

Scripps Institution of Oceanography Archives
Processing Record

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Scripps Institution of Oceanography. Contracts and Grants Office

SIO Contracts and Grants Office Records, 1959-1996

Physical Description: 75 record center cartons; 1 oversize databook

Scope and Content Note: Collection contains funded and unfunded proposals, dated from August 31, 1960, to March 14, 1996, letters of intent, and lists of the active contracts and grants. These include proposals for one time projects to multi-proposal projects for work conducted during a period of years, such as the Deep Sea Drilling Project. Files sometimes contain a preliminary draft as well as the final draft. The lists of active contracts and grants name the active contracts and grants up to the date the list was generated. This collection does not include patents. The collection is arranged into 3 series: Proposals Without Numbers, University of California, San Diego (UCSD) Proposals, and Proposals by Other Institutions.

In the series Proposals Without Numbers, proposals for which numbers could not be found, were arranged in chronological order.

The UCSD series contains the bulk of the proposals. These are proposals from UCSD's SIO. They are arranged in numerical order by proposal number.

In the series Other Institutions, proposals generated by other institutions, such as the Woods Hole Oceanographic Institution (WHOI), that were connected to SIO projects, were placed in this series. These include proposals for work done cooperatively with SIO and WHOI, University of California, Santa Cruz (UCSC), and University of California, Sea Grant (UCSG). They are arranged in alphabetical order by institution and then by institution proposal number.

Most of the multi-institutional projects, such as World Ocean Circulation Experiment (WOCE), are in the UCSD Proposals series, under their proposal number. Any proposals by other institutions are located in the Other Institutions series.

In each of the series, the folder titles are composed of the following elements. The first element is the proposal number. For the Proposals Without Numbers series, this element is lacking. In the UCSD series, proposals are arranged in numerical order by the proposal number. In June 1974, the proposal numbers were started over from 0000. In July 1985, the proposal numbers were changed. They start with numerals representing the fiscal year and then continue sequentially, i.e., 861002. The first few of these have the original proposal numbers in parenthesis. In the series Other Institutions, the institution and its proposal number are listed, i.e., UCSG-5. The next element in the folder title is the Principal Investigator(s) name(s). The granting agency is then listed, followed by the proposal title. The last item listed is the date of submission, determined by the date in the right-hand corner of the title page, unless there was a specific "Date of Submission." If a date was not found in either of these places, the date of the Principal Investigator's signature was used. This could be found on the title page or near the end of the proposal. For NSF proposals, the date was taken from the NSF Proposal Sheet, and the date of the signature on the front was used. Revised dates were used only if the revised proposal was in a separate folder. If the revision was in the same folder as the original, the date of the original was used. For the letters of intent, the date of the letter was used only if there was no title page. If a date could not be found in any of these places, they were simply labeled N.D. for no date. The dates of the proposals in this accession are from 1960-1996. Any proposals after March 1996 remain in the Contracts and Grants Office.

SIO CONTRACTS AND GRANTS ACRONYMS

- RTE86
1986 Reciprocal Acoustic Transmission Tomography Experiment
- ATTBL
AT&T Bell Laboratories
- AGM
Absolute Gravity Meter
- APAR
Absorbed Photosynthetically Active Radiation
- AMS
Accelerator Mass Spectrometry
- ABR
Accomplishment Based Renewal
- ADCP
Acoustic Doppler Current Profiling
- ADVP
Acoustic Doppler Velocity Profiler
- ATA
Advance Tether Application
- ACSAS
Advanced Conformal Submarine Acoustic Sensors
- ADA
Advanced Detection Array
- APC
Advanced Piston Coring
- ARPA
Advanced Research Projects Agency
- ASCP
Advanced Scientific Computing Program
- ASSAS
Advanced Solid-State Array Spectroradiometer
- ATV
Advanced Tethered Vehicle
- AUSS
Advanced Unmanned Search System
- AVHRR
Advanced Very High Resolution Radiometer
- AID
Agency for International Development
- AFGL
Air Force Geophysics Laboratory
- AFOSR
Air Force Office of Scientific Research
- AFSC
Air Force Systems Command
- AVIRIS
Airborne Visible-Infrared Imaging Spectrometer
- AWI
Alfred Wegener Institute
- AC
Allergan Company
- AP
Allergan Pharmaceuticals
- ANDES
Ambient Noise Directionality Estimation System
- AAAS
American Association for the Advancement of Science
- ACS
American Chemical Society
- AHA
American Heart Association
- ANZA
Analysis of Natural Seismicity at Anza
- AS
Analytical Services
- ARAD
Anatomy of a Ridge Axis Discontinuity

- AWMF
Andrew W. Mellon Foundation
- AMERIEZ
Antarctic Marine Ecosystems Research at the Ice Edge Zone
- AMLR
Antarctic Marine Living Resources
- ARS
Antarctic Remote Sensing
- ARC
Antarctic Research Center
- ASA
Antarctic Support Associates
- ASW
Antisubmarine Warfare
- APL
Applied Physics Laboratory
- ANL
Argonne National Laboratory
- ACE
Army Corp of Engineers
- AEDP
Army Engineer District, Portland
- ARO
Army Research Office
- ASIPL
Associated Surveys International, Pty, Ltd.
- ACCE
Atlantic Climate Change Experiment
- AOML
Atlantic Oceanographic and Marine Laboratory
- ASTEX
Atlantic Stratocumulus Transition Experiment
- AGCM
Atmospheric General Circulation Model
- AIRS
Atmospheric Infrared Radiation Sounder
- ARM
Atmospheric Radiation Measurement
- AEC
Atomic Energy Commission
- AR
Automation and Robotics
- AGOR
Auxiliary General Oceanography Research
- BPAE
BP Alaska Exploration
- BEMPEX
Barotropic, Electro-Magnetic, and Pressure Experiment
- BPNL
Battelle-Pacific Northwest Laboratory
- BI
Bedford Institute
- BLOS
Bigelow Laboratories for Ocean Sciences
- BSF
Binational Science Foundation
- BEC
Bio-Energy Council
- BIOME
Biological-Physical Interactions in Oceanic Mesoscale Ecosystems
- BII
Biospherical Instruments, Inc.
- BSU
Boise State University
- BU
Boston University
- BBTRE
Brazil Basin Tracer Release Experiment

