected Water Resources Abstracts (SWRA). At the time of search for this bibliography, the data base had 50,631 abstracts covering SWRA through December 15,1972. Separate subject and author indexes are provided.

DESCRIPTORS: (*Water pollution, *Chlorine organic compounds), (*Bibliographies, Water pollution), (*Pesticides, Water pollution), Biphenyl, Chlorine aromatic compounds, Plasticizers, Insecticides, Aquatic biology, Water analysis, Oceans, Industrial wastes, Toxicity, Residues, Biodeterioration, DDT, Dieldrin, Ecology, Accumulation

IDENTIFIERS: *Biphenyl/chloro, *Water pollution effects(Animals), Water pollution detection, OWRR

PB-217 859/8 NTIS Prices: PC$3.00/MF$0.95

MONS 212108

CIESM and Marine Pollution

Office of Naval Research London (England) (265000)

Conference rept.
AUTHOR: Leonard, John M.
C0673L1 FLD: 13B, 68D USGRDR7310
5 Feb 73 14p
REPT NO: ONRL-C-5-73
MONITOR: 18

ABSTRACT: A two-day session on Marine Pollution preceded the Plenary Congress of CIESM, held in Athens in November 1972. About 40 papers dealing with various aspects of pollution in the Mediterranean were given. In this report the writer lists presentations, discusses briefly those which seemed particularly interesting, and gives a mildly optimistic prognosis for pollution research in the Mediterranean. (Author)

DESCRIPTORS: (*Mediterranean Sea, *Water pollution), (*Symposia, Water pollution), Aerial photography, Bacteria, Wastes(Industrial), Wastes(Sanitary engineering), Disposal, Viruses, Metals, Toxicity

IDENTIFIERS: Oil pollution, Water pollution detection, Biphenyl/chloro , N

AD-757 988 NTIS Prices: PC$3.00/MF$0.95

MONS 212109

Uptake of Toxic Water Pollutants (PCB) by Lake Trout

Northern Michigan Univ., Marquette. Dept. of Biology.
AUTHOR: Parejko, Ronald, Johnston, Raymond
CC495H1 FLD: 6F, 57H, 68D, 68E USGRDR7307
Jan 73 19p
CONTRACT: DI-14-01-0001-3522
PROJECT: OWRR-A-061-MICH
MONITOR: OWRR-A-061-MICH(1)

ABSTRACT: Lake trout taken from North America's largest oligotrophic lake, Lake Superior, were analyzed to determine the content of polychlorinated biphenyls (PCBs) in their tissue. These fish are used for human consumption and the potential contamination of humans with PCBs would exist if fish that contained these compounds would be consumed. Results from analysis of fish oil extracted from lake trout have demonstrated that these fish possess low but detectable concentrations of PCBs in their tissue. Some of the lake trout analyzed also contained significant concentrations of chlorinated pesticides such as DDT and/or its analogs. Statistical determinations made between mean PCB concentration and fish age, sex and geographical location of removal from Lake Superior.

DESCRIPTORS: (*Chlorine organic compounds, *Residues), (*Lake Superior, Water pollution), (*Trout, Risidues), (*Water pollution, Chlorine organic compounds), Accumulation, Fresh water fish, Concentration(Composition), DDT, Gas chromatography

IDENTIFIERS: *Biphenyl/chloro

PB-214 768/4 NTIS Prices: PC$3.00/MF$0.95

An Evaluation of DDT and Dieldrin in Lake Michigan

Lake Michigan Enforcement Conference. Lake Michigan Interstate Pesticides Committee.

Ecological research series.
C0485A4 FLD: 6F, 13B, 57H, 68D USGRDR73C7
Aug 72 140p
PROJECT: EPA-16050-EYV, EPA-16050-EPV
MONITOR: EPA-R3-72-003
Paper copy available from GPO $1.25 as EP1.23:72-003.

ABSTRACT: An investigational program was designed to provide information essential to evaluate the impact of pesticides on Lake Michigan. Data was collected from waters, wastewaters, invertebrate organisms, and fish; analysis of samples from open water for the purpose of developing general residue levels was impractical. Tributary streams to Lake Michigan discharge chlorinated hydrocarbon pesticides into the lake; urban and fruit-growing areas are the more significant contributors of pesticides. The polychlorinated biphenyls are present in sufficient quantity, with sufficient evidence of biological impact, to warrant independent evaluation. Resident fish appear to be the most reliable biological monitor. The biological magnification of chlorinated hydrocarbon insecticides in sport and commercially valuable fish species as well as other wild animals are discussed.

DESCRIPTORS: (*Water pollution, *Pesticides), (*Lake Michigan, Water pollution), (*Chlorine organic compounds, Water pollution), (*Ecology, Pesticides), Fresh water fishes, Invertebrates, DDT, Dieldrin, Surface water runoff, Indicator species, Residues, Accumulation, Birds, Economic analysis, Trout, Salmon, Public health, Phthalates, Industrial wastes, Sewage, Legislation

IDENTIFIERS: *Water pollution effects(Animals), *Water quality data, *Pesticide residues, *Biphenyl/chloro

PB-214 696/7 NTIS Prices: PC-GPO/MF$0.95-NTIS

Adsorption of Chlorinated Hydrocarbons from Seawater by a Crosslinked Polymer

Woods Hole Oceanographic Institution, Mass. (381 000)

Technical rept.
AUTHOR: Harvey, George R.
C?285D1 FLD: 7C, 8J, 13B, 59A, 78B, 68D USGRDR7304
Nov 72 37p
REPT NO: WHOI-72-86
PROJECT: EPA-CQ-16020
MONITOR: 18

ABSTRACT: A synthetic resin, Amberlite XAD-2, has been evaluated as an adsorption medium for chlorinated hydrocarbons dissolved in seawater. The resin was found to be very efficent and the method was developed into a routine analytical procedure for the monitoring of seawater. (Author)

DESCRIPTORS: (*Adsorption, *Chlorine organic compounds), (*Ion exchange resins, *Adsorbents), (*Water analysis, Chlorine organic compounds), Concentrating, Styrene copolymers, Regeneration(Engineering), Sea water, Water pollution, Flow rate, Performance evaluation, DDT, Pesticides, Oceans

IDENTIFIERS: Amberlite polymers, Biphenyl/chloro

PB-213 954/5 NTIS Prices: PC$3.00/MF$0.95

MONS 212112

Identification of Polychlorinated Biphenyls in the Presence of DDT-Type Compounds

National Environmental Research Center, Cincinnati, Ohio. Analytical Quality Control Lab.
C0284F4 FLD: 7C, 59A, 68D USGRDR7304
Oct 72 66p
REPT NO: EPA-R2-72-004
CONTRACT: EPA-68-01-0082
PROJECT: EPA-16020-GIY
MONITOR: W73-03515
Paper copy available from GPO $1.25 as EP1.23/2:72-004.

ABSTRACT: Polychlorinated biphenyls (PCB's) interfere with gas chromatographic analyses of DDT and related compounds, necessitating a simple indipendent method for PCB determination. The purpose of the present study was to determine the applicability of low temperature (77K) luminescence methods to this problem. Basic studies included documentation of excitation/emission spectra of 6 pesticides (p, p' - and o,p'- DDE, DDD, and DDT), 7 PCB isomers, and 5 PCB mixtures (Aroclors). Although phosphorescence spectra of the DDD and DDT compounds are very similar, possible differences in lifetime and polarization measurements may aid in differentiation. Low temperature luminescence studies in various binary mixtures of Aroclor 1254 and p, p' -DDT indicate Aroclor 1254 may be identified and quantitated in the presence of DDT concentrations 100X greater.

DESCRIPTORS: (*Chlorine organic compounds, *Emission spectra), (*Spectroscopic analysis, Chlorine organic compounds), (*Pesticides, Spectroscopic analysis), DDT, Biphenyl, Excitation, Fluorescence, Chlorine aromatic compounds, Chlorine aliphatic compounds, Errors, Molecular isomerism, Water analysis, Cryogenics

IDENTIFIERS: *Biphenyl/chloro, DDD pesticide, DDE pesticide, *Water pollution detection

PB-213 900/0 NTIS Prices: PC-GPO/MF$0.95-NTIS

MONS 212113

Use and Replaceability of Polychlorinated Biphenyls

National Bureau of Standards, Washington, D.C. (240 N00)

Final rept.
AUTHOR: Broadhurst, Martin G.
C0191L1 FLD: 11G, 13B, 68A, 68D, 71M, 86V USGRDR7303
1972 22p
MONITOR: 18
Pub. in Environmental Health Perspectives, p81-102 Oct 72.

ABSTRACT: The study has included consideration of the uses and replaceability in polychlorinated biphenyls (PCB's) in the following areas: Dielectric fluids for capacitors and transformers; Industrial fluids for hydraulic, gas turbine and vacuum pump uses; Heat transfer fluids; and Plasticizers and miscellaneous uses. (Author)

DESCRIPTORS: (*Chlorine aromatic compounds, Utilization), Dielectrics, Heat transfer, Plasticizers, Industrial wastes, Biphenyl

IDENTIFIERS: *Biphenyl/chloro

COM-72-51054 NTIS Prices: Not available NTIS

MONS 212114

Transfer of Pesticides through Water, Sediments and Aquatic Life

Rhode Island Univ., Kingston.

Final rept.
AUTHOR: Olney, Charles E.
CC123A4 FLD: 13B, 6F, 68D, 57H USGRDR7302
1972 14p
CONTRACT: DI-14-31-0001-3240
PROJECT: OWRR-A-038-RI
MONITOR: OWRR-A-038-RI(1)

ABSTRACT: Analysis of water, sediment and fish from 32 ponds and rivers of Rhode Island indicate that residues of polychlorinated biphenyls (PCB's) have accumulated in the sediments and fish of most watersheds of the state. Residues of DDT and its metabolites were also found in most samples. Other chlorinated hydrocarbon insecticides found in some samples were chlordane, dieldrin, lindane, a-BHC, endosulfan I, and dacthal. With a few exceptions, where local contamination might be postulated, no residues exceeding 50 ppt PCB or 10 ppt pesticide were detected in water samples, while residues in whole fish (wet weight basis) and sediments (dry weight basis) were less that 500 ppb PCB, 500 ppb DDT, 50 ppb chlordane and 50 ppb dieldrin. (Author)

DESCRIPTORS: (*Water pollution, *Pesticides), (*Rhode Island, Water pollution), (*Chlorine organic compounds, Water pollution), DDT, Biphenyl, Biodeterioration, Insecticides, Chlordane, Dieldrin, Sediments, Fishes, Residues, Concentration(Composition)

IDENTIFIERS: *Pesticide residues, Biphenyl/chloro, Lindane, Endosulfan , DCPA herbicide

PB-213 172/0 NTIS Prices: PC$3.00/MF$0.95

Precisely Deactivated Adsorbents Applied to the Separation of Chlorinated Hydrocarbons

National Marine Fisheries Service, La Jolla, Calif. Southwest Fisheries Center.
AUTHOR: McClure, Vance E.
C0104A4 FLD: 7D, 59A, 86Q USGRDR7302
20 Mar 72 4p
GRANT: NSF-GH-52
MONITOR: NOAA-72101012
Prepared in cooperation with Scripps Institution of Oceanography, La Jolla, Calif.
Pub. in Jnl. of Chromatography, v70 p168-170 1972.

ABSTRACT: The method described in the report is applicable to adsorbents usually deactivated with water (Silica gel, magnesia, alumina and Florisil) and involves the equilibration of the activated adsorbent with a solution of a strongly adsorbed material in an appropriate solvent. The degree of deactivation can be specified by the composition of the deactivating solution. Elution must be performed only with solvents incapable of removing the strongly adsorbed species from the adsorbent bed. (Author)

DESCRIPTORS: (*Adsorption, *Chlorine organic compounds), (*Pesticides, Adsorption), Adsorbents, Silicon dioxide, Aluminum oxides, Deactivation, Magnesium oxides, DDT

IDENTIFIERS: Biphenyl/chloro

COM-72-11486 NTIS Prices: Reprint

Sampling of Glacial Snow for Pesticide Analysis

Massachusetts Univ., Amherst. Dept. of Chemistry. (400 721)

Water pollution control research series
AUTHOR: Stengle, T. R., Lichtenberg, J. J., Houston, C. S.
CC054K2 FLD: 6F, 57H, 68D USGRDR7301
Feb 71 25p
PROJECT: EPA-WQO-16020-GAG
MONITOR: EPA-WQO-16020-GAG-02/71
Prepared in cooperation with the Vermont Univ., Burlington. Dept. of Community Medicine.
Paper copy available from GPO $0.35 as EP1. 16026-GAG-0271.

ABSTRACT: Snow samples were taken from the plateau glacier of Mt. Logan, Y. T., Canada during an investigation intent on demonstrating the feasibility of taking such samples from high altitude snowfields for pesticide analysis and developing sampling techniques devoid of contamination. Samples were also taken at a depth of 15 m to determine whether DDT concentration varied with the age of the snow. Pesticide analyses were performed using vapor phase chromatographic techniques. DDT was not detected within the limit of detectability (5 ng/l). Over half the samples were contaminated with PCB's which raised the detectability limit to 10-50 ng/l. The PCB contamination is believed to have come from the sampling auger, as an analysis of rinsings from it seemed to confirm. A sample taken from a depth of 1.5-2.5 m was acidified with distilled nitric acid, when thawed, and analyzed for 19 elements simultaneously using a direct reading emission spectrometer. Four elements were detected: boron at 4 ng/ml, cadmium at 9 ng/ml, chromium at 2 ng/ml, and iron at 47 ng/ml. The high levels of cadmium and especially iron suggest contamination from the alloy steels of the auger.

DESCRIPTORS: (*Pesticides, *Glaciers), Chlorine aromatic compounds, DDT, Snow, Sampling, Chemical analysis, Contamination, Alloy steels, Boron, Cadmium, Chromium, Iron, Water pollution, Sources

IDENTIFIERS: Biphenyl/chloro

PB-212 727/2 NTIS Prices: PC-GPO/MF$0.95-NTIS

MONS 212117

Polychlorinated Biphenyls (Pcb)- an Environmental Health Problem. Experiments with the Synthesis of Tetrachlorobiphenyl (Labelled /sup 14/Cl) for Toxicological and Method Studies

AUTHOR: Melvas, B.

Asc61H4 PLD: 6T, 57Y, 68G NSA2709

MONITOR: IH

ABSTRACT: For abstract, see NSA 27 09, number 22009.

DESCRIPTORS: *Environment,

IDENTIFIERS: AEC

BNL-TR-1616 NTIS Prices: PC$3.00/MF$0.95

NO ABSTRACT AVAILABLE

MONS 212118

Polychlorinated Biphenyls in Coho Salmon From Waters of Lake Michigan

Michigan State Univ., East Lansing. Inst. of Water Research.

Completion rept.
AUTHOR: Leeling, Norman C.
A5495E2 FLD: 7C, 13B, 59A, 68D USGRDB7224
Sep 72 9p
CONTRACT: DI-14-01-0001-3222
PROJECT: OWRR-A-044-MICH
MONITOR: OWRR-A-044-MICH(1)

ABSTRACT: The objectives were two fold: To determine the level of polychlorinated biphenyl residues present in Coho salmon from Lake Michigan; and To chemically characterize the major individual components. Various physical and chemical methods used in attempts to separate the DDT complex, especially DDE, from polychlorinated biphenyls (PCB's) proved unsuccessful on a quantitative basis. These methods included high-speed liquid column chromatography, sulfuric and permanganate oxidation, and derivatization with tetraphenyl cyclopentadienone. (Author)

DESCRIPTORS: (*Chlorine organic compounds, Separation), (*Water pollution, Chlorine organic compounds), Pesticides, Chromatographic analysis, DDT, Great Lakes, Chemical reactions, Oxidation

IDENTIFIERS: Biphenyl/chloro, *DDE pesticide, Lake Michigan

PB-212 588 NTIS Prices: PC$3.00/MF$0.95

MONS 212119

DDT in Water. A Bibliography

Office of Water Resources Research, Washington, D.C. Water Resources Scientific Information Center.
A5393L1 FLD: 13B, 6F, 68D, 57H USGRDR7223
Oct 71 283p*
REPT NO: WRSIC-71-211
MONITOR: W72-10431

ABSTRACT: The bibliography on DDT in water contains 196 abstracts with full bibliographic details for selected reports, journal articles, and various documents published mostly since 1967. Produced from a computerized information base containing 32,719 abstracts at the time of search, the bibliography is representative of the information on DDT in water contained in the journal 'Selected Water Resources Abstracts' through October 15, 1971 (Volume 4, Number 20). A significant descriptor index is given of representative weighted terms that best describe the information content of the abstracted items. A comprehensive index is also given that represents all descriptors and identifiers used to index the various papers and documents represented by the abstracts in the bibliography. (Author)

DESCRIPTORS: (*Water pollution, *DDT), (*Bibliographies, DDT), Adsorption, Algae, Toxicology, Water analysis, Aquatic plants, Aquatic animals, Fishes, Chlorine organic compounds, Dieldrin, Ecology, Insecticides, Phosphorus organic acid esters

IDENTIFIERS: DDD pesticide, DDE pesticide, Heptachlor, Water pollution effects(Plants), Water pollution effects(Animals), Biphenyl/chloro

PB-212 262 NTIS Prices: PC$3.00/MF$0.95

MONS 212120

Sewage Sludge Incineration

Environmental Protection Agency, Washington, D.C. (390 139)
A5074P1 PLD: 13B, 68D, 68C, 68A USGRDR7219
Aug 72 95p*
REPT NO: EPA-R2-72-040
PROJECT: EPA-B-12043
MONITOR: W72-12631

ABSTRACT: The report presents the findings of a Task Force which was established to evaluate sludge incineration as an acceptable alternative to ocean disposal. Multiple-hearth and fluidized bed furnaces, containing scrubbing devices for particulate removal, were selected for performance evaluation. The sludge, particulate, stack gas, scrubbing liquid, and ash were sampled and analyzed for heavy metals, pesticides, and oxides of nitrogen and sulfur. The results indicated that incinerators are capable of achieving low emission concentrations for the common pollutants. Particulate samples showed a measurable concentration of lead. The ash samples normally showed a higher concentration of the heavy metals when compared with the sludge samples. The pesticides and PCB results indicated complete destruction.

DESCRIPTORS: (*Sludge disposal, *Incinerators), (*Sewage treatment, Sludge disposal), Fluidized bed processors, Furnaces, Air pollution control equipment, Waste disposal, Air pollution, Water pollution, Oceans, Performance evaluation, Abatement, Metals, Pesticides, Trace elements, Particles, Sulfur dioxide, Nitrogen oxides, Lead, Mercury, Chlorine organic compounds, Scrubbers, Ashes, Combustion products

IDENTIFIERS: *Air pollution control, *Water pollution abatement, *Solid waste disposal, Ocean waste disposal, Biphenyl/chloro

PB-211 323 NTIS Prices: PC$3.00/MF$0.95

MONS 212121

Noncombustible Hydraulic Fluids

Foreign Technology Div., Wright-Patterson AFB, Ohio. (141 600)
AUTHOR: Hyska, Karol
A4765E3 FLD: 11H, 71K USGRDR7216
3 Mar 70 11p
REPT NO: FTD-HT-23-104-70
PROJECT: FTD-7230178
Edited trans. of Ropa a Uhlie (Czechoslovakia) v11 n3 p159-162 1969, by H. Peck. Distribution Limitation now Removed.

ABSTRACT: Czech fire-resistant hydraulic fluids, based mainly on chlorinated byphenyl, are discussed. The properties and applications of these fluids are compared with medium pydraul F-9. (Author)

DESCRIPTORS: (*Hydraulic fluids, *Halogenated hydrocarbons), (*Diphenyl, Hydraulic fluids), Viscosity, Fire resistant materials, Chlorine compounds, Czechoslovakia, Translations

IDENTIFIERS: Chlorine aromatic compounds

AD-868 456 NTIS Prices: PC$3.00/MF$0.95

MONS 212122

Polychlorobiphenyls (PCBs) and Related Chlorophenyls; Effects on Health and Environment. I. Bibliography---1881-1971

Oak Ridge National Lab., Tenn. Toxicology Information Response Center.
AUTHOR: Quinby, Griffith E.
A4551E3 FLD: 6F, 6T, 13B, 68A, 68D, 57H, 57Y USGRDR7214
Apr 72 141p*
REPT NO: TIRC-1, ORNL-EIS-72-20

ABSTRACT: Medical and public health interest in polychlorobiphenyls (PCBs) in the United States was meager before 1970. The expanding literature since then has reflected the realization of the importance of these substances as environmental pollutants. The analytical confusion of PCB with DDT and other chlorinated hydrocarbon pesticides prior to 1969 is of special interest. The concern over PCBs was heightened in 1971 by the recognition of gross contamination of certain animal feeds and of trace contamination of some human foods. The 870 articles cited in this bibliography are believed to cover the majority of articles in all languages available through January, 1972. (Author)

DESCRIPTORS: (*Air pollution, Chlorine aromatic compounds), (*Chlorine aromatic compounds, *Bibliographies), (*Water pollution, Chlorine aromatic compounds), Biphenyl, Chromatographic analysis, Toxicology, Insecticides, Biochemistry, Food contamination, Public health, Ecology, Lubricating oils, Insulating oil

IDENTIFIERS: *Biphenyl/chloro

PB-209 944 NTIS Prices: PC$3.00/MF$0.95

MONS 212123

The Mass Spectra of Polychlorinated Biphenyls

National Research Council of Canada Halifax (Nova Scotia) Atlantic Regional Lab (045500)
AUTHOR: Safe, S., Hutzinger, O.
A4491C1 PLD: 7D, 59G USGRDR7214
17 Sep 71 7p
Availability: Pub. in Jnl. of the Chemical Society, p685-691 1972.

ABSTRACT: The mass spectra of several di- and tetra-chlorobiphenyls suggested randomization of chlorine over both phenyl rings in the molecular ion prior to fragmentation. The exceptions, 2,2'- and 2,6-dichloro-, 2,2',4,4'-,2,2',5,5'-, 2,3,5,6-, and 2,2',6,6'-tetrachloro-biphenyls, all contain two or more chlorine atoms ortho to the Ph--Ph bond and their metastable ion intensities which result from the M to M - Cl2 reaction are markedly different from those of the other isomers. The primary ion spectra of most isomeric compounds are similar, with successive losses of Cl radical from the molecular ion. This process is often accompanied by expulsion of HCl from the lower chlorine homologues. The ion kinetic energy spectra of the di- and tetra-chloroisomers confirm the suggested fragmentation pathways. (Author)

DESCRIPTORS: (*Diphenyl, Mass spectrum), (*Halogenated hydrocarbons, *Mass spectrum), Chlorine compounds, Gas ionization, Chemical bonds, Dissociation, Canada

IDENTIFIERS: *Chlorine aromatic compounds, *Biphenyl/chloro

AD-742 588 NTIS Price: Not available NTIS

MONS 212124

PCBs and the Environment

Interdepartmental Task Force on PCBs, Washington, D.C.

Final rept.
A4214J1 FLD: 13B, 6F, 6T, 68A, 68D, 57I, 57H, 65D, 57U, 86A
USGRDR7211
20 Mar 72 192p*
REPT NO: ITF-PCB-72-1

ABSTRACT: The report is the product of a six month review of the chemicals known as PCBs--polychlorinated biphenyls--by five Federal agencies, with participation by other agencies. The task force made nine findings, conclusions, and recommendations, primarily pointing out that PCBs should be restricted to essential or nonreplaceable uses which would minimize the likelihood of human exposure or leakage to the environment. Supplementing the 20-page report are eight appendices detailing current knowledge about various aspects of PCBs, including their use and replaceability; occurrence, transfer, and cycling in the environment; occurrence and sources in food; and PCBs effects on man and animals. (Author)

DESCRIPTORS: (*Chlorine aromatic compounds, *Pollution), (*Air pollution, Chlorine aromatic compounds), (*Water pollution, Chlorine aromatic compounds), (*Toxicology, Chlorine aromatic compounds), Environmental surveys, Insulating oil, Industrial wastes, Lubricant additives, Plasticizers, Biphenyl, Public health, Economic factors, Government policies, Chemical properties, Food, Epidemiology, Humans, Animals, Ecology

IDENTIFIERS: *Biphenyl/chloro

COM-72-10419 NTIS Prices: PC$6.00/MF$0.95

MONS 212125

PCB in Water: A Bibliography

Office of Water Resources Research, Washington, D.C. Water Resources Scientific Information Center.
A3801A4 FLD: 13B, 6F, 68D, 57H USGRDR7207
Jan 72 43p*
REPT NO: WRSIC-72-201
MONITOR: W72-04439

ABSTRACT: The bibliography contains a collection of 25 abstracts for selected reports and journal articles published in 1969, 1970, and 1971 on polychlorinated biphenyls (PCB). The abstracts include full bibliographical citations and a set of descriptors from the Water Resources Thesaurus. A significant descriptor index is given of representative weighted terms that best describe the information content of the abstracted items.

DESCRIPTORS: (*Water pollution, *Chlorine organic compounds), (*Bibliographies, Water pollution), (*Pesticides, Water pollution), Insecticides, Chlorine aromatic compounds, Biphenyl, Aquatic biology, Water analysis, Plasticizers, Oceans, Industrial wastes, Toxicology, Biodeterioration, DDT, Dieldrin, Ecology

IDENTIFIERS: *Biphenyl/chloro, *Water pollution effects(Animals), Water pollution detection

PB-206 534 NTIS Prices: PC$3.00/MF$0.95

MONS 212126

Chlorinated Hydrocarbons in the Marine Environment

National Academy of Sciences-National Research Council, Washington, D.C. Committee on Oceanography. (091 500)
AJ415L2 FLD: 6F, 8B, 68D, 57H, 78 USGRDP7203
1971 47p*
PROJECT: EPA-WQO-16070
MONITOR: EPA-WQO-16070-00/71

ABSTRACT: The report discusses the fact that the oceans are the ultimate accumulation site for the persistent chlorinated hydrocarbons. The report presents material to support its recommendations: A massive effort should be made immediately to check the escape of persistent toxicants into the environment; Rates of entry of each pollutant into the marine environment be determined; and The laws relating to the registration of chemical substances and the release of production figures by the government be examined.

DESCRIPTORS: (*Water pollution, *Insecticides), (*Chlorine organic compounds, Water pollution), (*Oceans, Water pollution), Recommendations, DDT, Ecology, Biphenyl, Ocean currents, Fishes, Birds, Marine biology

IDENTIFIERS: Biphenyl/chloro

PB-204 738 NTIS Prices: PC$3.00/MF$0.95

MONS 212127

The Use and Disposal of Electrical Insulating Liquids

National Industrial Pollution Control Council, Washington, D.C.

Sub-council rept.
A2402T3 FLD: 13B, 11H, 68D, 71K, 86A USGRDR7115
Jun 71 23p
Paper copy available from GPO $0.25/copy as 5254-0028.

ABSTRACT: Electrical insulating liquids (EIL), their application and disposal were studied against a background of similar information relating to petroleum products in total. Naphthenic mineral oils are found to comprise over 80 percent by volume of the total usage of EIL. Polybutenes are second, at almost 10 percent. Thus, 90 percent of EIL are petroleum-based. Being relatively non-toxic and biodegradable, they represent no environmental threat when subjected to conventional secondary waste treatment. Furthermore, assistance in reclaiming or proper disposal of used mineral oils can usually be obtained from the suppliers of these products. The third largest-volume EIL group is the askarels, or polychlorobiphenyls. This group has some toxic properties and contains members which have recently become suspect ecologically. Accordingly, the report contains recommendations regarding the control and disposition of askarels. (Author)

DESCRIPTORS: (*Insulating oil, *Waste disposal), (*Mineral oils, Waste disposal), (*Chlorine aromatic compounds, Waste disposal), Electric insulation, Ecology, Water pollution, Toxicology, Naphthalene, Biphenyl, Decomposition, Water pollution, Incinerators, Recommendations

IDENTIFIERS: *Water pollution control

COM-71-50247 NTIS Prices: PC-GPO/MF$0.95-NTIS

MONS 212128

INTERBUREAU BY-LINES. VOLUME 6, NUMBER 6

Food and Drug Administration, Washington, D.C. (140 700)
AUTHOR: Reynolds, Helen L., Palmer, Nancy J., Kovach, Laura A., Blair, Alberta E., Mahoney, Dorothy H.
A0633K3 PLD: 60, 6H, 7D, 6M, 57Q, 52D, 59A, 57K, 57Y USGRDR/1017
May 70 57p*
REPT NO: Consecutive-36
See also Volume 6, No. 5, PB-190 961.

ABSTRACT: Contents: Collaborative study of the determination of ammonia as an index of decomposition in crabmeat: Spectrofluorometric determination of Rauwolfia Serpentina tablets and whole root; Application of neutron activation analysis to food products: A bibliography; Polarographic determination of nitrates in aqueous media containing nitrites; Correlation of organoleptic evidence with pH, volatile bases, and indole as indices of decomposition in raw, frozen shrimp; Differential effects of DDT and polychlorinated biphenyls on the central nervous system; Microbiological contamination bibliography (Continued); Comulative index to Interbureau By-Lines, Vols. 1-6.

DESCRIPTORS: (*Food, *Degradation), (*Seafood, Chemical analysis), (*Radioactivation analysis, Food), (*Nitrates, *Polarographic analysis), (*DDT, Central nervous system), (*Biological contamination, *Bibliographies), (*Rauwolfia alkaloids, Spectroscopy), Halogenated hydrocarbons, Diphenyl, Ammonia, Chlorine compounds, Phenols, Reserpine, Indexes, Crustacea, Insecticides, Microorganisms

IDENTIFIERS: *Crabs, *Shrimps, *Neutron activation analysis, *Chlorine aromatic compounds, Rauwolfia serpentina, Fluorometric analysis, *Spectroscopic analysis

PB-192 766 CFSTI Prices: HC$3.00 MF$0.65

MONS 212129

NTISearch

NTIS - PR-186
July 1975

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NTIS National Technical Information Service
U S DEPARTMENT OF COMMERCE
Springfield, Virginia 22161

MONS 212130

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301 to 400 technical report summaries	175	220
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PRICES SUBJECT TO CHANGE

MONS 212132

AVAILABLE PUBLISHED SEARCHES

The list of Published Searches following these introductory pages includes all those available to July, 1975. Titles are arranged in 34 subject categories as shown at the bottom of this page and are cross-referenced to all appropriate categories.

The citations in this listing include the following information:

- Order Number (Please use when ordering any information item).
- Title
- Number of technical report summaries (in parentheses) in the search.
- Date of preparation of the search.

All Published Searches are available in paper copy or microfiche (105 x 148 75mm, which is about 4 x 6 inches) with up to 98 pages per fiche (24X). Published Searches are $25 each for domestic addresses ($35 for addresses outside the U.S.) whether in paper copy or fiche. Additional copies of the same Published Search to the same address cost $10 each for domestic addresses ($12.50 each for addresses outside the U.S.) in paper copy or fiche.

SUBJECT CATEGORIES AND PAGE LOCATION

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Administration	e	Industrial & Mechanical Engineering	x
Aeronautics and Aerodynamics	e	Library and Information Sciences	y
Agriculture and Food	f	Materials Sciences	y
Astronomy and Astrophysics	f	Mathematical Sciences	aa
Atmospheric Sciences	g	Medicine and Biology	bb
Behavior and Society	g	Military Sciences	ee
Biomedical Technology & Engineering	i	Missile Technology	ee
Building Technology	j	Natural Resources	ee
Business and Economics	k	Navigation, Guidance and Control	gg
Chemistry	l	Non-Destructive Testing	gg
Civil & Structural Engineering	m	Nuclear Science and Technology	gg
Communication	o	Ocean Technology and Engineering	hh
Computers, Control and Information Theory	p	Ordnance	ii
Detection and Countermeasures	g	Photography and Recording Devices	ii
Electrotechnology	g	Physics	ii
Energy	n	Propulsion and Fuels	kk
Environmental Pollution and Control	t	Transportation	ll
		Urban Technology	mm

PRICES SUBJECT TO CHANGE

July 1975

MONS 212133

EXAMPLE OF DATA SUPPLIED IN BIBLIOGRAPHIC ENTRY

Title — Industry Innovation and the Municipal Market

Corporate Author — Franklin Insl. Research Labs., Philadelphia, Pa. (142 925)

Final rept
AUTHOR Blair, John F., Jr
C1872L3 FLD 5C 98*, 86X USGRDR7324
Report Date — 15 Oct 73
Pages in Report — 103p*
REPT NO FIRL-F-C3431
PROJECT EDA-99-6-09281
MONITOR EDA-73-048

Abstract or Technical Report Summary —

ABSTRACT The summary report is made on work done under the auspices of the Economic Development Administration and funded through The Experimental Technology Incentives Program (ETIP). It delineates the form and content of the policies and programs required to develop the municipal local government market into a force for technological innovation and economic development. In addition to this document, a series of eighteen background papers is on file that deals in considerable depth with the more important aspects of the study. This supplementary documentation is referenced in footnotes throughout the text of the summary volume

Key Words —

DESCRIPTORS (*Industrial engineering, *Urban planning), (*Public administration, *Urban development), Procurement, Reviews, Optimization, Economic development Industrial relations, Marketing, Productivity, Systems engineering, Local government, Policies, Recommendations, Pennsylvania

IDENTIFIERS Technological development, Innovations, Philadelphia (Pennsylvania), EDA

Item Number — COM-73-11748/3 NTIS Prices PC$4.25/MF$2.25

Paper Copy Price — Microfiche Price

NOTE Prices are subject to change.

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#3 AVAILABLE PUBLISHED SEARCHES-July 1975

ADMINISTRATION

Order Number	
COM-74-11194	Technology Transfer (144) 1972-Jul 74
COM-74-11319	Urban Information Systems (196) 1970-Aug 74 Includes USAC reports
COM-74-11571	Productivity (126) Oct 74
NTIS/PS-74/112	Management Games (163) Nov 74
NTIS/PS-74/121	Inventory Control (195) 1970-Dec 74
NTIS/PS-74/122	Job Satisfaction (216) Dec 74
NTIS/PS-74/124	Production Planning and Scheduling (143) Dec 74
NTIS/PS-75/150	Time Series Forecasting and Prediction (96) Jan 75
NTIS/PS-75/276	Career Development. Part 1. Military Careers (143) Feb 75
NTIS/PS-75/277	Career Development. Part 2. Civilian Careers (186) Feb 75
NTIS/PS-75/352	Construction Management (103) Apr 75
NTIS/PS-75/405	Replacement Theory (85) Apr 75
NTIS/PS-75/406	Linear Programming in Management (38) May 75
NTIS/PS-75/439	PERT (123) May 75

AERONAUTICS AND AERODYNAMICS

Order Number	
COM-74-10515	Air Traffic Control Simulation Models (125) May 74
NTIS/PS-74/098	Airport Noise (113) Nov 74
NTIS/PS-75/036	Collision Avoidance Systems (156) Dec 74
NTIS/PS-75/115	Holographic Flow Visualization (53) Jan 75
NTIS/PS-75/116	Flow Visualization (106) Jan 75 Excludes shadowgraph, schlieren, and holographic techniques
NTIS/PS-75/164	Aircraft Wake Vortices (137) Dec 1974
NTIS/PS-75/318	Aircraft Sonic Boom. Part 1. Studies on Aircraft Flight and Design (99) Feb 75
NTIS/PS-75/319	Aircraft Sonic Boom. Part 2. Effects on Buildings (60) Feb 75
NTIS/PS-75/320	Aircraft Sonic Boom. Part 3. Biological Effects (52) Feb 75
NTIS/PS-75/332	Surface Effect Vehicles/Ships in Marine Environments (108) Jan 75
NTIS/PS-75/333	Surface Effect Vehicles and Surface Effect: General Studies. Vol. 1. 1964-1971 (134) Jan 75 Does not include marine environments
NTIS/PS-75/334	Surface Effect Vehicles and Surface Effect: General Studies. Vol. 2. 1972-1974 (67) Jan 75 Does not include marine environments

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AERONAUTICS AND AERODYNAMICS (Cont.)