- BMC
Bristol-Meyers Company
- BRU
Brown University
- CaBS
California Basin Study
- CCC
California Coastal Commission
- CDOC
California Department of Conservation
- CDFG
California Department of Fish and Game
- CDMG
California Division of Mines and Geology
- CEC
California Energy Commission
- CIEE
California Institute for Energy Efficiency
- CIT
California Institute of Technology
- CSI
California Space Institute
- CSLC
California State Lands Commission
- CATZ
California Transition Zone
- CPF
Caltech Presidents Fund
- CENOP
Cenozoic Paleooceanography
- CASS
Center for Advanced Space Studies
- COAP
Center for Ocean Analysis and Prediction
- CSE
Centers for Scientific Excellence
- CEPEX
Central Equatorial Pacific Experiment
- CNES
Centre National de'Etudes Spatiales
- CALF
Charles A. Lindbergh Fund, The
- CHASSF
Charles H. and Anna S. Stern Foundation
- COFRC
Chevron Oil Field Research Co.
- CC
City of Carlsbad
- CO
City of Oceanside
- CAC
Climate Analysis Center
- CFARC
Cloud Free Arc
- CFLOS
Cloud Free Line of Sight
- CDIP
Coastal Data Information Program
- CODE
Coastal Ocean Dynamics Experiment
- CTZ
Coastal Transition Zone
- CZCS
Coastal Zone Color Scanner
- CU
Columbia University
- CCPP
Comet Cooperative Partners Project

- CCCO
Committee on Climate Change and the Ocean
- CIS
Compensated Imaging Study
- CTD
Conductivity, Temperature, Depth
- CI
Conoco, Inc.
- CITE
Consell Intercomarcal de les Terres de l'Ebre
- CSAI
Continental Shelf Associates, Inc.
- CEAREX
Coordinated Eastern Arctic Experiment
- CM
Counter Measures
- CCM
Counter Counter Measures
- COARE
Coupled Ocean Atmosphere Response Experiment
- CDO
Crustal Deformation Observatory
- CRM
Crystallization Remnant Magnetization
- CKRP
CUREe-Kajima Research Project
- DOPE
Deep Ocean Pilot Experiment
- DSDP
Deep Sea Drilling Project
- DSV
Deep Submersible Vehicle
- DUMAND
Deep Underwater Muon and Neutrino Detection
- DARPA
Defense Advanced Research Projects Agency
- DCMGP
Defense Conversion Matching Grant Program
- DMA
Defense Mapping Agency
- DSMP
Defense Satellite Meteorological Program
- DOA
Department of Agriculture
- DOASE
Department of Agriculture, Science, and Education
- DBW
Department of Boating and Waterways
- DOC
Department of Commerce
- DOD
Department of Defense
- DOE
Department of Energy
- DED
Department of Engineering Development
- DFG
Department of Fish and Game
- DGMI
Department of Geology and Mineral Industries
- DOHHS
Department of Health and Human Services
- DOHEW
Department of Health, Education, and Welfare
- DT
Department of Transportation
- DWR
Department of Water Resources

- DOAF
Department of the Air Force
- DON
Department of the Navy
- DOI
Department of the Interior
- DNOD
Department of Navigation and Ocean Development
- DOAS
Differential Optoacoustic Spectroscopy
- DODS
Distributed Oceanographic Data Systems
- DU
Duke University
- EGSEC
EG&G Environmental Consultants
- EGGOS
EG&G Oceanographic Services
- EOSDIS
EOS Data Integration System
- EWiFS
EOS Wide Field-of-View Sensor
- EOC
Earth Observation Center
- EOS
Earth Observing System
- ERBE
Earth Radiation Budget Experiment
- EPR
East Pacific Rise
- EDDIES
Eddy-Driven Dynamics in Ecosystems
- ENSO
El Nino/ Southern Oscillation
- EPRI
Electric Power Research Institute
- EM
Electromagnetic
- EMODE
Electromagnetic Ocean Dynamics Experiment
- EM(S)OC
Electromagnetic Studies of the Continent
- EMSLAB
Electromagnetic Study of Lithosphere and Atmosphere Beneath the Juan de Fuca Plate
- ESC
Electronic Still Camera
- EUPF
Elsa U. Pardee Foundation
- ERDA
Energy Research and Development Administration
- EPA
Environmental Protection Agency
- EPOCS
Equatorial Pacific Ocean Circulation Study
- EVHF
Erna and Victor Hasselblad Foundation
- EHRP
Estuarine Habitat Research Program
- ESA
European Space Agency
- ERM
Exact Repeat Mission
- XBT
Expendable Bathythermograph
- ESOP
Experimental Synoptic Ocean Prediction
- ELF
Extreme Low Frequency

- EPRC
Exxon Production Research Company
- FLOSS
FLIP Oceanographic Surface Scattering
- FAW
Faculty Awards for Women Scientists
- FIFE
First ISLSCP Field Experiment
- FADs
Fish Aggregating Devices
- FTS
Flight Telerobotic Servicer
- FF
Flintridge Foundation, The
- FAOUN
Food and Agriculture Organization of the United Nations
- FCRG
Food Chain Research Group
- FOR
Foundation for Ocean Research
- FTIR
Fourier transform Infrared
- FRONTS
Frontal Dynamics
- GDESI
GDE Systems, Inc.
- GTESI
GTE Sylvania Incorporated
- GRS
Gamma Ray Spectrometer
- GRI
Gas Research Institute
- GAISC
General Atomic International Service Corporation
- GCM
General Circulation Model
- GD
General Dynamics
- GRIP
General Purpose Relational Database Information Platform
- GRCP
Genetic Resources Conservation Program
- GDS
Geomagnetic Deep Sounding
- GFDL
Geophysical Fluid Dynamics Experiment
- GRPS
Georeceiver Positioning System
- GMI
Global Marine Inc.
- GOFS
Global Ocean Flux Study
- GPS
Global Positioning System
- GI
Glycomed Incorporated
- GISS
Goddard Institute for Space Studies
- GRTTF
Gorda Ridge Technical Task Force
- GISP
Greenland Ice Sheet Project
- GOC
Grimm Oil Company
- GRDC
Gulf Research and Development Co.
- GAGE
Gulf Stream-Atmosphere Gradient Exchange