Order Number

NTIS/PS-75/336 Flight Simulator Training (119) Feb 75

AGRICULTURE AND FOOD

Order Number

COM-74-11203 Animal Waste Pollution and Its Control (115) Jul 74
NTIS/PS-74/083 Food Processing Waste Treatment (167) Nov 74
NTIS/PS-74/119 Food Processing (207) Dec 74
NTIS/PS-75/057 Food Taste (137) Oct 74
NTIS/PS-75/068 Agricultural Resources Surveys (53) 1973-Jan 75

NTIS/PS-75/072 Ground Water Pollution. Part 2. Pollution From Irrigation and Fertilization (132) Jan 75
NTIS/PS-75/093 Fish Protein Concentrates (117) Jan 75
NTIS/PS-75/101 Air Pollution Effects on Plants (135) Jan 75
NTIS/PS-75/111 Fishery Law (126) Jan 75
NTIS/PS-75/304 Aquaculture. Part 1. Fish (212) Feb 75 Excludes studies on salmon

NTIS/PS-75/305 Aquaculture. Part 2. Shellfish (129) Feb 75
NTIS/PS-75/306 Aquaculture. Part 3. Salmon (63) Feb 75
NTIS/PS-75/356 GRAS(Generally Recognized as Safe) Food Ingredients (253) April 75
NTIS/PS-75/360 Medical Entomology. Vol. 2. 1970-1975 (192) 1970-Jan 1975
NTIS/PS-75/361 Medical Entomology. Vol.1.1964-1969 (157) 1964-1969

NTIS/PS-75/380 Food Packaging and Storage (187) 1970-Apr 75

NTIS/PS-75/460 Sewage and Organic Waste Irrigation (111) May 75
NTIS/PS-75/468 Sport Fishing (150) Jun 75

ASTRONOMY AND ASTROPHYSICS

Order Number

NTIS/PS-75/031 Mars Environment (93) 1971-Oct 74
NTIS/PS-75/134 Cosmic Rays (129) 1973-Jan 75
NTIS/PS-75/225 Quasars, Pulsars, Black Holes (170) Feb 75
NTIS/PS-75/229 Solar Eclipses (140) Feb 75
NTIS/PS-75/242 Cosmology (102) Feb 75

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ATMOSPHERIC SCIENCES

Order Number

NTIS/PS-75/008 Clear Air Turbulence (220) Dec 74
NTIS/PS-75/045 Atmospheric Echo Sounding (50) Dec 74
NTIS/PS-75/078 Weather Modification Effects and Management (117) Jan 75 Excludes theory and physics of cloud seeding and nucleation
NTIS/PS-75/099 Fog Dispersal (167) Jan 74
NTIS/PS-75/187 Hurricane Forecasting, Modification, and Research (174) Jan 75

NTIS/PS-75/228 The Chemistry and Physics of Ozone in the Stratosphere (91) Jan 75
NTIS/PS-75/229 Solar Eclipses (140) Feb 75
NTIS/PS-75/231 Ice and Fog: Detection and Warning Systems (58) Dec 74
NTIS/PS-75/314 Automobile Air Pollution. Part 6. Atmospheric Motion (42) 1970-Dec 74
NTIS/PS-75/395 Cloud Seeding (231) Apr 75 Includes effects on water resources

BEHAVIOR AND SOCIETY

Order Number

COM-74-10100 Juvenile Delinquency Prevention Programs (100) Dec 73
COM-74-10928 Vocational Rehabilitation of the Physically Handicapped (78) May 74
COM-74-11376 Computer Aided Instruction (252) 1970-Aug 74
COM-74-11393 The Elderly (139) Sep 74
COM-74-11571 Productivity (126) Oct 74

NTIS/PS-74/110 Alcoholism (135) Nov 74
NTIS/PS-74/122 Job Satisfaction (216) Dec 74
NTIS/PS-74/125 Quality of Life in the Urban Environment (131) 1970-Dec 74
NTIS/PS-74/134 Ocean Law (123) Dec 74
NTIS/PS-75/002 Civil Insurgency (84) Jan 75

NTIS/PS-75/005 Rehabilitation of Criminal and Public Offenders (100) 1967-Oct 74
NTIS/PS-75/007 Disasters (131) Dec 74
NTIS/PS-75/012 Medicare and Medicaid Programs (64) Dec 74
NTIS/PS-75/032 Computational Linguistics (108) Jan 75
NTIS/PS-75/034 Family Counseling (35) Jan 75

NTIS/PS-75/047 Crime Prevention and Enforcement Through Community Relations (72) Jan 75

MONS 212137

BEHAVIOR AND SOCIETY (Cont.)

Order Number

NTIS/PS-75/052 Psycholinguistics (60) Jan 75
NTIS/PS-75/053 Speech Intelligibility (170) Jan 75
NTIS/PS-75/056 Behavior and Psychology as Related to Law Enforcement (103) Jan 75
NTIS/PS-75/058 Health Manpower (86) Jan 75 Excludes allied health personnel

NTIS/PS-75/062 Audiovisual Education (69) Dec 74
NTIS/PS-75/073 Signs and Display Systems: Graphic Design and Human Engineering (92) Jan 75
NTIS/PS-75/079 American Indians (122) Jan 75
NTIS/PS-75/082 Industrial Psychology (161) Jan 75
NTIS/PS-75/083 The Use of the Mass Media by Local and Regional Governments (58) Jan 75

NTIS/PS-75/087 Information Processing in Humans (221) Jan 75
NTIS/PS-75/102 Behavior and Physiological Effects of Noise. Vol 1. 1964-1972 (200) Jan 75
NTIS/PS-75/103 Behavior and Physiological Effects of Noise. Vol 2. 1973-1974 (72) Jan 75
NTIS/PS-75/131 Rehabilitation of the Physically Handicapped (119) Jan 75 Excludes reports sponsored solely by the Atomic Energy Commission
NTIS/PS-75/132 Rehabilitation of the Mentally Retarded (79) Jan 75

NTIS/PS-75/144 Driver Education (109) Jan 75
NTIS/PS-75/145 Probation and Parole (55) Jan 75
NTIS/PS-75/147 Drug Abuse (113) Jan 75
NTIS/PS-75/161 Effects of Fatigue on Human Behavior and Performance (104) Jan 75
NTIS/PS-75/168 Ghettos (69) Jan 75

NTIS/PS-75/195 Individualized Instruction (72) Jan 75
NTIS/PS-75/232 Attitudes, Opinions, and Motivations among Adolescents (186) Feb 75
NTIS/PS-75/240 Migrant Workers (38) Jan 75
NTIS/PS-75/245 Forensic Medicine (39) Jan 75
NTIS/PS-75/253 Historical Background Studies of the National Park Service (168) Jan 75

NTIS/PS-75/261 Student Teacher Interaction (69) Feb 75
NTIS/PS-75/266 Social Change (147) Feb 75
NTIS/PS-75/276 Career Development. Part 1. Military Careers (143) Feb 75
NTIS/PS-75/277 Career Development. Part 2. Civilian Careers (186) Feb 75
NTIS/PS-75/281 Human Aggression (41) Feb 75

NTIS/PS-75/290 Labor Relations (169) Feb 75 Excludes job satisfaction, bargaining, and productivity

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BEHAVIOR AND SOCIETY (Cont.)

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NTIS/PS-75/291 Collective Bargaining, Wages, and Labor Contracts (55) Feb 75
NTIS/PS-75/297 Human Memory (130) Feb 75
NTIS/PS-75/298 Work Attitudes in the Military (98) Feb 75
NTIS/PS-75/300 Work Attitudes in the Civilian Sector (178) Feb 75

NTIS/PS-75/323 Population Mobility (127) Feb 75
NTIS/PS-75/335 Simulators in Education and Training (99) Feb 75
NTIS/PS-75/336 Flight Simulator Training (119) Feb 75
NTIS/PS-75/358 Adult Education (98) Feb 75
NTIS/PS-75/373 Public Opinion and Sociology of Water Resource Development (82) 1970-Apr 75

NTIS/PS-75/393 Arms Control (234) Apr 75
NTIS/PS-75/425 Crimes and Crime Prevention (134) May 75
NTIS/PS-75/427 Blindness (113) May 75
NTIS/PS-75/443 Police (200) Jun 75

BIOMEDICAL TECHNOLOGY AND ENGINEERING

Order Number

COM-74-10888 Facial and Dental Prosthetics (63) Apr 74
COM-74-11126 Biocompatible Materials (160) Jul 74
COM-74-11312 Computer Technology in Medicine (166) 1972-Jul 74
COM-74-11528 Health Services in Rural Areas (59) Aug 1974
NTIS/PS-75/010 Blood Preservation and Storage (203) Nov 74

NTIS/PS-75/012 Medicare and Medicaid Programs (64) Dec 74
NTIS/PS-75/039 Underwater Breathing Apparatus (130) Dec 74
NTIS/PS-75/058 Health Manpower (86) Jan 75 Excludes allied health personnel
NTIS/PS-75/064 Robots (89) Jan 75
NTIS/PS-75/094 Biotelemetry (139) Nov 74

NTIS/PS-75/138 Color Vision (143) Jan 75
NTIS/PS-75/171 Emergency Medical Services and Care (87) Jan 75
NTIS/PS-75/172 Night Vision and Dark Adaptation (78) Jan 75
NTIS/PS-75/173 Radiology (102) 1967-Jan 75
NTIS/PS-75/175 Ultrasonics in Medicine (39) Jan 75

NTIS/PS-75/213 Nuclear Medicine (218) Jan 75
NTIS/PS-75/341 Ambulatory Health Care (74) Feb 75
NTIS/PS-75/366 Electromagnetic Shielding, Vol 1, 1964-1971 (162) Apr 75

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BIOMEDICAL TECHNOLOGY AND ENGINEERING (Cont.)

Order Number

NTIS/PS-75/367 Electromagnetic Shielding. Vol 2. 1972-1975 (78) Apr 75
NTIS/PS-75/396 Bionics (53) May 75

NTIS/PS-75/397 Artificial Intelligence (80) May 75
NTIS/PS-75/418 Artificial Kidneys (182) 1968-Apr 75
NTIS/PS-75/419 Health Care Delivery (137) May 75
NTIS/PS-75/423 Mechanical Hearts. Vol. 1. 1969-1973. (173) 1969-1973
NTIS/PS-75/424 Mechanical Hearts. Vol. 2. 1974-1975. (77) 1974-1975

NTIS/PS-75/427 Blindness (113) May 75
NTIS/PS-75/438 Artificial Limbs (115) 1968-May 75

BUILDING TECHNOLOGY

Order Number

COM-73-10242 Stress Analysis of Cracks (129) Jan 74
COM-74-10582 Industrialized Housing (159) Jun 74
COM-74-11141 Earthquake Engineering: Buildings, Bridges, Dams, and Related Structures (190) 1964-May 74
COM-74-11534 Building Fires (143) Sep 74
COM-74-11535 Concrete Polymer Composites (72) Oct 74

NTIS/PS-75/051 Wood Bonding (56) Jan 75
NTIS/PS-75/133 Fire Alarms and Fire Detectors (96) Jan 75
NTIS/PS-75/211 Prestressed Concrete Technology (161) Dec 74
NTIS/PS-75/221 Fiberboard and Particleboard (75) Jan 75
NTIS/PS-75/282 Structural Foundations in Soils, Ice, Snow, and Permafrost. Vol. 1. 1964-1971 (135) Jan 75 Excludes subway and seabed construction

NTIS/PS-75/283 Structural Foundations in Soils, Ice, Snow, and Permafrost. Vol. 2. 1972-1974 (57) Jan 75 Excludes subway and seabed construction
NTIS/PS-75/315 Aircraft Sonic Boom. Part 2. Effects on Buildings (60) Feb 75
NTIS/PS-75/345 Solar Heating and Air Conditioning (71) Jan 75
NTIS/PS-75/352 Construction Management (103) Apr 75
NTIS/PS-75/389 Architectural Construction Materials. Part 1. Non Concrete (189) May 75 Excludes concretes, bridges, pavements, airfields, cold weather construction, composites, and earthquake resistant construction

NTIS/PS-75/390 Architectural Construction Materials. Part 2. Concrete and Cement (127) May 75 Excludes non-concretes, bridges, pavements, airfields, cold weather construction, composites, and earthquake resistant construction

MONS 212140

BUILDING TECHNOLOGY (Cont.)

Order Number

NTIS/PS-75/391 Construction Equipment (174) May 75 Excludes translations

NTIS/PS-75/394 Cold Weather Construction (99) May 75 Excludes permafrost construction

NTIS/PS-75/428 Structural Mechanics Software (185) May 75

NTIS/PS-75/465 Stress Crack Phenomena (186) Jun 75 Excludes rock mechanics and mathematical analysis

NTIS/PS-75/466 Mathematical Analysis of Stress Cracks. Vol 1. 1964-1973 (207) June 75

NTIS/PS-75/467 Mathematical Analysis of Stress Cracks. Vol 2. 1974-May 75 (189) June 75

BUSINESS AND ECONOMICS

Order Number

COM-74-11571 Productivity (126) Oct 74

NTIS/PS-74/085 Material Shortages (96) Nov 74

NTIS/PS-74/091 Air Pollution Economics (202) 1970-Nov 74

NTIS/PS-74/092 Solid Waste Disposal Economics (76) Nov 74

NTIS/PS-74/093 Noise Pollution Economics (23) Nov 74

NTIS/PS-74/094 Water Pollution Economics (199) Nov 74 Excludes sewage treatment

NTIS/PS-74/130 Effects of Inflation (48) Dec 74

NTIS/PS-74/134 Ocean Law (123) Dec 74

NTIS/PS-75/097 Revenue Sharing (30) Jan 75

NTIS/PS-75/098 Federal Individual Income Tax Return Data by ZIP Code (104) Jan 75

NTIS/PS-75/119 Minority Business (71) Jan 75 Excludes regional and socioeconomic studies

NTIS/PS-75/120 Economic Development of Ethnic Minorities (86) Jan 75

NTIS/PS-75/199 Urban Financing and Taxation (95) Jan 75 Excludes financing of transportation and pollution control

NTIS/PS-75/200 Financing Urban Transportation. Part 1. General Studies (65) 1970-Jan 75

NTIS/PS-75/201 Financing Urban Transportation. Part 2. Local Studies (95) 1970-Jan 75

NTIS/PS-75/202 Financing and Taxation For Urban Control of Pollution (111) Jan 75

NTIS/PS-75/203 Housing Taxation and Financing by the Federal, State, and Local Governments (87) Jan 75

MONS 212141

BUSINESS AND ECONOMICS (Cont.)

Order Number

NTIS/PS-75/290 Labor Relations (169) Feb 75 Excludes job satisfaction, bargaining, and productivity

NTIS/PS-75/291 Collective Bargaining, Wages, and Labor Contracts (55) Feb 75

NTIS/PS-75/299 Federal Trade Commission Advertising Substantiation Progree (148) Feb 75

NTIS/PS-75/400 Telecommunications--Economic Studies (66) May 75

NTIS/PS-75/407 Economic Models. Vol. 1. 1964-March 1974 (161) May 75

NTIS/PS-75/408 Economic Models. Vol. 2. April 1974-April 1975 (140) May 75

NTIS/PS-75/409 Consumer Products and Consumer Affairs (41) May 75

CHEMISTRY

Order Number

COM-74-11018 Chemical Analysis of Aerosols and Airborne Particulates (60) Jun 74 Excludes sampling and particle size analysis

NTIS/PS-74/109 Drag Reducing Fluids (134) 1969-Nov 74

NTIS/PS-74/111 Fire Resistant Fibers and Textiles (124) Dec 74

NTIS/PS-74/116 Liquid Crystals (182) Nov 74

NTIS/PS-74/117 Polycarborenes (63) Nov 74

NTIS/PS-74/118 Waste Processing and Pollution in the Chemical and Petrochemical Industries (172) Dec 74

NTIS/PS-74/133 Fly Ash (143) Dec 74

NTIS/PS-75/017 Sewage Treatment by Reverse Osmosis and Membrane Processes (39) Dec 74

NTIS/PS-75/041 Standard Reference Materials (118) Jan 75

NTIS/PS-75/048 Lubricating Oil Analysis for Wear Monitoring (46) Jan 74

NTIS/PS-75/084 Combustion of Plastics and Elastomers (67) Jan 75

NTIS/PS-75/135 Electrodialysis Desalination (100) Dec 74

NTIS/PS-75/156 Water Pollution Detection (166) 1970-Jan 75

NTIS/PS-75/157 Corrosion in Desalination Plants (154) Dec 74

NTIS/PS-75/159 Laser Spectroscopy (126) 1970-Jan 75 Excludes Raman spectroscopy

NTIS/PS-75/160 Laser Raman Spectroscopy (66) 1970-Jan 74

NTIS/PS-75/163 Gas Scrubbers (156) Dec 74

NTIS/PS-75/193 Osmotic Desalting Membranes. Vol 2. 1973-1974 (89) Jan 75

NTIS/PS-75/194 Osmotic Desalting Membranes. Vol 1. 1964-1972 (120) Jan 75

NTIS/PS-75/206 Acrylic Resins. Part 1. Acrylonitrile Polymers (75) Dec 74

MONS 212142

CHEMISTRY (Cont.)

Order Number

NTIS/PS-75/207 Acrylic Resins. Part 2. Methacrylate Polymers (146) Dec 74

NTIS/PS-75/208 Acrylic Resins. Part 3. Acrylates, Acrylamides, and General Studies (125) Dec 74

NTIS/PS-75/209 Mercury Pollution (113) Dec 74 Excludes toxicity and pollution effects

NTIS/PS-75/228 The Chemistry and Physics of Ozone in the Stratosphere (91) Jan 75

NTIS/PS-75/256 Fluidized Bed Combustion (66) Dec 74

NTIS/PS-75/257 The Chemistry of Silicone Resins (130) Jan 75

NTIS/PS-75/267 Lead Pollution (171) Jan 75 Excludes pollution effects and toxicology of lead

NTIS/PS-75/285 Hazardous Material Waste Disposal (92) Dec 74 Excludes radioactive wastes

NTIS/PS-75/286 Hazardous Materials Transportation (126) Dec 74 Excludes radioactive wastes

NTIS/PS-75/289 Chemical Analysis of Steels (110) Feb 75

NTIS/PS-75/310 Automobile Air Pollution. Part 2. Exhaust Analysis (33) 1970-Dec 74

NTIS/PS-75/353 Polytetrafluoroethylene (Teflon) (118) Apr 75

NTIS/PS-75/359 Polywater (34) Apr 75

NTIS/PS-75/381 Desulfurization of Coal and Petroleum (107) Apr 75 Excludes flue gas and other post-combustion sulfur control

NTIS/PS-75/385 Coal Gasification and Liquefacton Vol 1. (161) 1964-1973

NTIS/PS-75/386 Coal Gasification and Liquefaction. Vol 2. 1974 (90) 1974-Apr 75

NTIS/PS-75/402 Light Detection and Ranging(LIDAR) (191) May 75

NTIS/PS-75/455 Sulfur Dioxide Control. Vol 2. 1973-1974 (94) May 75 Excludes fuel desulfurization

NTIS/PS-75/456 Sulfur Dioxide Control. Vol 1. 1964-1972 (159) May 75

NTIS/PS-75/461 Activated Carbon (221) May 75 Includes activated carbon treatment of sewage

CIVIL AND STRUCTURAL ENGINEERING

Order Number

COM-73-10242 Stress Analysis of Cracks (129) Jan 74

COM-74-11141 Earthquake Engineering: Buildings, Bridges, Dams, and Related Structures (190) 1964-May 74

COM-74-11201 Flood Control (191) 1972-Jul 74

COM-74-11535 Concrete Polymer Composites (72) Oct 74

MONS 212143

CIVIL AND STRUCTURAL ENGINEERING (Cont.)

Order Number

NTIS/PS-74/096 Tunnel Construction (138) Nov 74

NTIS/PS-75/050 Environmental and Ecological Effects of Dredging (85) Jan 75

NTIS/PS-75/061 De-Icing Materials and Techniques for Roads and Runways (92) Jan 75

NTIS/PS-75/076 Bridges: Construction and Construction Materials (104) Dec 74

NTIS/PS-75/180 Highway Beautification (46) Jan 75

NTIS/PS-75/198 Permafrost. Part 2. Structural Engineering (174) Jan 75

NTIS/PS-75/211 Prestressed Concrete Technology (161) Dec 74

NTIS/PS-75/255 Foundations in Marine Environments (64) Dec 74

NTIS/PS-75/282 Structural Foundations in Soils, Ice, Snow, and Permafrost. Vol. 1. 1964-1971 (135) Jan 75 Excludes subway and seabed construction

NTIS/PS-75/283 Structural Foundations in Soils, Ice, Snow, and Permafrost. Vol. 2. 1972-1974 (57) Jan 75 Excludes subway and seabed construction

NTIS/PS-75/352 Construction Management (103) Apr 75

NTIS/PS-75/365 Soil Compaction/Consolidation (181) Apr 75

NTIS/PS-75/366 Electromagnetic Shielding. Vol 1. 1964-1971 (162) Apr 75

NTIS/PS-75/367 Electromagnetic Shielding. Vol 2. 1972-1975 (78) Apr 75

NTIS/PS-75/389 Architectural Construction Materials. Part 1. Non Concrete (189) May 75 Excludes concretes, bridges, pavements, airfields, cold weather construction, composites, and earthquake resistant construction

NTIS/PS-75/390 Architectural Construction Materials. Part 2. Concrete and Cement (127) May 75 Excludes non-concretes, bridges, pavements, airfields, cold weather construction, composites, and earthquake resistant construction

NTIS/PS-75/391 Construction Equipment (174) May 75 Excludes translations

NTIS/PS-75/394 Cold Weather Construction (99) May 75 Excludes permafrost construction

NTIS/PS-75/466 Mathematical Analysis of Stress Cracks. Vol 1. 1964-1973 (207) June 75

NTIS/PS-75/467 Mathematical Analysis of Stress Cracks. Vol 2. 1974-May 75 (109) June 75

NTIS/PS-75/469 Erosion Control (138) May 75 Excludes soil stabilization

NTIS/PS-75/470 Soil Stabilization (167) May 75 Excludes erosion control

MONS 212144

COMMUNICATION

Order Number	
COM-74-11435	Speech Recognition by Computer (142) Sep 74
COM-74-11572	Computer Networks (153) 1969-Oct 74
NTIS/PS-74/087	Telephone Systems (181) Dec 74
NTIS/PS-74/101	Applications of the Fast Fourier Transform (144) 1970-Nov 74
NTIS/PS-75/030	Vocoders (87) Jan 75
NTIS/PS-75/035	Electroluminescent Display Devices (105) Jan 75
NTIS/PS-75/037	Underwater Voice Communication Systems (78) Dec 74
NTIS/PS-75/052	Psycholinguistics (60) Jan 75
NTIS/PS-75/053	Speech Intelligibility (170) Jan 75
NTIS/PS-75/067	Data Compression (89) Jan 75
NTIS/PS-75/073	Signs and Display Systems: Graphic Design and Human Engineering (92) Jan 75
NTIS/PS-75/083	The Use of the Mass Media by Local and Regional Governments (58) Jan 75
NTIS/PS-75/142	Modems (92) Jan 75
NTIS/PS-75/178	Frequency Allocation and Management (100) Jan 75
NTIS/PS-75/188	Band Pass Filters (104) Jan 75
NTIS/PS-75/248	Acoustic Surface Waves. Vol. 1. 1964-1972 (75) Jan 75
NTIS/PS-75/249	Acoustic Surface Waves. Vol. 2. 1973-1974 (137) Jan 75
NTIS/PS-75/250	Microwave Communication (163) Jan 75.
NTIS/PS-75/302	Antenna Arrays. Vol 2. 1972-1974 (93) Feb 75 Excludes phased arrays
NTIS/PS-75/303	Antenna Arrays. Vol 1. 1964-1971 (219) Feb 75 Excludes phased arrays
NTIS/PS-75/337	Phased Arrays. Vol 1. 1964-1971 (141) Feb 75
NTIS/PS-75/338	Phased Arrays. Vol 2. 1972-1974 (103) Feb 75
NTIS/PS-75/366	Electromagnetic Shielding. Vol 1. 1964-1971 (162) Apr 75
NTIS/PS-75/367	Electromagnetic Shielding. Vol 2. 1972-1975 (78) Apr 75
NTIS/PS-75/378	Walsh Functions (55) Apr 75
NTIS/PS-75/398	Information and Communication Theory (124) May 75
NTIS/PS-75/400	Telecommunications--Economic Studies (66) May 75
NTIS/PS-75/404	Cable Television (75) Apr 75
NTIS/PS-75/412	Light Communication Systems (151) Apr 75
NTIS/PS-75/420	Fiber Optics (147) 1969-May 75
NTIS/PS-75/434	Microforms. Vol 1. 1964-1973 (187) Jun 75
NTIS/PS-75/435	Microforms. Vol 2. 1973-Apr 75 (74) Jun 75
NTIS/PS-75/449	Single Sideband Communications (86) Apr 75
NTIS/PS-75/459	Tropospheric Scatter Communications (98) 1964-Apr 75

MONS 212145

COMPUTERS, CONTROL AND INFORMATION THEORY

Order Number

COM-74-10124 Automated Text Editing (57) Dec 73
COM-74-11312 Computer Technology in Medicine (166) 1972-Jul 74
COM-74-11433 Control Theory (203) 1970-Jul 74
COM-74-11435 Speech Recognition by Computer (142) Sep 74
COM-74-11454 The Use of Computers in Solving Mathematical Problems (172) Jun 71-Sep 74

COM-74-11572 Computer Networks (153) 1969-Oct 74
NTIS/PS-74/084 Pattern Recognition (97) Nov 74
NTIS/PS-74/095 Computer Storage Management (118) Nov 74
NTIS/PS-74/101 Applications of the Fast Fourier Transform (144) 1970-Nov 74
NTIS/PS-74/102 Minicomputers (215) Nov 74

NTIS/PS-75/026 Automata Theory (132) December 74
NTIS/PS-75/029 Logic Design (116) Dec 74
NTIS/PS-75/035 Electroluminescent Display Devices (105) Jan 75
NTIS/PS-75/063 Computer Performance Evaluation (40) Jan 75
NTIS/PS-75/064 Robots (89) Jan 75

NTIS/PS-75/065 Network Flows (126) Jan 75
NTIS/PS-75/067 Data Compression (89) Jan 75
NTIS/PS-75/086 Magnetic Bubble Domains (42) Jan 75
NTIS/PS-75/121 Symbolic Programming (41) Jan 75
NTIS/PS-75/128 Switching Circuits (111) 1970-Dec 74

NTIS/PS-75/158 Interactive Computer Graphics (126) 1970-Jan 75
NTIS/PS-75/251 Microcomputers (59) Feb 75
NTIS/PS-75/274 Semiconductor Computer Storage (89) Jan 75
NTIS/PS-75/355 Computer Software Maintenance (45) Apr 75
NTIS/PS-75/378 Walsh Functions (55) Apr 75

NTIS/PS-75/397 Artificial Intelligence (80) May 75
NTIS/PS-75/398 Information and Communication Theory (124) May 75
NTIS/PS-75/411 Machine Translation (127) May 75 Covers several foreign languages
NTIS/PS-75/416 Computer Software Standards (53) May 75
NTIS/PS-75/437 Computer Information Security and Protection (167) May 75

MONS 212146

DETECTION AND COUNTERMEASURES

Order Number

NTIS/PS-75/055 Night Vision Devices (95) Jan 75
NTIS/PS-75/075 Infrared Upconversion (48) Dec 74
NTIS/PS-75/104 Remote Sensing for Natural Resource, Environmental, and Regional Planning (91) 1973-Jan 75
NTIS/PS-75/105 Instrumentation and Data Processing Used in the Earth Resources Technology Satellite (80) 1973-Dec 74
NTIS/PS-75/165 Electronic Countermeasures and Electronic Counter Countermeasures (91) Jan 75

NTIS/PS-75/231 Ice and Fog: Detection and Warning Systems (58) Dec 74
NTIS/PS-75/302 Antenna Arrays. Vol 2. 1972-1974 (93) Feb 75 Excludes phased arrays
NTIS/PS-75/303 Antenna Arrays. Vol 1. 1964-1971 (219) Feb 75 Excludes phased arrays
NTIS/PS-75/326 Seismic Detection. Part 1. General Studies (82) Jan 75 Excludes detection of nuclear events.
NTIS/PS-75/327 Seismic Detection. Part 2. Nuclear Events--1970-1972--Vol. 1. (135) Jan 75

NTIS/PS-75/328 Seismic Detection. Part 2. Nuclear Events--1973-1974--Vol. 2. (124) Jan 75
NTIS/PS-75/337 Phased Arrays. Vol 1. 1964-1971 (141) Feb 75
NTIS/PS-75/338 Phased Arrays. Vol 2. 1972-1974 (103) Feb 75
NTIS/PS-75/351 Nonlinear Acoustics (71) Apr 75
NTIS/PS-75/366 Electromagnetic Shielding. Vol 1. 1964-1971 (162) Apr 75

NTIS/PS-75/367 Electromagnetic Shielding. Vol 2. 1972-1975 (78) Apr 75
NTIS/PS-75/402 Light Detection and Ranging(LIDAR) (191) May 75

ELECTROTECHNOLOGY

Order Number

NTIS/PS-75/035 Electroluminescent Display Devices (105) Jan 75
NTIS/PS-75/055 Night Vision Devices (95) Jan 75
NTIS/PS-75/128 Switching Circuits (111) 1970-Dec 74
NTIS/PS-75/149 IMPATT Diodes (81) Jan 75
NTIS/PS-75/154 Phase Shifters (119) Jan 75

NTIS/PS-75/177 Schottky Barrier Devices (114) Jan 75
NTIS/PS-75/188 Band Pass Filters (104) Jan 75
NTIS/PS-75/190 Electron Beam Semiconductor Devices (38) Jan 75
NTIS/PS-75/227 Gunn Effect Devices (140) Jan 75
NTIS/PS-75/233 Printed Circuits. Vol 1. 1964-1971 (109) Jan 75

MONS 212147

ELECTROTECHNOLOGY (Cont.)

Order Number

NTIS/PS-75/234 Printed Circuits. Vol 2. 1972-1974 (67) Jan 75
NTIS/PS-75/239 Strip Transmission Lines (111) Jan 75
NTIS/PS-75/246 Beam Lead Microelectronics (36) Jan 75
NTIS/PS-75/247 Integrated Circuit Reliability (173) Jan 75
NTIS/PS-75/248 Acoustic Surface Waves. Vol. 1. 1964-1972 (75) Jan 75

NTIS/PS-75/249 Acoustic Surface Waves. Vol. 2. 1973-1974 (137) Jan 75
NTIS/PS-75/258 Lightning, Surge, and Transient Protection (88) Jan 75
NTIS/PS-75/274 Semiconductor Computer Storage (89) Jan 75
NTIS/PS-75/275 Charge Transfer and Transferred Electron Devices (57) Jan 75
NTIS/PS-75/288 Transistor Amplifiers (93) Jan 75

NTIS/PS-75/302 Antenna Arrays. Vol 2. 1972-1974 (93) Feb 75 Excludes phased arrays
NTIS/PS-75/303 Antenna Arrays. Vol 1. 1964-1971 (219) Feb 75 Excludes phased arrays

NTIS/PS-75/337 Phased Arrays. Vol 1. 1964-1971 (141) Feb 75
NTIS/PS-75/338 Phased Arrays. Vol 2. 1972-1974 (103) Feb 75
NTIS/PS-75/324 Microwave Oscillators. Vol. 1. 1964-1974. (118) Jan 75
NTIS/PS-75/325 Microwave Oscillators. Vol. 2. 1972-1974 (73) Jan 75
NTIS/PS-75/366 Electromagnetic Shielding. Vol 1. 1964-1971 (162) Apr 75
NTIS/PS-75/367 Electromagnetic Shielding. Vol 2. 1972-1975 (78) Apr 75
NTIS/PS-75/368 Amorphous Semiconductors (224) Oct 73 -Dec 74
NTIS/PS-75/415 Light Emitting Diodes (159) Apr 75
NTIS/PS-75/420 Fiber Optics (147) 1969-May 75

NTIS/PS-75/457 Ferrite Microwave Electronics. Vol 1. 1964-1969 (221) 1964-1969
NTIS/PS-75/458 Ferrite Microwave Electronics. Vol 2. 1970-1974 (105) 1970-Apr 75

ENERGY

Order Number

COM-74-11533 Fuel Cells (270) 1969-Sep 74
NTIS/PS-74/103 Offshore Drilling (96) 1966-Nov 74 Includes environmental aspects
NTIS/PS-74/131 Nuclear Fusion (146) 1971-Dec 74 Excludes reports sponsered solely by the Atomic Energy Commission
NTIS/PS-75/070 Design and Applications of Flywheels (57) Jan 75
NTIS/PS-75/089 Cadmium Sulfide Solar Cells (161) Jan 75

MONS 212148

ENERGY (Cont.)

Order Number	
NTIS/PS-75/137	Optical Coatings for Solar Cells and Solar Collectors (51) Jan 75
NTIS/PS-75/214	Energy Conservation (91) Jan 75
NTIS/PS-75/215	Waste Heat Utilization (116) Jan 75 Includes total energy systems
NTIS/PS-75/254	Oil Recovery (86) Jan 75 Excludes offshore drilling
NTIS/PS-75/316	Heat Pipes. Vol I. 1964-1972 (175) Feb 75
NTIS/PS-75/317	Heat Pipes. Vol 2. 1973-1974 (122) Feb 75
NTIS/PS-75/342	Fuel Consumption. Part 2. Transportation (93) Feb 75
NTIS/PS-75/343	Fuel Consumption. Part 1. Industrial, Residential, and General Studies (75) Feb 75
NTIS/PS-75/345	Solar Heating and Air Conditioning (71) Jan 75
NTIS/PS-75/346	Solar Electric Power Generation (94) Jan 75
NTIS/PS-75/347	Solar Collectors and Concentrators (57) Jan 75 Excludes spacecraft application
NTIS/PS-75/348	Wind Power (85) Jan 75
NTIS/PS-75/362	Oil Shale (137) Apr 75
NTIS/PS-75/363	Electric Power Consumption (89) Apr 75
NTIS/PS-75/371	Pollution and Environmental Aspects of Fuel Conversion (47) Apr 75
NTIS/PS-75/372	Thermionics (119) Apr 75
NTIS/PS-75/377	Geothermal Energy (148) Apr 75
NTIS/PS-75/379	Hydrogen Energy (86) Apr 75
NTIS/PS-75/381	Desulfurization of Coal and Petroleum (107) Apr 75 Excludes flue gas and other post-combustion sulfur control
NTIS/PS-75/385	Coal Gasification and Liquefacton Vol 1. (161) 1964-1973
NTIS/PS-75/386	Coal Gasification and Liquefaction. Vol 2. 1974 (90) 1974-Apr 75
NTIS/PS-75/445	Nickel Cadmium Batteries (163) May 75
NTIS/PS-75/448	Magnetohydrodynamic Generators in Power Generation (105) May 75
NTIS/PS-75/463	Natural Gas. Part 1. Supply, Demand, and Utilization (97) May 75
NTIS/PS-75/464	Natural Gas. Part 2. Marine Transportation (44) May 75

MONS 212149

ENVIRONMENTAL POLLUTION AND CONTROL

Order Number

COM-73-11463 Odor Pollution (92) Aug 73
COM-74-10551 Oil Spill Removal (114) May 74
COM-74-11018 Chemical Analysis of Aerosols and Airborne Particulates (60) Jun 74 Excludes sampling and particle size analysis
COM-74-11140 Metal Waste Reclamation (146) Jul 74
COM-74-11203 Animal Waste Pollution and Its Control (115) Jul 74

COM-74-11360 Air Quality Monitoring (121) 1970-Jul 74
NTIS/PS-74/083 Food Processing Waste Treatment (167) Nov 74
NTIS/PS-74/088 Supertankers and Superports (60) Nov 74 Includes environmental considerations
NTIS/PS-74/089 Nitrogen Oxide Air Pollution Studies (152) Nov 74
NTIS/PS-74/090 Eutrophication (254) Nov 74

NTIS/PS-74/091 Air Pollution Economics (202) 1970-Nov 74
NTIS/PS-74/092 Solid Waste Disposal Economics (76) Nov 74
NTIS/PS-74/093 Noise Pollution Economics (23) Nov 74
NTIS/PS-74/094 Water Pollution Economics (199) Nov 74 Excludes sewage treatment
NTIS/PS-74/097 Activated Sludge Treatment (235) Nov 74

NTIS/PS-74/098 Airport Noise (113) Nov 74
NTIS/PS-74/099 Water Rights and Water Law (147) Nov 74
NTIS/PS-74/100 Water Pollution in Estuaries and Coastal Zones (153) Nov 74 Excludes specific biological and oceanographic studies
NTIS/PS-74/103 Offshore Drilling (96) 1966-Nov 74 Includes environmental aspects
NTIS/PS-74/104 Urban Air Pollution (153) 1970-Nov 74

NTIS/PS-74/106 Urban Noise Pollution (66) 1970-Nov 74
NTIS/PS-74/107 Urban Sewage Treatment Planning (134) 1970-Nov 74
NTIS/PS-74/108 Urban Storm Sewers and Water Runoff (229) Nov 74
NTIS/PS-74/113 Air Pollution Effects on Materials (57) Dec 74
NTIS/PS-74/118 Waste Processing and Pollution in the Chemical and Petrochemical Industries (172) Dec 74

NTIS/PS-74/125 Quality of Life in the Urban Environment (131) 1970-Dec 74
NTIS/PS-74/129 Automatic Acquisition of Water Quality Data (116) 1970-Dec 74
NTIS/PS-74/133 Fly Ash (143) Dec 74
NTIS/PS-74/134 Ocean Law (123) Dec 74
NTIS/PS-74/135 DDT, DCD, and DDE Pesticides (150) Dec 74

NTIS/PS-75/005 Toxic Effects of Pesticides (143) Dec 74

MONS 212150

ENVIRONMENTAL POLLUTION AND CONTROL (Cont.)