- HALOE
Halogen Occultation Experiment
- HIG
Hawaii Institute of Geophysics
- HDCC
Hawaiian Dredging and Construction Company
- HI
Helionetics, Inc.
- HGI
High Gain Initiative
- HPLC
High-Performance Liquid Chromatography
- HA
Holton Associates
- HEM
Horizontal Electrometers
- IRIS
Incorporated Research Institutions for Seismology
- ISD
Ingalls Shipbuilding Division
- ICPMS
Inductively Coupled Plasma Mass Spectrometer
- IR
Infrared
- IFREMER
Institut Français de Recherche pour l'Exploitation de la Mer
- INO
Institute for Naval Oceanography
- IGPP
Institute of Geophysics and Planetary Physics
- IMR
Institute of Marine Resources
- IMS
Institute of Museum Services
- IFC
Intensive Field Campaign
- IDL
Interactive Database Language
- IOC
Intergovernmental Oceanographic Commission
- ICA
International Cooperation Administration
- IDOE
International Decade of Ocean Exploration
- IDA
International Deployment of Accelerometers
- IPOD
International Program of Ocean Drilling
- ISCCP
International Satellite Cloud Climatology Program
- ISLSCP
International Satellite Land Surface Climatology Project
- IUE
International Ultraviolet Explorer
- IGCW
Intrinsic Germanium Crystal Well
- IES
Inverted Echo Sounders
- IRMS
Isotope Ratio Mass Spectrometer
- JPL
Jet Propulsion Laboratory
- JHU
John Hopkins University
- JEDA
Joint Environmental Data Analysis
- JGOFS
Joint Global Ocean Flux Study

- JIMO
Joint Institute for Marine Observations
- JOIDES
Joint Oceanographic Institutions Deep Earth Sampling
- JOII
Joint Oceanographic Institutions, Inc.
- POLYMODE
Joint United States-USSR Mid-Ocean Dynamics Experiment
- KAU
King Abdulaziz University
- KLI
Kinnetic Laboratories Incorporated
- KAPL
Knolls Atomic Power Laboratory
- KAEGMBH
Krupp Atlass Elektronik GMBH
- LSBLF
L.S.B. Leaky Foundation
- LIMDAS
LSTC Imager Display and Analysis Sub-System
- LGO
Lamont-Doherty Geological Observatory
- LMS
Laser Mass Spectrometer
- LMMS
Laser Microprobe Mass Spectrometry
- LIMS
Laser-Induced Mass Spectrometry
- LAMSI
Latin American Marine Sciences Institutions
- LLNL
Lawrence Livermore National Laboratory
- LCA
LeRoy Crandall and Associates
- LRL
Lilly Research Laboratories
- LC-MS
Liquid Chromatography-Mass Spectrometry
- LDE
Local Dynamics Experiment
- LL
Look Laboratory
- LAMPF
Los Alamos Meson Physics Facility
- LANL
Los Alamos National Laboratory
- LADCE
Los Angeles District Corp of Engineers
- LAFGC
Los Angeles Fish and Game Commission
- LFASE
Low-Frequency Acoustic Seismic Experiment
- MBCAES
MBC Applied Environmental Sciences
- MT
Magnetotelluric
- M
Marathon
- MMC
Marine Mammal Commission
- MPL
Marine Physical Laboratory
- MRC
Marine Review Committee
- MK
Mark
- MS
Mass Spectrometer

- MIT
Massachusetts Institute of Technology
- MLO
Mauna Loa Observatory
- MKFI
Max Kade Foundation, Inc.
- MDA
McDonnell Douglas Aerospace
- MEFN
McKnight Endowment Fund for Neuroscience, The
- MR
Microwave Radiation
- MORB
Mid-Ocean Ridge Basalts
- MHA
Military Hydrophone Arrays
- MMS
Minerals Management Service
- MILDEX
Mixed Layer Dynamics Experiment
- MOS
Moored Oceanographic Spectroradiometer
- MIM
Motion Isolation Module
- MCS
Multichannel Seismic
- MSSMS
Multicollector Solid Source Mass Spectrometer
- NASA
National Aeronautics and Space Administration
- NASA/ARC
NASA/Ames Research Center
- NBS
National Bureau of Standards
- NCAR
National Center for Atmospheric Research
- NCRI
National Coastal Resources Research and Development Institute
- NDBO
National Data Buoy Office
- NEH
National Endowment for the Humanities
- NGS
National Geographic Society
- NGDC
National Geophysics Data Center
- NIGEC
National Institute for Global Environmental Change
- NIH
National Institutes of Health
- NMFS
National Marine Fisheries Service
- NOAA
National Ocean Atmospheric Administration
- NPS
National Park Service
- NRC
National Research Council
- NRL
National Research Laboratory
- NRDC
National Resources Defense Council
- NSF
National Science Foundation
- NSGC
National Space Grant College
- NSTS
National Space Transportation System

- NWS
National Weather Service
- NADC
Naval Air Development Center
- NASC
Naval Air Systems Command
- NESC
Naval Electronics Systems Command
- NFEC
Naval Facilities Engineering Command
- NO
Naval Observatory
- NORDA
Naval Ocean Research and Development Activity
- NOSC
Naval Ocean Systems Center
- NOARL
Naval Oceanographic and Atmospheric Research Laboratory
- NOO
Naval Oceanographic Office
- NPGS
Naval Postgraduate School
- NRLSSC
Naval Research Laboratory Stennis Space Center
- NSSC
Naval Sea Systems Command
- NSC
Naval Supply Center
- NWC
Naval Weapons Center
- NELO
Navy Engineering Logistics Office
- NEREUS
Navy Environmental Remote Sensing Using Shuttle
- NI
Netrologic Incorporated
- NTS
Nevada Test Site
- NJMSC
New Jersey Marine Sciences Consortium
- NMF
Nimitz Marine Facility
- NDVI
Normalized Difference Vegetation Index
- NAFTA
North American Free Trade Agreement
- NATO
North American Treaty Organization
- NCSU
North Carolina State University
- NORPAX
North Pacific Experiment
- NIU
Northern Illinois University
- NWT
Northwestern Territories
- NWU
Northwestern University
- ORNL
Oak Ridge National Laboratory
- OAT
Ocean Acoustic Tomography
- OBAGM
Ocean Bottom Absolute Gravity Meter
- OBH
Ocean Bottom Hydrophone
- OBS
Ocean Bottom Seismograph