Order Number	
NTIS/PS-75/017	Sewage Treatment by Reverse Osmosis and Membrane Processes (39) Dec 74
NTIS/PS-75/019	Asbestos and Silicate Pollution (91) Dec 74 Includes silicosis and asbestosis
NTIS/PS-75/020	Cadmium Pollution (101) Dec 74
NTIS/PS-75/021	Beryllium Pollution (53) Dec 74
NTIS/PS-75/022	Industrial Hazards Due to Atmospheric Factors (181) 1970-Sept 74
NTIS/PS-75/024	Bioindicators of Pollution (119) Nov 74
NTIS/PS-75/046	Acid Mine Drainage (137) Jan 75
NTIS/PS-75/050	Environmental and Ecological Effects of Dredging (85) Jan 75
NTIS/PS-75/054	Strip Mining (101) Jan 75
NTIS/PS-75/060	Maneuvering Aircraft: Noise Pollution and Control (102) Jan 75
NTIS/PS-75/069	Pollution and Its Control In the Peper and Pulp Industry (145) Jan 75
NTIS/PS-75/071	Ground Water Pollution. Part 1. General Studies (133) Jan 74 Excludes studies dealing with irrigation and fertilizatron
NTIS/PS-75/072	Ground Water Pollution. Part 2. Pollution From Irrigation and Fertilization (132) Jan 75
NTIS/PS-75/080	Textile Processing Wastes (59) Jan 75
NTIS/PS-75/088	Ecosystem Models (144) Jan 74
NTIS/PS-75/101	Air Pollution Effects on Plants (135) Jan 75
NTIS/PS-75/102	Behavior and Physiological Effects of Noise. Vol 1. 1964-1972 (200) Jan 75
NTIS/PS-75/103	Behavior and Physiological Effects of Noise. Vol 2. 1973-1974 (72) Jan 75
NTIS/PS-75/104	Remote Sensing for Natural Resource, Environmental, and Regional Planning (91) 1973-Jan 75
NTIS/PS-75/107	Ecology of Insecticide Water Pollution. Vol 1. 1974 (62) Jan 75
NTIS/PS-75/108	Ecology of Insecticide Water Pollution. Vol 2. 1964-1973 (203) Jan 75
NTIS/PS-75/112	Coal Mine Waste (51) Dec 74
NTIS/PS-75/118	The Biological Effects of Oil Spills (107) Jan 75 Excludes biodeterioration
NTIS/PS-75/129	Bacterial Pollution of Water (147) Jan 75
NTIS/PS-75/139	Diesel Engine Exhaust (86) Jan 75
NTIS/PS-75/152	Biodeterioration of Oil Spills (81) Jan 74
NTIS/PS-75/156	Water Pollution Detection (166) 1970-Jan 75
NTIS/PS-75/163	Gas Scrubbers (156) Dec 74

MONS 212151

Order Number

NTIS/PS-75/184 Regional and Urban Solid Waste Disposal. Part 1. Management Planning (91) Jan 75

NTIS/PS-75/185 Regional and Urban Solid Waste Disposal. Part 2. Local Case Studies (110) Jan 75

NTIS/PS-75/186 Regional and Urban Solid Waste Disposal. Part 3. Handling and Disposal Technology (84) Jan 75

NTIS/PS-75/202 Financing and Taxation For Urban Control of Pollution (111) Jan 75

NTIS/PS-75/209 Mercury Pollution (113) Dec 74 Excludes toxicity and pollution effects

NTIS/PS-75/210 Biological Effects of Mercury Pollution (112) Dec 74

NTIS/PS-75/215 Waste Heat Utilization (116) Jan 75 Includes total energy systems

NTIS/PS-75/218 Thermal Pollution. Part 1. Control Techniques and General Studies (85) Jan 75 Excludes waste heat recovery

NTIS/PS-75/219 Thermal Pollution. Part 2. Biological Effects (171) Jan 75

NTIS/PS-75/220 Thermal Pollution. Part 3. Hydrology and Hydrodynamics (124) Jan 75

NTIS/PS-75/228 The Chemistry and Physics of Ozone in the Stratosphere (91) Jan 75

NTIS/PS-75/252 Sewage Sludge Disposal (146) Dec 74

NTIS/PS-75/256 Fluidized Bed Combustion (66) Dec 74

NTIS/PS-75/267 Lead Pollution (171) Jan 75 Excludes pollution effects and toxicology of lead

NTIS/PS-75/268 Biological Effects of Lead Pollution (109) Jan 75

NTIS/PS-75/285 Hazardous Material Waste Disposal (92) Dec 74 Excludes radioactive wastes

NTIS/PS-75/286 Hazardous Materials Transportation (126) Dec 74 Excludes radioactive wastes

NTIS/PS-75/309 Automobile Air Pollution. Part 1. Abatement Through Management and Planning (89) 1970-Jan 75

NTIS/PS-75/310 Automobile Air Pollution. Part 2. Exhaust Analysis (33) 1970-Dec 74

NTIS/PS-75/311 Automobile Air Pollution. Part 3. Control Equipment (100) 1970-Dec 74

NTIS/PS-75/312 Automobile Air Pollution. Part 4. New Automotive Engines (60) 1970-Dec 74

NTIS/PS-75/313 Automobile Air Pollution. Part 5. Automotive Fuels (48) 1970-Dec 74

NTIS/PS-75/314 Automobile Air Pollution. Part 6. Atmospheric Motion (42) 1970-Dec 74

NTIS/PS-75/318 Aircraft Sonic Boom. Part 1. Studies on Aircraft Flight and Design (99) Feb 75

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Order Number

NTIS/PS-75/319 Aircraft Sonic Boom. Part 2. Effects on Buildings (60) Feb 75

NTIS/PS-75/320 Aircraft Sonic Boom. Part 3. Biological Effects (52) Feb 75

NTIS/PS-75/350 Incineration Studies (202) Mar 75

NTIS/PS-75/354 Ground Water Pollution. Part 3. Saline Ground Water (76) Apr 75

NTIS/PS-75/357 Aeration of Sewage Lagoons, Reservoirs, and Streams (157) Apr 75

NTIS/PS-75/362 Oil Shale (137) Apr 75

NTIS/PS-75/371 Pollution and Environmental Aspects of Fuel Conversion (47) Apr 75

NTIS/PS-75/375 Biochemical Oxygen Demand (262) Mar 75

NTIS/PS-75/381 Desulfurization of Coal and Petroleum (107) Apr 75 Excludes flue gas and other post-combustion sulfur control

NTIS/PS-75/382 Metal Processing Wastes. Part 2. Water Pollution (112) Apr 75

NTIS/PS-75/383 Metal Processing Wastes. Part 1. Air Pollution (167) Apr 75

NTIS/PS-75/388 Septic Tank Design and Use (73) Apr 75 Includes reports dealing with non-septic tank, household sewage treatment systems

NTIS/PS-75/401 Effects of Land Use and Urbanization on Water Resources (94) 1971-May 75

NTIS/PS-75/410 Air Pollution Emission Factors (69) May 75

NTIS/PS-75/426 Salt Marshes (92) May 75

NTIS/PS-75/429 Radioactivity from Nuclear Power Plants (227) May 75

NTIS/PS-75/430 Sewage Effects in Marine and Estuarine Environments (136) May 75

NTIS/PS-75/441 Water Quality Modeling--Hydrological and Limnological Systems (213) Jun 75

NTIS/PS-75/444 Highway Traffic Noise (101) May 75

NTIS/PS-75/450 Solid Waste Reclamation and Recycling. Part 1. Packaging and Containers (44) May 75 Excludes studies only dealing with specific materials

NTIS/PS-75/451 Solid Waste Reclamation and Recycling. Part 2. Plastics. (60) May 75

NTIS/PS-75/452 Solid Waste Reclamation and Recycling. Part 3. Metals (136) May 75 Includes metal recovery from aqueous industrial waste streams

NTIS/PS-75/453 Solid Waste Reclamation and Recycling. Part 4. Glass (39) May 75

NTIS/PS-75/454 Solid Waste Recycling and Reclamation. Part 5. Paper (59) May 75

ENVIRONMENTAL POLLUTION AND CONTROL (Cont.)

Order Number

NTIS/PS-75/455 Sulfur Dioxide Control. Vol 2. 1973-1974 (94) May 75 Excludes fuel desulfurization

NTIS/PS-75/456 Sulfur Dioxide Control. Vol 1. 1964-1972 (159) May 75

NTIS/PS-75/460 Sewage and Organic Waste Irrigation (111) May 75

NTIS/PS-75/461 Activated Carbon (221) May 75 Includes activated carbon treatment of sewage

NTIS/PS-75/462 Ocean Waste Disposal (164) May 75 Excludes thermal effluents

INDUSTRIAL AND MECHANICAL ENGINEERING

Order Number

COM-74-11223 Mine Safety (158) 1972-Jul 74

NTIS/PS-74/124 Production Planning and Scheduling (143) Dec 74

NTIS/PS-75/022 Industrial Hazards Due to Atmospheric Factors (181) 1970-Sept 74

NTIS/PS-75/041 Standard Reference Materials (118) Jan 75

NTIS/PS-75/048 Lubricating Oil Analysis for Wear Monitoring (46) Jan 74

NTIS/PS-75/070 Design and Applications of Flywheels (57) Jan 75

NTIS/PS-75/082 Industrial Psychology (161) Jan 75

NTIS/PS-75/123 Metrication in the United States (72) Dec 74

NTIS/PS-75/133 Fire Alarms and Fire Detectors (96) Jan 75

NTIS/PS-75/155 Plasma and Flame Spraying (129) Jan 75

NTIS/PS-75/162 Metal Drawing (43) Jan 75

NTIS/PS-75/166 High Energy Rate Forming. Part 1 (68) Jan 75 Excludes explosive forming

NTIS/PS-75/167 High Energy Rate Forming. Part 2. Explosive Forming (104) Jan 75

NTIS/PS-75/204 Fluid Control Devices. Vol 1. 1964-1971 (188) Dec 74

NTIS/PS-75/205 Fluid Control Devices. Vol 2. 1972-1974 (104) Dec 74

NTIS/PS-75/223 Ferrous Metal Casting (173) Dec 74

NTIS/PS-75/226 Electron Beam Welding (131) Jan 75

NTIS/PS-75/243 Gas Bearings (124) 1970-Jan 75

NTIS/PS-75/244 Use of Ultrasonics in Manufacturing Procedures (89) Dec 74

NTIS/PS-75/270 Nondestructive Ultrasonic Testing and Inspection. Vol. 1. 1964-1971 (188) Jan 75

NTIS/PS-75/271 Nondestructive Ultrasonic Testing and Inspection. Vol. 2. 1972-1974 (165) Jan 75

INDUSTRIAL AND MECHANICAL ENGINEERING (Cont.)

Order Number	
NTIS/PS-75/284	Shipborne Containers and Containerization (100) Jan 75
NTIS/PS-75/316	Heat Pipes. Vol 1. 1964-1972 (175) Feb 75
NTIS/PS-75/317	Heat Pipes. Vol 2. 1973-1974 (122) Feb 75
NTIS/PS-75/330	Electrodeposition. Vol 1. 1964-1971 (97) Jan 75
NTIS/PS-75/331	Electrodeposition. Vol 2. 1972-1974 (110) Jan 75
NTIS/PS-75/343	Fuel Consumption. Part 1. Industrial, Residential, and General Studies (75) Feb 75

LIBRARY AND INFORMATION SCIENCES

Order Number	
COM-74-10124	Automated Text Editing (57) Dec 73
NTIS/PS-75/085	Biomedical Information Systems (123) Jan 75
NTIS/PS-75/146	Copyrights (56) Jan 75
NTIS/PS-75/189	User Needs in Documentation and Information (60) Jan 75
NTIS/PS-75/269	Records Management (170) Feb 75
NTIS/PS-75/411	Machine Translation (127) May 75 Covers several foreign languages
NTIS/PS-75/434	Microforms. Vol 1. 1964-1973 (187) Jun 75
NTIS/PS-75/435	Microforms. Vol 2. 1973-Apr 75 (74) Jun 75

MATERIALS SCIENCES

Order Number	
COM-74-11140	Metal Waste Reclamation (146) Jul 74
COM-74-11526	Carbon and Graphite Materials. Part 1. Carbon Fibers and Carbon Fiber Composites (278) Sep 74
COM-74-11527	Carbon and Graphite Materials. Part 2. Carbon and Graphite Composites (149) Sep 74 Excludes carbon fibers
NTIS/PS-74/109	Drag Reducing Fluids (134) 1969-Nov 74
NTIS/PS-74/111	Fire Resistant Fibers and Textiles (124) Dec 74
NTIS/PS-74/113	Air Pollution Effects on Materials (57) Dec 74
NTIS/PS-74/133	Fly Ash (143) Dec 74
NTIS/PS-75/040	Adhesives (123) 1970-Jan 75
NTIS/PS-75/041	Standard Reference Materials (118) Jan 75
NTIS/PS-75/048	Lubricating Oil Analysis for Wear Monitoring (46) Jan 74

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MATERIALS SCIENCES (Cont.)

Order Number	
NTIS/PS-75/049	Hydrogen Embrittlement of Metals (185) Jan 75
NTIS/PS-75/051	Wood Bonding (96) Jan 75
NTIS/PS-75/084	Combustion of Plastics and Elastomers (67) Jan 75
NTIS/PS-75/109	Reinforced Plastics. Part 1. Fiberglass Reinforcement (151) Jan 75
NTIS/PS-75/110	Reinforced Plastics. Part 2. Boron, Carbon, and Other Reinforcing Materials (152) Jan 75
NTIS/PS-75/113	Solid Lubricants (109) Jan 75
NTIS/PS-75/122	Highway Markings (64) Dec 74
NTIS/PS-75/126	Gas Turbines, General: Corrosion and Erosion (141) Dec 74 Excludes turbine blades
NTIS/PS-75/127	Turbine Blades: Corrosion and Erosion (78) Dec 74
NTIS/PS-75/136	Lightweight Armor (106) Jan 75
NTIS/PS-75/137	Optical Coatings for Solar Cells and Solar Collectors (51) Jan 75
NTIS/PS-75/140	Seals and Gaskets (180) 1970-Jan 75
NTIS/PS-75/143	Sea Water Corrosion (165) Dec 74
NTIS/PS-75/155	Plasma and Flame Spraying (129) Jan 75
NTIS/PS-75/157	Corrosion in Desalination Plants (154) Dec 74
NTIS/PS-75/175	Superalloys (172) Dec 74
NTIS/PS-75/181	Carbon and Graphite Materials. Part 3. Graphite Research (148) Jan 75
NTIS/PS-75/182	Carbon and Graphite Materials. Part 4. Carbon Research (67) Jan 75
NTIS/PS-75/183	Carbon and Graphite Materials. Part 5. Glassy Carbon (35) Dec 74
NTIS/PS-75/192	Cryogenic Properties of Aluminum and Aluminum Alloys (70) Jan 75
NTIS/PS-75/206	Acrylic Resins. Part 1. Acrylonitrile Polymers (75) Dec 74
NTIS/PS-75/207	Acrylic Resins. Part 2. Methacrylate Polymers (146) Dec 74
NTIS/PS-75/208	Acrylic Resins. Part 3. Acrylates, Acrylamides, and General Studies (125) Dec 74
NTIS/PS-75/212	Ablation and Ablative Materials (121) Jan 75
NTIS/PS-75/217	Fracture of Ceramics (147) Dec 74
NTIS/PS-75/221	Fiberboard and Particleboard (75) Jan 75
NTIS/PS-75/223	Ferrous Metal Casting (173) Dec 74
NTIS/PS-75/226	Electron Beam Welding (131) Jan 75
NTIS/PS-75/241	Cathodic Protection (135) Dec 74
NTIS/PS-75/257	The Chemistry of Silicone Resins (130) Jan 75

NONS 212156

MATERIALS SCIENCES (Cont.)

Order Number

NTIS/PS-75/289 Chemical Analysis of Steels (110) Feb 75
NTIS/PS-75/294 Cavitation. Part 3. Corrosion and Erosion (83) Feb 75 Excludes turbine cavitation
NTIS/PS-75/295 Cavitation. Part 4. Cavitation Flow and Erosion in Turbines (60) Feb 75
NTIS/PS-75/330 Electrodeposition. Vol 1. 1964-1971 (97) Jan 75
NTIS/PS-75/331 Electrodeposition. Vol 2. 1972-1974 (110) Jan 75

NTIS/PS-75/353 Polytetrafluoroethylene (Teflon) (118) Apr 75
NTIS/PS-75/370 Detergents, Soaps, and Surface Active Cleaners (105) Apr 75
NTIS/PS-75/414 Boron Reinforced Composites (199) 1972-May 75
NTIS/PS-75/422 Metal Matrix Composites (180) 1971-May 75
NTIS/PS-75/440 Cyanoacrylate Tissue Adhesives (48) 1964-May 75

NTIS/PS-75/442 Marine Fouling (140) 1969-Jun 75
NTIS/PS-75/450 Solid Waste Reclamation and Recycling. Part 1. Packaging and Containers (44) May 75 Excludes studies only dealing with specific materials
NTIS/PS-75/451 Solid Waste Reclamation and Recycling. Part 2. Plastics. (60) May 75
NTIS/PS-75/452 Solid Waste Reclamation and Recycling. Part 3. Metals (136) May 75 Includes metal recovery from aqueous industrial waste streams
NTIS/PS-75/453 Solid Waste Reclamation and Recycling. Part 4. Glass (39) May 75

NTIS/PS-75/465 Stress Crack Phenomena (186) Jun 75 Excludes rock mechanics and mathematical analysis
NTIS/PS-75/466 Mathematical Analysis of Stress Cracks. Vol 1. 1964-1973 (207) June 75
NTIS/PS-75/467 Mathematical Analysis of Stress Cracks. Vol 2. 1974-May 75 (109) June 75

MATHEMATICAL SCIENCES

Order Number

COM-74-11454 The Use of Computers in Solving Mathematical Problems (172) Jun 71-Sep 74
COM-74-11495 Numerical Methods in Fluid Flow Problems (139) Sep 74
NTIS/PS-75/027 Integration of Partial Differential Equations (121) 1970-Nov 74
NTIS/PS-75/028 Integration of Nonlinear Differential Equations (78) 1970-Nov 74
NTIS/PS-75/065 Network Flows (126) Jan 75

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MATHEMATICAL SCIENCES (Cont.)

Order Number

NTIS/PS-75/066 Experimental Design (100) Jan 75
NTIS/PS-75/150 Time Series Forecasting and Prediction (96) Jan 75
NTIS/PS-75/406 Linear Programming in Management (38) May 75

MEDICINE AND BIOLOGY

Order Number

COM-74-10105 Antineoplastic Agents (136) 1970-Jan 74
COM-74-10528 Vocational Rehabilitation of the Physically Handicapped (78) May 74
COM-74-11312 Computer Technology in Medicine (166) 1972-Jul 74
NTIS/PS-74/086 Carcinogens (134) Sep 74
NTIS/PS-74/114 Sickle Cell Anemia (35) Nov 74

NTIS/PS-74/115 Hepatitis and Blood Transfusions (48) Nov 74
NTIS/PS-74/126 Immunologic Diseases (199) Dec 74
NTIS/PS-74/127 Transplantation Immunology (94) 1970-Dec 74
NTIS/PS-74/128 Vaccines and Immunity (169) 1970-Dec 74
NTIS/PS-74/135 DDT, DDD, and DDE Pesticides (150) Dec 74

NTIS/PS-75/009 Toxic Effects of Pesticides (143) Dec 74
NTIS/PS-75/011 Biological Effects of Laser Radiation (169) Jan 75
NTIS/PS-75/012 Medicare and Medicaid Programs (64) Dec 74
NTIS/PS-75/013 Molecular Biology (91) 1968-Oct 74
NTIS/PS-75/019 Asbestos and Silicate Pollution (91) Dec 74 Includes silicosis and asbestosis

NTIS/PS-75/022 Industrial Hazards Due to Atmospheric Factors (181) 1970-Sept 74
NTIS/PS-75/023 Epilepsy (59) Nov 74
NTIS/PS-75/024 Bioindicators of Pollution (119) Nov 74
NTIS/PS-75/025 Biofeedback (35) Jan 75
NTIS/PS-75/033 Stress Factors on Pilot Performance (65) Nov 74

NTIS/PS-75/043 The Use of Dogs to Detect Explosives and Narcotics (24) Jan 75
NTIS/PS-75/085 Biomedical Information Systems (123) Jan 75
NTIS/PS-75/087 Information Processing in Humans (221) Jan 75
NTIS/PS-75/088 Ecosystem Models (144) Jan 74
NTIS/PS-75/090 Congenital Abnormalities (50) Jan 75

NTIS/PS-75/091 Biological Pest Control (77) 1966-Jan 75
NTIS/PS-75/092 Endangered Species (29) Dec 74

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MEDICINE AND BIOLOGY (Cont.)

Order Number

NTIS/PS-75/093 Fish Protein Concentrates (117) Jan 75
NTIS/PS-75/095 Venereal Diseases (46) Oct 74
NTIS/PS-75/096 Contraceptives and Birth Control (49) Nov 74

NTIS/PS-75/100 Interferon (157) Jan 75
NTIS/PS-75/101 Air Pollution Effects on Plants (135) Jan 75
NTIS/PS-75/102 Behavior and Physiological Effects of Noise. Vol 1. 1964-1972 (200) Jan 75
NTIS/PS-75/103 Behavior and Physiological Effects of Noise. Vol 2. 1973-1974 (72) Jan 75
NTIS/PS-75/106 Auditory Perception in Cetacea (57) Jan 75

NTIS/PS-75/107 Ecology of Insecticide Water Pollution. Vol 1. 1974 (162) Jan 75
NTIS/PS-75/108 Ecology of Insecticide Water Pollution. Vol 2. 1964-1973 (203) Jan 75
NTIS/PS-75/118 The Biological Effects of Oil Spills (107) Jan 75 Excludes biodeterioration
NTIS/PS-75/124 Herpes Virus (103) Jan 75
NTIS/PS-75/125 Cigarette Smoking (39) Jan 75

NTIS/PS-75/129 Bacterial Pollution of Water (147) Jan 75
NTIS/PS-75/131 Rehabilitation of the Physically Handicapped (119) Jan 75 Excludes reports sponsored solely by the Atomic Energy Commission
NTIS/PS-75/132 Rehabilitation of the Mentally Retarded (79) Jan 75
NTIS/PS-75/138 Color Vision (143) Jan 75
NTIS/PS-75/147 Drug Abuse (113) Jan 75

NTIS/PS-75/152 Biodeterioration of Oil Spills (81) Jan 74
NTIS/PS-75/161 Effects of Fatigue on Human Behavior and Performance (104) Jan 75
NTIS/PS-75/169 Whales (93) Jan 75
NTIS/PS-75/170 Cold Weather Stress on Humans (72) Jan 75
NTIS/PS-75/171 Emergency Medical Services and Care (87) Jan 75

NTIS/PS-75/172 Night Vision and Dark Adaptation (78) Jan 75
NTIS/PS-75/173 Radiology (102) 1967-Jan 75
NTIS/PS-75/175 Ultrasonics in Medicine (39) Jan 75
NTIS/PS-75/176 Prostaglandins (37) 1967-Jan 75
NTIS/PS-75/210 Biological Effects of Mercury Pollution (112) Dec 74

NTIS/PS-75/213 Nuclear Medicine (218) Jan 75
NTIS/PS-75/219 Thermal Pollution. Part 2. Biological Effects (171) Jan 75
NTIS/PS-75/222 Tumor Immunology (51) 1964-Sept 73
NTIS/PS-75/235 Psychoses (85) Jan 75

MONS 212159

MEDICINE AND BIOLOGY (Cont.)

Order Number

NTIS/PS-75/236 Hyperbaric Oxygenation (125) Jan 75

NTIS/PS-75/237 Altitude Hypoxia (166) Jan 75
NTIS/PS-75/245 Forensic Medicine (39) Jan 75
NTIS/PS-75/259 Nystagmus (196) Jan 75
NTIS/PS-75/260 Hemophilia (22) Jan 75
NTIS/PS-75/262 Radioimmunoassay Studies (55) Jan 75

NTIS/PS-75/263 Tumor Viruses (65) Jan 75
NTIS/PS-75/264 Cardiovascular Diseases. Vol. 2. 1973-1974 (106) 1973-Oct 74
NTIS/PS-75/265 Cardiovascular Diseases. Vol. 1. 1964-1972 (151) 1964-1972
NTIS/PS-75/268 Biological Effects of Lead Pollution (109) Jan 75
NTIS/PS-75/272 Hypertension (80) Jan 75

NTIS/PS-75/273 Chronic Obstructive Lung Disease (24) Jan 75
NTIS/PS-75/278 Underwater Medicine and Physiology (191) Jan 75
NTIS/PS-75/280 Burn Therapy (126) Jan 75
NTIS/PS-75/307 Malaria. Vol 1. 1964-1970 (174) Feb 75
NTIS/PS-75/308 Malaria. Vol 2. 1971-1974 (64) Feb 75

NTIS/PS-75/315 Oral Diseases and Preventive Dentistry (119) Feb 75
NTIS/PS-75/320 Aircraft Sonic Boom. Part 3. Biological Effects (52) Feb 75
NTIS/PS-75/329 Ecology of the Marine Environment (205) Feb 75
NTIS/PS-75/339 Leukemia (134) Feb 75
NTIS/PS-75/340 Dental Materials and Equipment (143) Feb 75

NTIS/PS-75/344 Schistosome and Schistosomiasis (130) Feb 75
NTIS/PS-75/349 Septicemia (158) Feb 75
NTIS/PS-75/356 GRASIGenerally Recognized as Safe) Food Ingredients (253) April 75
NTIS/PS-75/360 Medical Entomology. Vol. 2. 1970-1975 (192) 1970-Jan 1975
NTIS/PS-75/361 Medical Entomology. Vol.1.1964-1969 (157) 1964-1969

NTIS/PS-75/369 Hemorrhagic Shock (70) 1964 - Apr 75
NTIS/PS-75/384 Biological Effects of Microwaves (112) Mar 75
NTIS/PS-75/387 Toxicity of Gaseous Halocarbons (70) May 1975
NTIS/PS-75/418 Artificial Kidneys (182) 1968-Apr 75
NTIS/PS-75/427 Blindness (113) May 75

NTIS/PS-75/429 Radioactivity from Nuclear Power Plants (227) May 75
NTIS/PS-75/430 Sewage Effects in Marine and Estuarine Environments (136) May 75
NTIS/PS-75/440 Cyanoacrylate Tissue Adhesives (48) 1964-May 75

MONS 212160

MILITARY SCIENCES

Order Number

NTIS/PS-74/121 Inventory Control (195) 1970-Dec 74
NTIS/PS-75/001 Guerrilla Warfare (125) Jan 74
NTIS/PS-75/002 Civil Insurgency (84) Jan 75
NTIS/PS-75/003 Riots and Riot Control (110) Jan 75
NTIS/PS-75/004 Insurgency and Counterinsurgency in Military Affairs (128) Jan 75

NTIS/PS-75/055 Night Vision Devices (95) Jan 75
NTIS/PS-75/393 Arms Control (234) Apr 75
NTIS/PS-75/405 Replacement Theory (85) Apr 75

MISSILE TECHNOLOGY

Order Number

NTIS/PS-75/436 Inertial Navigation and Guidance (208) Apr 74

NATURAL RESOURCES

Order Number

COM-73-11802 Structural Geologic Studies (88) Jul 73
COM-74-10406 Forest Management (85) 1967-Feb 74
COM-74-11223 Mine Safety (158) 1972-Jul 74
NTIS/PS-74/090 Eutrophication (254) Nov 74
NTIS/PS-74/099 Water Rights and Water Law (147) Nov 74

NTIS/PS-74/103 Offshore Drilling (96) 1966-Nov 74 Includes environmental aspects
NTIS/PS-74/129 Automatic Acquisition of Water Quality Data (116) 1970-Dec 74
NTIS/PS-74/134 Ocean Law (123) Dec 74
NTIS/PS-75/042 Snow Studies (192) Jan 75
NTIS/PS-75/046 Acid Mine Drainage (137) Jan 75

NTIS/PS-75/050 Environmental and Ecological Effects of Dredging (85) Jan 75
NTIS/PS-75/054 Strip Mining (101) Jan 75
NTIS/PS-75/059 Seismology (62) 1974-Oct 74 Excludes detection
NTIS/PS-75/068 Agricultural Resources Surveys (53) 1973-Jan 75
NTIS/PS-75/071 Ground Water Pollution, Part 1, General Studies (133) Jan 74 Excludes studies dealing with irrigation and fertilization

MONS 212161

NATURAL RESOURCES (Cont.)

Order Number

NTIS/PS-75/072 Ground Water Pollution. Part 2. Pollution From Irrigation and Fertilization (132) Jan 75

NTIS/PS-75/078 Weather Modification Effects and Management (117) Jan 75 Excludes theory and physics of cloud seeding and nucleation

NTIS/PS-75/092 Endangered Species (29) Dec 74

NTIS/PS-75/104 Remote Sensing for Natural Resources, Environmental, and Regional Planning (91) 1973-Jan 75

NTIS/PS-75/105 Instrumentation and Data Processing Used in the Earth Resources Technology Satellite (80) 1973-Dec 74

NTIS/PS-75/112 Coal Mine Waste (51) Dec 74

NTIS/PS-75/191 Tectonics (157) Jan 75

NTIS/PS-75/196 Mine Ventilation (66) Jan 75

NTIS/PS-75/197 Permafrost. Part 1. General Studies (105) Jan 75

NTIS/PS-75/198 Permafrost. Part 2. Structural Engineering (174) Jan 75

NTIS/PS-75/220 Thermal Pollution. Part 3. Hydrology and Hydrodynamics (124) Jan 75

NTIS/PS-75/254 Oil Recovery (86) Jan 75 Excludes offshore drilling

NTIS/PS-75/326 Seismic Detection. Part 1. General Studies (82) Jan 75 Excludes detection of nuclear events.

NTIS/PS-75/354 Ground Water Pollution. Part 3. Saline Ground Water (76) Apr 75

NTIS/PS-75/357 Aeration of Sewage Lagoons, Reservoirs, and Streams (157) Apr 75

NTIS/PS-75/362 Oil Shale (137) Apr 75

NTIS/PS-75/373 Public Opinion and Sociology of Water Resource Development (82) 1970-Apr 75

NTIS/PS-75/374 Planning and Impact of Water Resource Programs (210) 1972-Apr 75

NTIS/PS-75/375 Biochemical Oxygen Demand (262) Mar 75

NTIS/PS-75/377 Geothermal Energy (148) Apr 75

NTIS/PS-75/392 Underwater Construction and Mining (127) May 75

NTIS/PS-75/401 Effects of Land Use and Urbanization on Water Resources (94) 1971-May 75

NTIS/PS-75/426 Salt Marshes (92) May 75

NTIS/PS-75/441 Water Quality Modeling--Hydrological and Limnological Systems (213) Jun 75

NTIS/PS-75/468 Sport Fishing (150) Jun 75

MONS 212162

NAVIGATION, GUIDANCE AND CONTROL

Order Number

NTIS/PS-75/151 Omega Navigation System (129) Jan 75
NTIS/PS-75/436 Inertial Navigation and Guidance (208) Apr 74

NON-DESTRUCTIVE TESTING

Order Number

COM-74-11372 Motor Vehicle Tires: Skid and Wear Resistance; Nondestructive Tests; Safety (130) Aug 74
NTIS/PS-75/115 Holographic Flow Visualization (53) Jan 75
NTIS/PS-75/117 Schlieren and Shadowgraph Photography (149) Jan 75
NTIS/PS-75/270 Nondestructive Ultrasonic Testing and Inspection, Vol. 1. 1964-1971 (188) Jan 75
NTIS/PS-75/271 Nondestructive Ultrasonic Testing and Inspection, Vol. 2. 1972-1974 (165) Jan 75

NTIS/PS-75/431 Applications of Holography (230) Jun 75 Excludes flow visualization and acoustic holography
NTIS/PS-75/432 Acoustic Holography (92) Jun 75
NTIS/PS-75/433 Holographic Theory and Recording Techniques (150) Jun 75 Excludes acoustic holography and applications

NUCLEAR SCIENCE AND TECHNOLOGY

Order Number

NTIS/PS-74/131 Nuclear Fusion (146) 1971-Dec 74 Excludes reports sponsored solely by the Atomic Energy Commission
NTIS/PS-75/131 Rehabilitation of the Physically Handicapped (119) Jan 75 Excludes reports sponsored solely by the Atomic Energy Commission
NTIS/PS-75/181 Carbon and Graphite Materials. Part 3. Graphite Research (148) Jan 75
NTIS/PS-75/213 Nuclear Medicine (218) Jan 75
NTIS/PS-75/327 Seismic Detection. Part 2. Nuclear Events--1970-1972--Vol. 1. (135) Jan 75

NTIS/PS-75/328 Seismic Detection. Part 2. Nuclear Events--1973-1974--Vol. 2. (124) Jan 75

MONS 212163

OCEAN TECHNOLOGY AND ENGINEERING

Order Number

COM-74-10951 Oil Spill Removal (114) May 74
NTIS/PS-74/088 Supertankers and Superports (60) Nov 74 Includes environmental considerations
NTIS/PS-74/100 Water Pollution in Estuaries and Coastal Zones (153) Nov 74 Excludes specific biological and oceanographic studies
NTIS/PS-74/123 Offshore Structures (66) Dec 74 Excludes offshore drilling platforms
NTIS/PS-74/134 Ocean Law (123) Dec 74

NTIS/PS-75/014 Marine Anchors (97) Dec 74
NTIS/PS-75/037 Underwater Voice Communication Systems (78) Dec 74
NTIS/PS-75/038 Underwater Clothing, Tools, and Equipment (101) Dec 74 Excludes breathing apparatus
NTIS/PS-75/039 Underwater Breathing Apparatus (130) Dec 74
NTIS/PS-75/059 Seismology (62) 1974-Oct 74 Excludes detection

NTIS/PS-75/077 Icebreakers and Icebreaking (88) Dec 74
NTIS/PS-75/118 The Biological Effects of Oil Spills (107) Jan 75 Excludes biodeterioration
NTIS/PS-75/141 Recreational Boating (71) Jan 75
NTIS/PS-75/143 Sea Water Corrosion (165) Dec 74
NTIS/PS-75/152 Biodeterioration of Oil Spills (81) Jan 74

NTIS/PS-75/169 Whales (93) Jan 75
NTIS/PS-75/191 Tectonics (157) Jan 75
NTIS/PS-75/255 Foundations in Marine Environments (64) Dec 74
NTIS/PS-75/278 Underwater Medicine and Physiology (191) Jan 75
NTIS/PS-75/284 Shipborne Containers and Containerization (100) Jan 75

NTIS/PS-75/293 Cavitation. Part 2. Hydrofoils (90) Feb 75
NTIS/PS-75/296 Cavitation. Part 5. Propeller Cavitation (74) Feb 75
NTIS/PS-75/304 Aquaculture. Part 1. Fish (212) Feb 75 Excludes studies on salmon
NTIS/PS-75/305 Aquaculture. Part 2. Shellfish (129) Feb 75
NTIS/PS-75/329 Ecology of the Marine Environment (205) Feb 75

NTIS/PS-75/332 Surface Effect Vehicles/Ships in Marine Environments (108) Jan 75
NTIS/PS-75/392 Underwater Construction and Mining (127) May 75
NTIS/PS-75/413 Ocean Wave Sensors (129) May 75
NTIS/PS-75/430 Sewage Effects in Marine and Estuarine Environments (136) May 75
NTIS/PS-75/442 Marine Fouling (140) 1969-Jun 75

NTIS/PS-75/446 Remote Sensing of the Ocean. Part 1. Physical, Chemical, and Geological (147) 1970-Apr 75

MONS 212164

OCEAN TECHNOLOGY AND ENGINEERING (Cont.)