- OCTS
Ocean Color Temperature Sensor
- ODP
Ocean Drilling Program
- OGCM
Ocean General Circulation Model
- OSN
Ocean Seismic Network
- ON
Oceanographer of the Navy
- ODF
Oceanographic Data Facility
- ORSTOM
Office de la Recherche Scientifique et Technique Outre-Mer
- OAST
Office of Aeronautics and Space Technology
- ONR
Office of Naval Research
- ODEX
Optical Dynamics Experiment
- OLS
Optical Line Scanner
- OSU
Oregon State University
- OPUS
Organization of Persistent Upwelling Structures
- OMZ
Oxygen Minimum Zone
- OMZI
Oxygen Minimum Zone Interaction Study
- PAC
Pacific Analysis Corporation
- PGEC
Pacific Gas & Electric Co.
- PRRP
Pacific Rim Research Program
- PF
Packard Foundation
- TPF
Parker Foundation, The
- PSU
Penn State University
- PRC
People's Republic of China
- PGGA
Permanent GPS Geodetic Array
- PL
Phillips Laboratory
- PPC
Phillips Petroleum Company
- PFGO
Pinon Flat Geological Observatory
- PFMO
Pinyon Flat Magnetic Observatory
- PRPOO's
Planktonic Rate Processes in the Central Oligotrophic Oceans
- POLDER
Polarization and Directionality of the Earth Reflectance
- PUFAs
Polyunsaturated Fatty Acids
- PSF
Port of San Francisco
- PRPA
Program Research and Development Announcement
- RC
Rand Corporation
- RGDS
Range Gated Doppler Sonar

- REE
Rare Earth Elements
- RUM
Remote Underwater Manipulator
- RCO
Research Corporation
- REPSFBD
Research Enhancement Program for the San Francisco Bay/Delta
- REU
Research Experience for Undergraduates
- RFI
Research for the Future, Inc.
- RISC
Research Institute of Scripps Clinic
- RACER
Research on Antarctic Coastal Ecosystem Rates and Processes
- ROSE
Riviera Ocean Seismic Experiment
- RISE
Riviera Submersible Experiment
- RADC
Rome Air Development Center
- SAXON
SAR-X Band and Ocean Nonlinearities
- SDSU
San Diego State University
- SDSC
San Diego Super Computer
- SFCWP
San Francisco Clean Water Program
- SFEP
San Francisco Estuary Project
- SFWP
San Francisco Wastewater Program
- SNL
Sandia National Laboratories
- SLR
Satellite Laser Ranging
- SCALES
Scales, Climate, and Large Ecosystem Studies
- SEM
Scanning Electron Microscopy
- SMMR
Scanning Multi-frequency Microwave Radiometer
- ST
Science and Technology
- SAI
Science Applications, Inc.
- SAIC
Science Applications International Corporations
- SSP
Science Support Program
- SAMM
Scientific Advisors on Marine Mammals
- SAC
Scientific Advisory Committee
- SCOR
Scientific Committee on Ocean Research
- SIO
Scripps Institution of Oceanography
- SOPAC
Scripps Orbit and Permanent Array Center
- SS
Sea Space
- SST
Sea Surface Temperature
- SW
Sea World

- SFMT
Seafloor Magnetotelluric
- SNAG
Seafloor Noise Advisory Group
- SON
Secretary of the Navy
- SWELL
Seismic Wave Exploration of the Lower Lithosphere
- SDC
Shell Development Company
- SR
Short-wave Radiation
- SIR
Shuttle Imaging Radar
- SSE
Sight Specific Experiment
- SI
Smithsonian Institute
- SPC
Sohio Petroleum Company
- STC
Soils Technology Corp
- SERI
Solar Energy Research Institute
- SASS
Sonar Array Survey System
- SOSUS
Sound Surveillance System
- SAMSON
Sources of Ambient Microseismic Oceanic Noise
- SAVE
South Atlantic Ventilation Experiment
- SCCZ
Southern California Coastal Zone
- SCEC
Southern California Edison Co.
- SFC
Southwest Fisheries Center
- SSI
Space Studies Institute
- STSI
Space Telescope Science Institute
- SVMS
Spaceborne VHSIC Multi-processor System
- SINC
Sparta, Inc.
- SSM
Special Sensor Microwave
- SSM/I
Special Sensor Microwave/Imager
- SOHIO
Standard Oil Company
- SSB
State Seismological Bureau
- SUNY
State University of New York
- SWRCB
State Water Resources Control Board
- SAGE
Stratospheric Aerosol and Gas Experiment
- STEDI
Student Explorer Demonstration Initiative
- SLC
Submarine Laser Communication
- SRS
Submarine Remote Sensor
- SEPC
Sun Exploration and Production Company

- SSC
Supply and Services, Canada
- SES
Surface Effect Ships
- SYNOP
Synoptic Ocean Prediction
- SAR
Synthetic Aperture Radar
- SPAI
Systems Planning and Analysis, Inc.
- TG
Teledyne Geotech
- THIR
Temperature-Humidity Infrared Radiometer
- TTI
Tetra Tech, Inc.
- TDSI
Tetrattech Data Systems, Inc.
- T
Texaco
- TBRL
Texaco Bellaire Research Laboratories
- TAMRF
Texas A&M Research Foundation
- TAMU
Texas A&M University
- TESI
Thermal Energy Storage Inc.
- TIMS
Thermal Ionization Mass Spectrometer
- TF
Tinker Foundation
- TOMS
Total Ozone Mapping Spectrometer
- TASI
Tracor Applied Sciences Inc.
- TOGA
Tropical Ocean Global Atmosphere
- TRMM
Tropical Rainfall Measuring Mission
- TDLAS
Tunable Diode Laser Absorption Spectroscopy
- ULF
Ultra Low Frequency
- UV
Ultraviolet
- UOCC
Union Oil Company of California
- UNU
United Nations University
- USARC
United States Army Research Center
- USCG
United States Coast Guard
- USFS
United States Forestry Service
- USGS
United States Geological Survey
- USMFS
United States-Mexico Foundation for Science
- USNRL
United States Naval Research Laboratory
- USN
United States Navy
- USSJCSTC
United States-Spain Joint Committee for Scientific and Technological Cooperation
- UNIDIS
Universal Data Integration System