Order Number	
NTIS/PS-75/447	Remote Sensing of the Ocean. Part 2. Dynamics (87) 1970-Apr 75
NTIS/PS-75/462	Ocean Waste Disposal (164) May 75 Excludes thermal effluents
NTIS/PS-75/464	Natural Gas. Part 2. Marine Transportation (44) May 75

ORDNANCE

Order Number	
NTIS/PS-75/043	The Use of Dogs to Detect Explosives and Narcotics (24) Jan 75
NTIS/PS-75/136	Lightweight Armor (106) Jan 75

PHOTOGRAPHY AND RECORDING DEVICES

Order Number	
NTIS/PS-75/115	Holographic Flow Visualization (53) Jan 75
NTIS/PS-75/116	Flow Visualization (106) Jan 75 Excludes shadowgraph, schlieren, and holographic techniques
NTIS/PS-75/117	Schlieren and Shadowgraph Photography (149) Jan 75
NTIS/PS-75/431	Applications of Holography (230) Jun 75 Excludes flow visualization and acoustic holography
NTIS/PS-75/432	Acoustic Holography (92) Jun 75
NTIS/PS-75/433	Holographic Theory and Recording Techniques (150) Jun 75 Excludes acoustic holography and applications

PHYSICS

Order Number	
COM-73-10242	Stress Analysis of Cracks (129) Jan 74
COM-74-11056	Carbon Dioxide Lasers (170) Jun 74
COM-74-11495	Numerical Methods in Fluid Flow Problems (139) Sep 74
NTIS/PS-74/109	Drag Reducing Fluids (134) 1969-Nov 74
NTIS/PS-74/116	Liquid Crystals (182) Nov 74

MONS 212165

PHYSICS (Cont.)

Order Number

NTIS/PS-74/120 Dye Lasers (140) Dec 74
NTIS/PS-74/131 Nuclear Fusion (146) 1971-Dec 74 Excludes reports sponsered solely by the Atomic Energy Commission
NTIS/PS-75/015 Metal Vapor Lasers (35) Dec 74
NTIS/PS-75/016 Carbon Monoxide Lasers (83) Dec 74
NTIS/PS-75/018 Gas Dynamic Lasers (85) Dec 74

NTIS/PS-75/035 Electroluminescent Display Devices (105) Jan 75
NTIS/PS-75/044 Gallium Arsenide Lasers (77) Jan 74
NTIS/PS-75/075 Infrared Upconversion (48) Dec 74
NTIS/PS-75/081 Ultraviolet and X Ray Lasers (80) Jan 75
NTIS/PS-75/086 Magnetic Bubble Domains (42) Jan 75

NTIS/PS-75/089 Cadmium Sulfide Solar Cells (161) Jan 75
NTIS/PS-75/115 Holographic Flow Visualization (53) Jan 75
NTIS/PS-75/116 Flow Visualization (106) Jan 75 Excludes shadowgraph, schlieren, and holographic techniques
NTIS/PS-75/117 Schlieren and Shadowgraph Photography (149) Jan 75
NTIS/PS-75/153 Cavity Flow (117) Jan 75

NTIS/PS-75/164 Aircraft Wake Vortices (137) Dec 1974
NTIS/PS-75/177 Schottky Barrier Devices (114) Jan 75
NTIS/PS-75/178 Frequency Allocation and Management (100) Jan 75
NTIS/PS-75/188 Band Pass Filters (104) Jan 75
NTIS/PS-75/204 Fluid Control Cevices. Vol 1. 1964-1971 (188) Dec 74

NTIS/PS-75/205 Fluid Control Devices. Vol 2. 1972-1974 (104) Dec 74
NTIS/PS-75/225 Quasars, Pulsers, Black Holes (170) Feb 75
NTIS/PS-75/229 Solar Eclipses (140) Feb 75
NTIS/PS-75/230 Relativity Theory (130) 1970-Dec 74
NTIS/PS-75/238 Quantum Electrodynemics (153) Feb 75

NTIS/PS-75/242 Cosmology (102) Feb 75
NTIS/PS-75/244 Use of Ultrasonics in Manufecturing Procedures (89) Dec 74
NTIS/PS-75/248 Acoustic Surface Weves. Vol. 1. 1964-1972 (75) Jan 75
NTIS/PS-75/249 Acoustic Surface Weves. Vol. 2. 1973-1974 (137) Jan 75
NTIS/PS-75/292 Cavitation. Part 1. Cavitation Flow (142) Feb 75

NTIS/PS-75/293 Cavitation. Part 2. Hydrofoils (90) Feb 75
NTIS/PS-75/294 Cavitation. Part 3. Corrosion and Erosion (83) Feb 75 Excludes turbine cavitation
NTIS/PS-75/295 Cavitation. Part 4. Cavitation Flow and Erosion in Turbines (60) Feb 75
NTIS/PS-75/296 Cavitation. Part 5. Propeller Cavitation (74) Feb 75
NTIS/PS-75/316 Heat Pipes. Vol 1. 1964-1972 (175) Feb 75

MONS 212166

PHYSICS (Cont.)

Order Number

NTIS/PS-75/317 Heat Pipes. Vol 2. 1973-1974 (122) Feb 75
NTIS/PS-75/351 Nonlinear Acoustics (71) Apr 75
NTIS/PS-75/368 Amorphous Semiconductors (224) Oct 73 -Dec 74
NTIS/PS-75/399 Radiation Damage of Laser Materials (143) Apr 75
NTIS/PS-75/402 Light Detection and Ranging(LIDAR) (191) May 75

NTIS/PS-75/412 Light Communication Systems (151) Apr 75
NTIS/PS-75/415 Light Emitting Diodes (159) Apr 75
NTIS/PS-75/420 Fiber Optics (147) 1969-May 75
NTIS/PS-75/428 Structural Mechanics Software (185) May 75
NTIS/PS-75/431 Applications of Holography (230) Jun 75 Excludes flow visualization and acoustic holography

NTIS/PS-75/432 Acoustic Holography (92) Jun 75
NTIS/PS-75/433 Holographic Theory and Recording Techniques (150) Jun 75 Excludes acoustic holography and applications
NTIS/PS-75/448 Magnetohydrodynamic Generators in Power Generation (105) May 75
NTIS/PS-75/457 Ferrite Microwave Electronics. Vol 1. 1964-1969 (221) 1964-1969
NTIS/PS-75/458 Ferrite Microwave Electronics. Vol 2. 1970-1974 (105) 1970-Apr 75

NTIS/PS-75/465 Stress Crack Phenomena (186) Jun 75 Excludes rock mechanics and mathematical analysis
NTIS/PS-75/466 Mathematical Analysis of Stress Cracks. Vol 1. 1964-1973 (207) June 75
NTIS/PS-75/467 Mathematical Analysis of Stress Cracks. Vol 2. 1974-May 75 (109) June 75

PROPULSION AND FUELS

Order Number

NTIS/PS-75/126 Gas Turbines, General: Corrosion and Erosion (141) Dec 74 Excludes turbine blades
NTIS/PS-75/127 Turbine Blades: Corrosion and Erosion (78) Dec 74
NTIS/PS-75/139 Diesel Engine Exhaust (86) Jan 75
NTIS/PS-75/256 Fluidized Bed Combustion (66) Dec 74
NTIS/PS-75/295 Cavitation. Part 4. Cavitation Flow and Erosion in Turbines (60) Feb 75

NTIS/PS-75/312 Automobile Air Pollution. Part 4. New Automotive Engines (60) 1970-Dec 74
NTIS/PS-75/313 Automobile Air Pollution. Part 5. Automotive Fuels (48) 1970-Dec 74

MONS 212167

TRANSPORTATION

Order Number	
COM-74-10887	Transportation for the Elderly and Physically Handicapped (125) Apr 74
COM-74-10919	Air Traffic Control Simulation Models (125) May 74
COM-74-11372	Motor Vehicle Tires: Skid and Wear Resistance; Nondestructive Tests; Safety (130) Aug 74
COM-74-11573	Electric Automobiles (60) Oct 74
NTIS/PS-74/098	Airport Noise (113) Nov 74
NTIS/PS-74/110	Alcoholism (135) Nov 74
NTIS/PS-75/006	Pedestrian Movement and Safety (70) 1968-Oct 74
NTIS/PS-75/008	Clear Air Turbulence (220) Dec 74
NTIS/PS-75/033	Stress Factors on Pilot Performance (65) Nov 74
NTIS/PS-75/036	Collision Avoidance Systems (156) Dec 74
NTIS/PS-75/060	Maneuvering Aircraft: Noise Pollution and Control (102) Jan 75
NTIS/PS-75/073	Signs and Display Systems: Graphic Design and Human Engineering (92) Jan 75
NTIS/PS-75/074	Bicycles (41) Jan 75
NTIS/PS-75/099	Fog Dispersal (167) Jan 74
NTIS/PS-75/114	Tracked Air Cushion Vehicles and Magnetic Levitation (70) Dec 74
NTIS/PS-75/122	Highway Parkings (64) Dec 74
NTIS/PS-75/130	Air Bag Restraints (68) Jan 75
NTIS/PS-75/144	Driver Education (109) Jan 75
NTIS/PS-75/148	Tourism and Travel in the United States (85) Jan 75
NTIS/PS-75/151	Omega Navigation System (129) Jan 75
NTIS/PS-75/164	Aircraft Wake Vortices (137) Dec 1974
NTIS/PS-75/174	Discrete Address Beacon System (46) Jan 75
NTIS/PS-75/180	Highway Beautification (46) Jan 75
NTIS/PS-75/200	Financing Urban Transportation. Part 1. General Studies (65) 1970-Jan 75
NTIS/PS-75/201	Financing Urban Transportation. Part 2. Local Studies (95) 1970-Jan 75
NTIS/PS-75/231	Ice and Fog: Detection and Warning Systems (58) Dec 74
NTIS/PS-75/279	Urban Parking (82) Feb 75
NTIS/PS-75/286	Hazardous Materials Transportation (126) Dec 74 Excludes radioactive wastes
NTIS/PS-75/287	Dual Mode Transportation (77) Feb 75
NTIS/PS-75/309	Automobile Air Pollution. Part 1. Abatement Through Management and Planning (89) 1970-Jan 75
NTIS/PS-75/310	Automobile Air Pollution. Part 2. Exhaust Analysis (33) 1970-Dec 74

MONS 212168

MILITARY SCIENCES

Order Number

NTIS/PS-74/121 Inventory Control (195) 1970-Dec 74
NTIS/PS-75/001 Guerrilla Warfare (125) Jan 74
NTIS/PS-75/002 Civil Insurgency (84) Jan 75
NTIS/PS-75/003 Riots and Riot Control (110) Jan 75
NTIS/PS-75/004 Insurgency and Counterinsurgency in Military Affairs (128) Jan 75

NTIS/PS-75/055 Night Vision Devices (95) Jan 75
NTIS/PS-75/393 Arms Control (234) Apr 75
NTIS/PS-75/405 Replacement Theory (85) Apr 75

MISSILE TECHNOLOGY

Order Number

NTIS/PS-75/436 Inertial Navigation and Guidance (208) Apr 74

NATURAL RESOURCES

Order Number

COM-73-11E02 Structural Geologic Studies (88) Jul 73
COM-74-10406 Forest Management (85) 1967-Feb 74
COM-74-11223 Mine Safety (158) 1972-Jul 74
NTIS/PS-74/090 Eutrophication (254) Nov 74
NTIS/PS-74/099 Water Rights and Water Law (147) Nov 74

NTIS/PS-74/103 Offshore Drilling (96) 1966-Nov 74 Includes environmental aspects
NTIS/PS-74/129 Automatic Acquisition of Water Quality Data (116) 1970-Dec 74
NTIS/PS-74/134 Ocean Law (123) Dec 74
NTIS/PS-75/042 Snow Studies (192) Jan 75
NTIS/PS-75/046 Acid Mine Drainage (137) Jan 75

NTIS/PS-75/050 Environmental and Ecological Effects of Dredging (85) Jan 75
NTIS/PS-75/054 Strip Mining (101) Jan 75
NTIS/PS-75/059 Seismology (62) 1974-Oct 74 Excludes detection
NTIS/PS-75/068 Agricultural Resources Surveys (53) 1973-Jan 75
NTIS/PS-75/071 Ground Water Pollution, Part 1, General Studies (133) Jan 74 Excludes studies dealing with irrigation and fertilization

MONS 212161

NATURAL RESOURCES (Cont.)

Order Number

NTIS/PS-75/072 Ground Water Pollution. Part 2. Pollution From Irrigation and Fertilization (132) Jan 75

NTIS/PS-75/078 Weather Modification Effects and Management (117) Jan 75 Excludes theory and physics of cloud seeding and nucleation

NTIS/PS-75/092 Endangered Species (29) Dec 74

NTIS/PS-75/104 Remote Sensing for Natural Resources, Environmental, and Regional Planning (91) 1973-Jan 75

NTIS/PS-75/105 Instrumentation and Data Processing Used in the Earth Resources Technology Satellite (80) 1973-Dec 74

NTIS/PS-75/112 Coal Mine Waste (51) Dec 74

NTIS/PS-75/191 Tectonics (157) Jan 75

NTIS/PS-75/196 Mine Ventilation (66) Jan 75

NTIS/PS-75/197 Permafrost. Part 1. General Studies (105) Jan 75

NTIS/PS-75/198 Permafrost. Part 2. Structural Engineering (174) Jan 75

NTIS/PS-75/220 Thermal Pollution. Part 3. Hydrology and Hydrodynamics (124) Jan 75

NTIS/PS-75/254 Oil Recovery (166) Jan 75 Excludes offshore drilling

NTIS/PS-75/326 Seismic Detection. Part 1. General Studies (82) Jan 75 Excludes detection of nuclear events.

NTIS/PS-75/354 Ground Water Pollution. Part 3. Saline Ground Water (76) Apr 75

NTIS/PS-75/357 Aeration of Sewage Lagoons, Reservoirs, and Streams (157) Apr 75

NTIS/PS-75/362 Oil Shale (137) Apr 75

NTIS/PS-75/373 Public Opinion and Sociology of Water Resource Development (82) 1970-Apr 75

NTIS/PS-75/374 Planning and Impact of Water Resource Programs (210) 1972-Apr 75

NTIS/PS-75/375 Biochemical Oxygen Demand (262) Mar 75

NTIS/PS-75/377 Geothermal Energy (148) Apr 75

NTIS/PS-75/392 Underwater Construction and Mining (127) May 75

NTIS/PS-75/401 Effects of Land Use and Urbanization on Water Resources (194) 1971-May 75

NTIS/PS-75/426 Salt Marshes (92) May 75

NTIS/PS-75/441 Water Quality Modeling--Hydrological and Limnological Systems (213) Jun 75

NTIS/PS-75/468 Sport Fishing (150) Jun 75

MONS 212162

NAVIGATION, GUIDANCE AND CONTROL

Order Number	
NTIS/PS-75/151	Omega Navigation System (129) Jan 75
NTIS/PS-75/436	Inertial Navigation and Guidance (208) Apr 74

NON-DESTRUCTIVE TESTING

Order Number	
COM-74-11372	Motor Vehicle Tires: Skid and Wear Resistance; Nondestructive Tests; Safety (130) Aug 74
NTIS/PS-75/115	Holographic Flow Visualization (53) Jan 75
NTIS/PS-75/117	Schlieren and Shadowgraph Photography (149) Jan 75
NTIS/PS-75/270	Nondestructive Ultrasonic Testing and Inspection. Vol. 1. 1964-1971 (188) Jan 75
NTIS/PS-75/271	Nondestructive Ultrasonic Testing and Inspection. Vol. 2. 1972-1974 (165) Jan 75
NTIS/PS-75/431	Applications of Holography (230) Jun 75 Excludes flow visualization and acoustic holography
NTIS/PS-75/432	Acoustic Holography (92) Jun 75
NTIS/PS-75/433	Holographic Theory and Recording Techniques (150) Jun 75 Excludes acoustic holography and applications

NUCLEAR SCIENCE AND TECHNOLOGY

Order Number	
NTIS/PS-74/131	Nuclear Fusion (146) 1971-Dec 74 Excludes reports sponsored solely by the Atomic Energy Commission
NTIS/PS-75/131	Rehabilitation of the Physically Handicapped (119) Jan 75 Excludes reports sponsored solely by the Atomic Energy Commission
NTIS/PS-75/181	Carbon and Graphite Materials. Part 3. Graphite Research (148) Jan 75
NTIS/PS-75/213	Nuclear Medicine (218) Jan 75
NTIS/PS-75/327	Seismic Detection. Part 2. Nuclear Events--1970-1972--Vol. 1. (135) Jan 75
NTIS/PS-75/328	Seismic Detection. Part 2. Nuclear Events--1973-1974--Vol. 2. (124) Jan 75

MONS 212163

OCEAN TECHNOLOGY AND ENGINEERING

Order Number

COM-74-10551 Oil Spill Removal (114) May 74
NTIS/PS-74/088 Supertankers and Superports (60) Nov 74 Includes environmental considerations
NTIS/PS-74/100 Water Pollution in Estuaries and Coastal Zones (153) Nov 74 Excludes specific biological and oceanographic studies
NTIS/PS-74/123 Offshore Structures (66) Dec 74 Excludes offshore drilling platforms
NTIS/PS-74/134 Ocean Law (123) Dec 74

NTIS/PS-75/014 Marine Anchors (97) Dec 74
NTIS/PS-75/037 Underwater Voice Communication Systems (78) Dec 74
NTIS/PS-75/038 Underwater Clothing, Tools, and Equipment (101) Dec 74 Excludes breathing apparatus
NTIS/PS-75/039 Underwater Breathing Apparatus (130) Dec 74
NTIS/PS-75/059 Seismology (62) 1974-Oct 74 Excludes detection

NTIS/PS-75/077 Icebreakers and Icebreaking (88) Dec 74
NTIS/PS-75/118 The Biological Effects of Oil Spills (107) Jan 75 Excludes biodeterioration
NTIS/PS-75/141 Recreational Boating (71) Jan 75
NTIS/PS-75/143 Sea Water Corrosion (165) Dec 74
NTIS/PS-75/152 Biodeterioration of Oil Spills (81) Jan 74

NTIS/PS-75/169 Whales (93) Jan 75
NTIS/PS-75/191 Tectonics (157) Jan 75
NTIS/PS-75/255 Foundations in Marine Environments (64) Dec 74
NTIS/PS-75/278 Underwater Medicine and Physiology (191) Jan 75
NTIS/PS-75/284 Shipborne Containers and Containerization (100) Jan 75

NTIS/PS-75/293 Cavitation. Part 2. Hydrofoils (90) Feb 75
NTIS/PS-75/296 Cavitation. Part 5. Propeller Cavitation (74) Feb 75
NTIS/PS-75/304 Aquaculture. Part 1. Fish (212) Feb 75 Excludes studies on salmon
NTIS/PS-75/305 Aquaculture. Part 2. Shellfish (129) Feb 75
NTIS/PS-75/329 Ecology of the Marine Environment (205) Feb 75

NTIS/PS-75/332 Surface Effect Vehicles/Ships in Marine Environments (109) Jan 75
NTIS/PS-75/392 Underwater Construction and Mining (127) May 75
NTIS/PS-75/413 Ocean Wave Sensors (129) May 75
NTIS/PS-75/430 Sewage Effects in Marine and Estuarine Environments (136) May 75
NTIS/PS-75/442 Marine Fouling (140) 1969-Jun 75

NTIS/PS-75/446 Remote Sensing of the Ocean. Part 1. Physical, Chemical, and Geological (147) 1970-Apr 75

MONS 212164

OCEAN TECHNOLOGY AND ENGINEERING (Cont.)