- USL
Universite des Sciences de Lille
- UAF
University of Alaska, Fairbanks
- UC
University of California
- UCB
University of California, Berkeley
- UCD
University of California, Davis
- UCEI
University of California Energy Institute
- UCFPL
University of California Forest Products Laboratory
- UCI
University of California, Irvine
- UCLA
University of California, Los Angeles
- UCR
University of California, Riverside
- UCSB
University of California, Santa Barbara
- UCSC
University of California, Santa Cruz
- UCSG
University of California, Sea Grant
- UCH
University of Chicago
- UCO
University of Colorado
- UD
University of Delaware
- UH
University of Hawaii
- UMD
University of Maryland
- UOM
University of Miami
- UMF
University of Montpellier, France
- UM
University of Montana
- UNOLS
University National Oceanographic laboratory System
- UNL
University of Nebraska, Lincoln
- UNLV
University of Nevada, Las Vegas
- UNR
University of Nevada, Reno
- UNM
University of New Mexico
- URI
University of Rhode Island
- USF
University of South Florida
- USC
University of Southern California
- USCSGC
University of Southern California, Sea Grant College
- UTOR
University of Tennessee, Oak Ridge
- UTA
University of Texas, Austin
- UTD
University of Texas, Dallas
- UTEP
University of Texas, El Paso

- UTJ
University of Tokyo, Japan
- UT
University of Tulsa
- UU
University of Utah
- UURI
University of Utah Research Institute
- UW
University of Washington
- UERG
Universitywide Energy Research Group
- UUVPO
Unmanned Undersea Vehicle Program Office
- VLA
Vertical Line Array
- VLF
Very Low Frequency
- VIM
Vibrational Isolation Module
- VISSR
Visible and Infrared Spin Scan Radiometer
- VOS
Volunteer Observing Ship
- WMKF
W.M. Keck Foundation
- WHP
WOCE Hydrographic Program
- WRC
Water Resources Center
- WES
Waterways Experiment Station
- WGC
Watson General Corporation
- WF
Weingart Foundation
- WBE
West Beach Estates
- WCNURC
West Coast National Undersea Research Center
- WOD
Westinghouse Oceanic Division
- TWF
Whitaker Foundation, The
- WSMR
White Sands Missile Range
- WSI
Whole Sky Imager
- WAIS
Wide Area Imaging System
- WHDF
William H. Donner Foundation
- WHOI
Woods Hole Oceanographic Institute
- WOCE
World Ocean Circulation Experiment

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Proposals Without Numbers

[Box 1]

No Num.; F.P. Shepard; NSF; "Submarine Canyon Surveys"; n.d.

No Num.; F.P. Shepard; NSF; "Nature and Velocity of Currents and Other Flows in Submarine Canyons"; n.d.

No Num.; W.A. Nierenberg; ONR/NSF; "Large-Scale Ocean and Atmosphere Fluctuations in the Pacific"; n.d.

No Num.; W.A. Nierenberg; NSF; "DSDP"; n.d.

No Num.; W.A. Nierenberg, M.N.A. Peterson; NSF; "Transfer of the PI of DSDP from W.A. Nierenberg to M.N.A. Peterson"; January 29, 1973.

No Num.; F.P. Shepard; NSF; "Nature and Velocity of Currents in Submarine Canyons and Their Margins"; August 13, 1973.

No Num.; M. Tsuchiya; NSF; "The N and S Equatorial Counter-Currents in the E Tropical Pacific"; January 12, 1976.

No Num.; F.N. Spiess; NSF; "Small Scale Tectonic Aspects of the Seafloor"; July 27, 1976.

No Num.; W.A. Nierenberg; JOII; "Amendments to JOIDES Agreement"; July 29, 1976.

No Num.; R.D. Wolfe; UC; "JOIDES"; August 6, 1976.

No Num.; G.G. Shor; ONR; "Seismic Refraction Studies of the Pacific"; August 12, 1977.

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0896; E. Brinton; NOAA; "Seasonal Analysis of Anchovy Gonads"; July 12, 1977.

0901; J.D. Macdougall; NASA; "Origin and Evolution of Carbonaceous Meteorites"; July 22, 1977.

0906; R.R. Hessler; NSF; "Taxonomy and Phylogeny of a Deep-Sea Family (Eurycopidae, Isopoda, Crustacea)"; July 22, 1977.

0914; A.A. Benson; ERDA; "CH₄OH Metabolism Ecological Effects"; July 26, 1977.

0922; J.L. Reid; NSF; "The Exchange of H₂O between the S Argentine Basin, the Weddell Sea, and the Atlantic-Indian Basin"; August 2, 1977.

0928; K.L. Smith; ERDA; "Activity Rates of Abyssal Communities"; August 3, 1977.

0931; W.A. Nierenberg; ONR; "Ocean Studies"; August 1, 1977.

0933; V.C. Anderson, F.N. Spiess; ONR; "Fine Scale Surveys of NW Pacific Areas"; August 19, 1977.

0938; W.H. Munk, G.O. Williams, P.F. Worcester, B.D. Zetler; ONR; "Variability in Sound Transmission Through the Ocean Interior"; September 28, 1977.

0942; L.M. Dorman, J.H. Filloux, J.W. Hawkins, G.G. Shor; NSF; "The Mariana-Philippine Transect Zone: SIO Projects in the Interinstitutional SEATAR Program"; November 11, 1977.

0946; A.A. Yayanos; ERDA; "Deep-Sea Biophysics"; August 19, 1977.

0951; T.R. Folsom; ERDA; "The Study of Dynamic Features Controlling the Coastal Environment near the San Onofre Power Plant. Phase II Prediction of Oceanic Residences of Contaminants"; August 22, 1977.

0954; V.C. Anderson, F.N. Spiess; NORDA; "A Submersible Program in MX H2O"; August 24, 1977.

0956; V.C. Anderson, F.N. Spiess; ONR; "Acoustics and the Ocean Environment"; August 29, 1977.

0957; W.A. Nierenberg; ONR; "Ocean Studies"; September 1, 1977.

0958; D.L. Inman, R.T. Guza, C.D. Winant; ONR; "Fluid-Sediment Interaction on Beaches and Shelves"; August 29, 1977.

0959; V.C. Anderson, F.N. Spiess; ONR; "Dynamic Beamformer Data Analysis"; November 28, 1977.

0961; W.A. Nierenberg; ONR; "Ocean Studies"; January 15, 1978.

0961; W.A. Nierenberg; ONR; "Ocean Studies"; January 15, 1978.

0962; T. Enns; DOHEW; "CO2 Diffusion in Lung Tissue and in Muscle Tissue"; September 9, 1977.

0963; E. Brinton; NOAA; "Collecting, Sorting, Analysis, and Preparation of Otolith of Fish Larvae Prerecruits and Adults"; September 9, 1977.

0968; R.J. Seymour; DNOD; "Mission Bay Wave Climatology Study"; September 14, 1977.

Active Contracts and Grants; September 30, 1977.

0994; D.J. Faulkner; DOHEW; "Antibiotics from Marine Organisms"; October 18, 1977.

1002; E. Brinton; NOAA; "Collecting, Sorting, Analysis, and Preparation of Otolith of Fish Larvae Prerecruits and Adults"; November 15, 1977.

1008, 1019, 1029; K.L. Smith, G.N. Somero, R.R. Hessler; NSF; "Biological Exploration of Hot Springs of the Galapagos Rift"; January 4, 1978.

1009; R.J. Seymour; DNOD; "Option I, Mission Bay Wave Climatology Study"; November 17, 1977.

1012; J.R. Curray, V. Vacquier; LGO; "IPOD Site Survey, Gulf of CA"; December 21, 1977.

1016; K.L. Smith; NSF; "Biological Energetics of the Deep-Sea Benthic Boundary Layer"; December 9, 1977.

1036; W.A. Nierenberg; ONR; "Ocean Studies (DUMAND Support)"; December 8, 1977.

1038; V.C. Anderson, F.N. Spiess; ONR; "Supplementary Funding for the Deep Tow Studies in the N Atlantic"; December 27, 1977.

1046; Y. Chung, H. Craig, J. Lupton; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; n.d.

1047; R.W. Austin; NADC; "Optical Oceanographic Measurement Support"; January 3, 1978.

1051; E.L. Winterer; NSF; "Tethyan Jurassic Pelagic Sediments"; January 5, 1978.

1055; R.J. Seymour; DNOD; "Oceanside Wave Climatology Study"; January 5, 1978.

1058; J.J. Sullivan; NOAA; "Nearshore Sediment Transport Study"; December 22, 1977.

1062; J. Berger, F. Gilbert; USGS; "Very Long Period Seismic Studies in the USSR"; January 26, 1978.

1063; J.L. Bada; DOHEW; "Aspartic Acid Racemization: Relationship to Aging"; January 13, 1978.

[Box 6]

1064; C.S. Cox, J.H. Filloux; NSF; "EM Sounding near a Spreading Ridge"; January 18, 1978.

1065; R.C. Finkel; USGS; "Assessment of the 234U/238U Activity Ratio as a Possible Earthquake Precursor, Renewal"; January 13, 1978.

1072; E. Brinton; NOAA; "Synthesis and Analysis of Data and Preparation of Report"; January 25, 1975.

1075; J. Mammerickx; ONR; "Bathymetry of the Rivera Fracture Zone"; January 24, 1978.

1076; C.S. Cox; ONR; "ELF Studies of the Ocean Crust"; January 16, 1978.

1079; J.N. Brune, M.S. Reichle; USGS; "Seismic Hazard and Earthquake Prediction in NW MX and the CA-MX Border Region: A Cooperative US-MX Study"; January 31, 1978.

1080; F. Reines; ONR; "Design Study of the DUMAND Project"; March 1978.

1082; G.L. Kooyman; NMFS; "Computer Programming for Reduction of Marine Mammal Time-Depth Records"; January 26, 1978.

1083; J.J. Sullivan; NOAA; "UCSG: Education, Research, and Advisory Services"; January 27, 1978.

1084; A.E. Bainbridge; UW; "Polymode LDE"; January 1978.

1087; E.A. Hemmingsen; DOHEW; "Studies of Cavitation in Biological Systems"; February 10, 1978.

1092; B.E. Volcani; DOHEW; "Biochemical Studies on Siliceous Skeletal Formation"; February 24, 1978.

1096; W.A. Newman; NSF; "Research on the Systematics of Cirripedia, Including a Revision of the Lepadomorpha"; February 23, 1978.

1097; J.L. Bada; UCR; "Dating the Occupation of W NA by Homo sapiens: The Accuracy of Radiocarbon and Amino Acid Racemization Data on Bone of Pleistocene Age"; February 21, 1978.

1101; B.L. McGlamery; DARPA; "Advance Imaging Systems Studies"; March 10, 1978.

1103; R.H. Stewart; NOAA; "Measurements of Oceanic Rainfall Using SEASAT-A Data"; March 13, 1978.

1106; R.L. Bernstein; DOC; "An Ocean Mesoscale Eddy Investigation Utilizing SEASAT-A SMMR Data"; March 10, 1978.

1108; C.S. Cox; ONR; "Study of the Conductivity of the Oceanic Lithosphere"; March 13, 1978.

1109; L.L. Cheng; ONR; "Heavy Metal Concentrations in the Ocean Surface Film: Using Halobates as an Indicator"; March 15, 1978.

1110R1; F. Reines; ONR; "A DUMAND Summer Workshop on the Design and Associated Physics of the DUMAND Detector"; July 11, 1978.

1111; D.J. Faulkner; NSF; "Chemical Ecology in the Marine Environment"; March 17, 1978.

1113; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; March 16, 1978.

1119; J.W. Miles; ONR; "Wave Propagation"; March 23, 1978.

1121; J.A. McGowan; SNL; "Modification and Testing of a Multiple Net System for Very Deep H₂O"; March 24, 1978.

1123; J.A. Orcutt; ONR; "OBS Calibration"; April 5, 1978.

1125; R.L. Bernstein; ONR; "Merging Satellite and Conventional Oceanographic Data to Explore N Pacific Mesoscale Circulations"; March 29, 1978.

Active Contracts and Grants; March 31, 1978.

1127; R.L. Salmon; NSF; "Statistical Turbulence Theory Applied to Simple Atmospheric Models"; April 5, 1978.

1128; R.L. Bernstein; NASA; "The SIO SRS Facility"; April 19, 1978.

1128R1; R.L. Bernstein; NASA; "The SIO SRS Facility"; August 21, 1978.

1133; R.L. Bernstein; ONR; "The SIO SRS Facility"; April 13, 1978.

1138; W.R. Riedel; NSF; "Curating of the Deep-Sea Geological Collections at SIO"; September 1, 1978.

1139; W.F. Heiligenberg; NSF; "Perception and Evaluation of Electric Stimuli in Fish"; April 11, 1978.

1140; W.A. Nierenberg; ONR; "Ocean Studies"; April 12, 1978.

1141; R.E. Davis, L. Regier; ONR; "A Study of the Optimization of Shipborne ADCP Meters"; April 14, 1978.

1146; R.L. Bernstein; NSF; "The SIO SRS Facility"; April 24, 1978.