Order Number	
NTIS/PS-75/447	Remote Sensing of the Ocean. Part 2. Dynamics (87) 1970-Apr 75
NTIS/PS-75/462	Ocean Waste Disposal (164) May 75 Excludes thermal effluents
NTIS/PS-75/464	Natural Gas. Part 2. Marine Transportation (44) May 75

ORDNANCE

Order Number	
NTIS/PS-75/043	The Use of Dogs to Detect Explosives and Narcotics (24) Jan 75
NTIS/PS-75/136	Lightweight Armor (106) Jan 75

PHOTOGRAPHY AND RECORDING DEVICES

Order Number	
NTIS/PS-75/115	Holographic Flow Visualization (53) Jan 75
NTIS/PS-75/116	Flow Visualization (106) Jan 75 Excludes shadowgraph, schlieren, and holographic techniques
NTIS/PS-75/117	Schlieren and Shadowgraph Photography (149) Jan 75
NTIS/PS-75/431	Applications of Holography (230) Jun 75 Excludes flow visualization and acoustic holography
NTIS/PS-75/432	Acoustic Holography (92) Jun 75
NTIS/PS-75/433	Holographic Theory and Recording Techniques (150) Jun 75 Excludes acoustic holography and applications

PHYSICS

Order Number	
COM-73-10242	Stress Analysis of Cracks (129) Jan 74
COM-74-11056	Carbon Dioxide Lasers (170) Jun 74
COM-74-11495	Numerical Methods in Fluid Flow Problems (139) Sep 74
NTIS/PS-74/109	Drag Reducing Fluids (134) 1969-Nov 74
NTIS/PS-74/116	Liquid Crystals (182) Nov 74

MONS 212165

PHYSICS (Cont.)

Order Number

NTIS/PS-74/120 Dye Lasers (140) Dec 74
NTIS/PS-74/131 Nuclear Fusion (146) 1971-Dec 74 Excludes reports sponsered solely by the Atomic Energy Commission
NTIS/PS-75/015 Metal Vapor Lasers (35) Dec 74
NTIS/PS-75/016 Carbon Monoxide Lasers (83) Dec 74
NTIS/PS-75/018 Gas Dynamic Lasers (85) Dec 74

NTIS/PS-75/035 Electroluminescent Display Devices (105) Jan 75
NTIS/PS-75/044 Gallium Arsenide Lasers (77) Jan 74
NTIS/PS-75/075 Infrared Upconversion (48) Dec 74
NTIS/PS-75/081 Ultraviolet and X Ray Lasers (80) Jan 75
NTIS/PS-75/086 Magnetic Bubble Domains (42) Jan 75

NTIS/PS-75/089 Cadmium Sulfide Solar Cells (161) Jan 75
NTIS/PS-75/115 Holographic Flow Visualization (53) Jan 75
NTIS/PS-75/116 Flow Visualization (106) Jan 75 Excludes shadowgraph, schlieren, and holographic techniques
NTIS/PS-75/117 Schlieren and Shadowgraph Photography (149) Jan 75
NTIS/PS-75/153 Cavity Flow (117) Jan 75

NTIS/PS-75/164 Aircraft Wake Vortices (137) Dec 1974
NTIS/PS-75/177 Schottky Barrier Devices (114) Jan 75
NTIS/PS-75/178 Frequency Allocation and Management (100) Jan 75
NTIS/PS-75/188 Band Pass Filters (104) Jan 75
NTIS/PS-75/204 Fluid Control Devices, Vol 1, 1964-1971 (188) Dec 74

NTIS/PS-75/205 Fluid Control Devices, Vol 2, 1972-1974 (104) Dec 74
NTIS/PS-75/225 Quasers, Pulsers, Black Holes (170) Feb 75
NTIS/PS-75/229 Solar Eclipses (140) Feb 75
NTIS/PS-75/230 Relativity Theory (130) 1970-Dec 74
NTIS/PS-75/238 Quantum Electrodynamics (153) Feb 75

NTIS/PS-75/242 Cosmology (102) Feb 75
NTIS/PS-75/244 Use of Ultrasonics in Manufacturing Procedures (89) Dec 74
NTIS/PS-75/248 Acoustic Surface Waves, Vol. 1, 1964-1972 (75) Jan 75
NTIS/PS-75/249 Acoustic Surface Waves, Vol. 2, 1973-1974 (137) Jan 75
NTIS/PS-75/292 Cavitation, Part 1, Cavitation Flow (142) Feb 75

NTIS/PS-75/293 Cavitation, Part 2, Hydrofoils (90) Feb 75
NTIS/PS-75/294 Cavitation, Part 3, Corrosion and Erosion (83) Feb 75 Excludes turbine cavitation
NTIS/PS-75/295 Cavitation, Part 4, Cavitation Flow and Erosion in Turbines (60) Feb 75
NTIS/PS-75/296 Cavitation, Part 5, Propeller Cavitation (74) Feb 75
NTIS/PS-75/316 Heat Pipes, Vol 1, 1964-1972 (175) Feb 75

MONS 212166

PHYSICS (Cont.)

Order Number

NTIS/PS-75/317 Heat Pipes. Vol 2. 1973-1974 (122) Feb 75
NTIS/PS-75/351 Nonlinear Acoustics (71) Apr 75
NTIS/PS-75/368 Amorphous Semiconductors (224) Oct 73 -Dec 74
NTIS/PS-75/399 Radiation Damage of Laser Materials (143) Apr 75
NTIS/PS-75/402 Light Detection and Ranging(LIDAR) (191) May 75

NTIS/PS-75/412 Light Communication Systems (151) Apr 75
NTIS/PS-75/415 Light Emitting Diodes (159) Apr 75
NTIS/PS-75/420 Fiber Optics (147) 1969-May 75
NTIS/PS-75/428 Structural Mechanics Software (185) May 75
NTIS/PS-75/431 Applications of Holography (230) Jun 75 Excludes flow visualization and acoustic holography

NTIS/PS-75/432 Acoustic Holography (92) Jun 75
NTIS/PS-75/433 Holographic Theory and Recording Techniques (150) Jun 75 Excludes acoustic holography and applications
NTIS/PS-75/448 Magnetohydrodynamic Generators in Power Generation (105) May 75
NTIS/PS-75/457 Ferrite Microwave Electronics. Vol 1. 1964-1969 (221) 1964-1969
NTIS/PS-75/458 Ferrite Microwave Electronics. Vol 2. 1970-1974 (105) 1970-Apr 75

NTIS/PS-75/465 Stress Crack Phenomena (186) Jun 75 Excludes rock mechanics and mathematical analysis
NTIS/PS-75/466 Mathematical Analysis of Stress Cracks. Vol 1. 1964-1973 (207) June 75
NTIS/PS-75/467 Mathematical Analysis of Stress Cracks. Vol 2. 1974-May 75 (109) June 75

PROPULSION AND FUELS

Order Number

NTIS/PS-75/126 Gas Turbines, General: Corrosion and Erosion (141) Dec 74 Excludes turbine blades
NTIS/PS-75/127 Turbine Blades: Corrosion and Erosion (78) Dec 74
NTIS/PS-75/139 Diesel Engine Exhaust (86) Jan 75
NTIS/PS-75/256 Fluidized Bed Combustion (66) Dec 74
NTIS/PS-75/295 Cavitation. Part 4. Cavitation Flow and Erosion in Turbines (60) Feb 75

NTIS/PS-75/312 Automobile Air Pollution. Part 4. New Automotive Engines (60) 1970-Dec 74
NTIS/PS-75/313 Automobile Air Pollution. Part 5. Automotive Fuels (48) 1970-Dec 74

MONS 212167

TRANSPORTATION

Order Number	
COM-74-10887	Transportation for the Elderly and Physically Handicapped (25) Apr 74
COM-74-10519	Air Traffic Control Simulation Models (125) May 74
COM-74-11372	Motor Vehicle Tires: Skid and Wear Resistance; Nondestructive Tests; Safety (130) Aug 74
COM-74-11573	Electric Automobiles (60) Oct 74
NTIS/PS-74/098	Airport Noise (113) Nov 74
NTIS/PS-74/110	Alcoholism (135) Nov 74
NTIS/PS-75/006	Pedestrian Movement and Safety (70) 1968-Oct 74
NTIS/PS-75/008	Clear Air Turbulence (220) Dec 74
NTIS/PS-75/033	Stress Factors on Pilot Performance (65) Nov 74
NTIS/PS-75/036	Collision Avoidance Systems (156) Dec 74
NTIS/PS-75/060	Maneuvering Aircraft: Noise Pollution and Control (102) Jan 75
NTIS/PS-75/073	Signs and Display Systems: Graphic Design and Human Engineering (92) Jan 75
NTIS/PS-75/074	Bicycles (41) Jan 75
NTIS/PS-75/099	Fog Dispersal (167) Jan 74
NTIS/PS-75/114	Tracked Air Cushion Vehicles and Magnetic Levitation (70) Dec 74
NTIS/PS-75/122	Highway Parkings (64) Dec 74
NTIS/PS-75/130	Air Bag Restraints (68) Jan 75
NTIS/PS-75/144	Driver Education (109) Jan 75
NTIS/PS-75/148	Tourism and Travel in the United States (85) Jan 75
NTIS/PS-75/151	Omega Navigation System (129) Jan 75
NTIS/PS-75/164	Aircraft Wake Vortices (137) Dec 1974
NTIS/PS-75/174	Discrete Address Beacon System (46) Jan 75
NTIS/PS-75/180	Highway Beautification (46) Jan 75
NTIS/PS-75/200	Financing Urban Transportation. Part 1. General Studies (65) 1970-Jan 75
NTIS/PS-75/201	Financing Urban Transportation. Part 2. Local Studies (95) 1970-Jan 75
NTIS/PS-75/231	Ice and Fog: Detection and Warning Systems (58) Dec 74
NTIS/PS-75/279	Urban Parking (82) Feb 75
NTIS/PS-75/286	Hazardous Materials Transportation (126) Dec 74 Excludes radioactive wastes
NTIS/PS-75/287	Dual Mode Transportation (77) Feb 75
NTIS/PS-75/309	Automobile Air Pollution. Part 1. Abatement Through Management and Planning (89) 1970-Jan 75
NTIS/PS-75/310	Automobile Air Pollution. Part 2. Exhaust Analysis (33) 1970-Dec 74

MONS 212168

TRANSPORTATION (Cont.)

Order Number	
NTIS/PS-75/311	Automobile Air Pollution. Part 3. Control Equipment (100) 1970-Dec 74
NTIS/PS-75/312	Automobile Air Pollution. Part 4. New Automotive Engines (60) 1970-Dec 74
NTIS/PS-75/313	Automobile Air Pollution. Part 5. Automotive Fuels (48) 1970-Dec 74
NTIS/PS-75/314	Automobile Air Pollution. Part 6. Atmospheric Motion (42) 1970-Dec 74
NTIS/PS-75/318	Aircraft Sonic Boom. Part 1. Studies on Aircraft Flight and Design (99) Feb 75
NTIS/PS-75/319	Aircraft Sonic Boom. Part 2. Effects on Buildings (60) Feb 75
NTIS/PS-75/320	Aircraft Sonic Boom. Part 3. Biological Effects (52) Feb 75
NTIS/PS-75/321	Railroad Management and Planning (139) Feb 75
NTIS/PS-75/322	Railroad Freight Transportation (98) Feb 75
NTIS/PS-75/333	Surface Effect Vehicles and Surface Effect: General Studies. Vol. 1. 1964-1971 (134) Jan 75 Does not include marine environments
NTIS/PS-75/334	Surface Effect Vehicles and Surface Effect: General Studies. Vol. 2. 1972-1974 (67) Jan 75 Does not include marine environments
NTIS/PS-75/342	Fuel Consumption. Part 2. Transportation (93) Feb 75
NTIS/PS-75/376	Air Traffic Congestion and Capacity (106) Apr 75
NTIS/PS-75/403	Urban Automated Traffic Control (114) May 75
NTIS/PS-75/417	Microwave Landing Systems (80) Apr 75
NTIS/PS-75/421	BART and METRO--Rapid Transit for the San Francisco and Washington D.C. Areas (168) May 75
NTIS/PS-75/436	Inertial Navigation and Guidance (208) Apr 74
NTIS/PS-75/444	Highway Traffic Noise (101) May 75
NTIS/PS-75/464	Natural Gas. Part 2. Marine Transportation (44) May 75

URBAN TECHNOLOGY

Order Number	
COM-74-10100	Juvenile Delinquency Prevention Programs (100) Dec 73
COM-74-10887	Transportation for the Elderly and Physically Handicapped (25) Apr 74
COM-74-10982	Industrialized Housing (159) Jun 74
COM-74-11201	Flood Control (191) 1972-Jul 74
COM-74-11319	Urban Information Systems (196) 1970-Aug 74 Includes USAC reports

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URBAN TECHNOLOGY (Cont.)

Order Number	
COM-74-11360	Air Quality Monitoring (121) 1970-Jul 74
COM-74-11393	The Elderly (139) Sep 74
COM-74-11534	Building Fires (143) Sep 74
NTIS/PS-74/104	Urban Air Pollution (153) 1970-Nov 74
NTIS/PS-74/106	Urban Noise Pollution (66) 1970-Nov 74
NTIS/PS-74/107	Urban Sewage Treatment Planning (134) 1970-Nov 74
NTIS/PS-74/108	Urban Storm Sewers and Water Runoff (229) Nov 74
NTIS/PS-74/125	Quality of Life in the Urban Environment (131) 1970-Dec 74
NTIS/PS-74/132	Housing (121) 1970-Dec 74
NTIS/PS-75/003	Riots and Riot Control (110) Jan 75
NTIS/PS-75/005	Rehabilitation of Criminal and Public Offenders (100) 1967-Oct 74
NTIS/PS-75/006	Pedestrian Movement and Safety (70) 1968-Oct 74
NTIS/PS-75/007	Disasters (131) Dec 74
NTIS/PS-75/043	The Use of Dogs to Detect Explosives and Narcotics (24) Jan 75
NTIS/PS-75/047	Crime Prevention and Enforcement Through Community Relations (72) Jan 75
NTIS/PS-75/056	Behavior and Psychology as Related to Law Enforcement (103) Jan 75
NTIS/PS-75/061	De-icing Materials and Techniques for Roads and Runways (92) Jan 75
NTIS/PS-75/083	The Use of the Mass Media by Local and Regional Governments (58) Jan 75
NTIS/PS-75/104	Remote Sensing for Natural Resource, Environmental, and Regional Planning (911) 1973-Jan 75
NTIS/PS-75/114	Tracked Air Cushion Vehicles and Magnetic Levitation (70) Dec 74
NTIS/PS-75/119	Minority Business (71) Jan 75 Excludes regional and socioeconomic studies
NTIS/PS-75/120	Economic Development of Ethnic Minorities (86) Jan 75
NTIS/PS-75/141	Recreational Boating (71) Jan 75
NTIS/PS-75/148	Tourism and Travel in the United States (85) Jan 75
NTIS/PS-75/168	Ghettos (69) Jan 75
NTIS/PS-75/171	Emergency Medical Services and Care (87) Jan 75
NTIS/PS-75/180	Highway Beautification (46) Jan 75
NTIS/PS-75/184	Regional and Urban Solid Waste Disposal. Part 1. Management Planning (81) Jan 75
NTIS/PS-75/185	Regional and Urban Solid Waste Disposal. Part 2. Local Case Studies (110) Jan 75
NTIS/PS-75/186	Regional and Urban Solid Waste Disposal. Part 3. Handling and Disposal Technology (84) Jan 75

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URBAN TECHNOLOGY (Cont.)

Order Number	
NTIS/PS-75/199	Urban Financing and Taxation (95) Jan 75 Excludes financing of transportation and pollution control
NTIS/PS-75/200	Financing Urban Transportation. Part 1. General Studies (65) 1970-Jan 75
NTIS/PS-75/201	Financing Urban Transportation. Part 2. Local Studies (95) 1970-Jan 75
NTIS/PS-75/202	Financing and Taxation For Urban Control of Pollution (111) Jan 75
NTIS/PS-75/203	Housing Taxation and Financing by the Federal, State, and Local Governments (87) Jan 75
NTIS/PS-75/216	Citizen Participation in Local Government (99) Jan 75
NTIS/PS-75/279	Urban Parking (82) Feb 75
NTIS/PS-75/287	Dual Mode Transportation (77) Feb 75
NTIS/PS-75/301	Central City Redevelopment (54) Feb 75
NTIS/PS-75/309	Automobile Air Pollution. Part 1. Abatement Through Management and Planning (89) 1970-Jan 75
NTIS/PS-75/323	Population Mobility (127) Feb 75
NTIS/PS-75/401	Effects of Land Use and Urbanization on Water Resources (94) 1971-May 75
NTIS/PS-75/403	Urban Automated Traffic Control (114) May 75
NTIS/PS-75/421	BART and METRO--Rapid Transit for the San Francisco and Washington D.C. Areas (168) May 75
NTIS/PS-75/425	Crimes and Crime Prevention (134) May 75
NTIS/PS-75/443	Police (200) Jun 75
NTIS/PS-75/444	Highway Traffic Noise (101) May 75

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July 1975

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-EE-

USCOMM DC 8367-P79

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