1151; L.M. Dorman, T.H. Jordan, J.A. Orcutt; DARPA; "Seismic Detection and Discrimination Using OBS"; April 24, 1978.

1154; J.L. Harris; DOAF; "Modeling the European Atmospheric Optical Environment"; May 15, 1978.

1159; J.L. Bada; NSF; "Data Acquisition and Storage System for the Amino Acid Dating Lab"; April 25, 1978.

1163; F.J. McNally; ONR; "N Pacific Current Study"; May 4, 1978.

1164; R.L. Bernstein; ONR; "Merging Satellite and Conventional Oceanographic Data to Explore N Pacific Mesoscale Circulations"; May 9, 1978.

1165; W.A. Nierenberg; ONR; "Ocean Studies"; May 1, 1978.

1166; E. Brinton; NOAA; "Seasonal Analysis of Anchovy Gonads"; May 3, 1978.

1167; R.W. Eppley; DOE; "Research on the Marine Food Chain"; June 3, 1978.

1168; R.W. Austin; NOSC; "Multispectral Ocean Data Analysis"; May 2, 1978.

1170; E.D. Goldberg; DOE; "Marine Geochemistry Research"; May 9, 1978.

1171; J.A. Orcutt, M.H. Salisbury; NSF; "Seismic Properties of the Upper Icelandic Crust"; June 12, 1978.

1175; L.M. Dorman, J.A. Orcutt; NORDA; "Acceleration of OBS Program"; May 15, 1978.

1176; K.C. Macdonald, F.N. Spiess; NSF; "RISE Program: Near Bottom Studies of the EPR Crest and the Tamayo Fracture Zone"; May 25, 1978.

1177; R.A. Knox; ONR; "Observations and Analyses of Indian Ocean Equatorial Currents"; May 17, 1978.

1178; R.W. Austin; DARPA; "Assessment and Modeling of Ocean Optical Properties"; May 18, 1978.

1180; C.S. Cox; ONR; "Internal Wave Studies"; May 18, 1978.

1183; R.J. Seymour; DNOD; "Wave Climatology Study, Pt. Arguello"; May 18, 1978.

1184; J.H. Filloux; NSF; "Dense Direct Observations of Long-Term Pressure Fluctuations on the Open Ocean Floor"; July 24, 1978.

1185; J.L. Bada; NGS; "Amino Acid Dating of Fossil Bones from E Africa"; May 24, 1978.

1194; W.H. Thomas; EPA; "Effects of Some Representative Compounds in Petroleum Refinery Effluents on Marine Phytoplankton"; June 2, 1978.

1195; L.M. Dorman, T.H. Jordan, J.A. Orcutt; NSF; "SIO Participation in the ROSE Earthquake Studies"; May 18, 1978.

1199; J.A. Welhan; USGS; "Isotopic and Chemical Studies of Geothermal Gases"; June 1, 1978.

1200; L.M. Dorman, J.A. Orcutt; ONR; "SIO Participation in the ROSE Explosion Seismology Studies"; June 1, 1978.

1201; V.C. Anderson, F.N. Spiess; ONR; "Accelerated Data Reduction"; June 1, 1978.

1203; G.L. Kooyman; NOAA; "Request Supplement to NOAA Contract 03-07-022-35130"; June 1, 1978.

1205; A.E. Bainbridge; UH; "Trans-Equatorial Shuttle Experiment during FGGE"; June 1978.

1207; J.Z. Frazer; DOI; "Availability of Cu, Ni, Co and Mn from Ocean Ferromanganese Nodules"; June 8, 1978.

1209; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; June 12, 1978.

1212; D. Goodman; NSF; "Optimal Life Tables in Fluctuating Environments and the Application of Graduated Life Table Models to the Analysis of the Demography of Long-Lived Animals"; June 16, 1978.

1217; P.F. Lonsdale, F.N. Spiess; NSF; "IDOE Mn Nodule Program"; June 30, 1978.

1219; R.J. Seymour; ACE; "Planning Study for Coastal Wave Network"; June 16, 1978.

1220; R.J. Seymour; ACE; "Remote Terminal for Wave Data"; June 16, 1978.

1225; H.T. Hammel; NSF; "Osmoregulatory Responses of Ducks and Penguins to Altered Plasma Concentrations"; June 19, 1978.

1226; R.E. Flick, R.T. Guza, D.L. Inman, C.D. Winant; ONR; "Fluid Sediment Interaction on Beaches and Shelves"; July 6, 1978.

1230; J.J. Sullivan; NOAA; "UCSG: Education, Research and Advisory Services"; June 1, 1978.

1234; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; June 26, 1978.

1236; C.S. Cox; ONR; "Study of the Conductivity of the Oceanic Lithosphere"; June 27, 1978.

1237; J.J. Sullivan; NOAA; "Nearshore Sediment Transport Study"; June 22, 1978.

1238; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; June 26, 1978.

1239; V.C. Anderson, F.N. Spiess; NORDA; "Vertical Directionality of Low Frequency Ambient Noise"; June 28, 1978.

Active Contracts and Grants; June 30, 1978.

1240; V.C. Anderson, F.N. Spiess; NORDA; "Multipath and Caustics"; August 1, 1978.

1241; R.L. Bernstein; NASA; "Determination of Time-Variability in the Tropical Pacific Current Systems: An Experiment Using Satellite Altimetry and Conventional Oceanographic Data"; July 13, 1978.

1247; R.C. Smith; EPA; "The Effects of Suspended Sediments on the Penetration of Solar Radiation into Natural H₂O"; July 9, 1978.

1251; V.C. Anderson, F.N. Spiess; ONR; "MPL Core Program"; July 18, 1978.

1257; C.S. Cox, D.L. Cutchin; NSF; "NORPAX Travel Grant"; July 25, 1978.

1258; V.C. Anderson, F.N. Spiess; ONR; "Acoustic Delineation of Plankton Patchiness"; July 20, 1978.

1259; J.D. Macdougall; NASA; "Origin and Evolution of Carbonaceous Meteorites"; August 9, 1978.

1260; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; July 24, 1978.

1265; G.J. McNally; ONR; "N Pacific Current Study"; August 7, 1978.

1266; V.C. Anderson, F.N. Spiess; ONR; "ADA Data Analysis"; July 28, 1978.

[Box 7]

1267; V.C. Anderson, F.N. Spiess; ONR; "Acoustics and the Ocean Environment"; October 6, 1978.

1270; T.R. Folsom; DOE; "The Study of Dynamic Features Controlling the Coastal Environment near the San Onofre Power Plant. Phase II Prediction of Oceanic Residences of Contaminants"; August 14, 1978.

1271; V.C. Anderson, F.N. Spiess; ARPA; "Continuation of ADA Program"; August 8, 1978.

1277; M.C. Hendershott; NSF; "Internal Waves over Submarine Canyon Topography"; August 9, 1978.

1278; M.C. Hendershott, R. Salmon; NSF; "Statistical Properties of Quasi-Geostrophic Ocean Flow Model and Their Relationship with Solutions Exhibiting Persistent Structure"; August 8, 1978.

1280; V.C. Anderson, F.N. Spiess; ONR; "Augmentation to Shipboard Handling System"; August 14, 1978.

1280R1; V.C. Anderson, F.N. Spiess; ONR; "Augmentation to Shipboard Handling System"; December 20, 1978.

1284; A.A. Benson; NSF; "Oceanic Arsenic Detoxication: The Path of Arsenic in Marine Food Chains"; August 10, 1978.

1285; J.J. Sullivan; NOAA; "UCSG: Nearshore Sediment Transport Studies"; July 1978.

1286; W.A. Nierenberg; NASA; "Proposal for Administrative Support NASA Advisory Council Chairmanship"; August 11, 1978.

1288; W.H. Munk; NSF; "OAT: A Method for Measuring Large-Scale Variability"; August 8, 1978.

1290; S.M. Smith; DMA; "Digitizing of Bathymetric Data from Past SIO Cruises"; August 14, 1978.

1291; R.J. Cicerone; NSF; "Measurements of Atmospheric CFCs and N₂O and Interpretative and Theoretical Studies in Atmospheric Chemistry"; August 21, 1978.

1294; G.L. Kooyman; NOAA; "Effects of Oiling on Sea Otters in Nature"; August 23, 1978.

1295; V. Vacquier; NADC; "Submarine Measurements of Earth's Magnetic Field"; August 22, 1978.

1299; R.A. Lewin; NSF; "Studies on Algae of a New Division: Prochlorophyta"; August 30, 1978.

1300; V.C. Anderson, F.N. Spiess; ONR; "Advanced ASW Operational/Technical Concepts"; August 25, 1978.

1303; T.P. Barnett, J. Namias; NOAA; "Climate Research and Prediction"; September 8, 1978.

1304; W.H. Munk, P.F. Worcester, B.D. Zetler; ONR; "OAT for Measuring Large Scale Variability"; September 6, 1978.

1306; F.N. Spiess; NSF; "Augmentation to 'Collaborative Research on Mediterranean Cobblestone Topography: Origin and Significance'"; September 6, 1978.

1316; K.H. Nealson; NSF; "Studies of Mn-Oxidizing Bacteria and the Assessment of Their Role in Marine Mn Deposition"; September 9, 1978.

1318; V.C. Anderson, F.N. Spiess; ONR; "Dynamic Beamformer"; September 15, 1978.

1319; T. Enns; DOHEW; "CO₂ Diffusion in Lung Tissue and in Muscle Tissue"; September 13, 1978.

1321; R.J. Cicerone; NASA; "Letter Proposal for Continued HALOE Satellite Science Team Participation"; September 14, 1978.

1323; F.P. Shepard; USGS; "Use of Current Meters to Supplement USGS's Shelf Sediment Transport Studies"; September 18, 1978.

1324; K.C. Macdonald; MIT; "Volcano-Tectonic Evolution of Rifted Mid-Ocean Ridges and Distribution of Reversely Magnetized Rocks in the Mid-Ocean Rift and Their Tectonic Implications"; September 18, 1978.

1328; K.C. Macdonald, F.N. Spiess; NSF; "RISE Reversal Area"; September 20, 1978.

1329; K.C. Macdonald, F.N. Spiess; NSF; "RISE Tamayo Fracture Zone"; September 20, 1978.

1331; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 25, 1978.

1333; F.N. Spiess; NSF; "Continuation of Collaborative Research on Mediterranean Cobblestone Topography: Origin and Significance"; September 22, 1978.

1336; J.M. Gieskes; NSF; "Cooperative Study of Sediments, Pore H₂O, and Igneous Rocks from the DSDP: Pore H₂O Chemistry"; September 26, 1978.

1339; W.A. Nierenberg; ONR; "Ocean Studies"; December 11, 1978.

1340; J.D. Isaacs; SWRCB; "Marine Advisory Committee"; October 4, 1978.

1346; R.J. Cicerone; NSF; "Measurements of Atmospheric CFCs and N₂O and Interpretative and Theoretical Studies in Atmospheric Chemistry"; October 13, 1978.

1352; D.J. Faulkner; DOHEW; "Antibiotics from Marine Organisms"; October 24, 1978.

1353; D.J. Faulkner; DOHEW; "Antibiotics from Marine Organisms"; January 4, 1979.

1354; A.E. Bainbridge; DOE; "Nutrient Measurements for NORPAX"; December 18, 1978.

1359; F.N. Spiess; NESC; "Deep Tow System Improvement Program"; October 26, 1978.

1363; R.J. Seymour; NOSC; "Tethered Float Breakwater Ocean Experiment"; October 17, 1978.

1365; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; October 31, 1978.

1366; A.E. Bainbridge; DOE; "Technical Support for Collection of 14C Samples during FGGE"; November 3, 1978.

1367; E.L. Winterer; NSF; "Tethyan Jurassic Pelagic Sediments"; October 31, 1978.

1371; R.J. Seymour; TTI; "Pt. Conception Coastal Data Studies"; November 7, 1978.

1375; R.W. Austin; NASA; "Remote Sensing Surface Truth Cruise of the R/V Horizon"; November 20, 1978.

1378; R.F. Weiss; DOE; "CO₂ Measurements in the Equatorial Pacific"; December 12, 1978.

1380; J.R. Curray; LGO; "Supplementary Funding for Sufficient Funds to Complete Task of Processing and Interpreting Multichannel Data Collected in the Gulf of CA"; November 28, 1978.

1381; C.S. Cox; ONR; "EM Probing of the Ocean Crust"; January 8, 1979.

1382; W.H. Berger, J.S. Killingley; NSF; "CENOP"; April 2, 1979.

1383; W.S. Hodgkiss; PSU; "Study of Reverberation Rejection Capability of Adaptive Array Processors"; December 4, 1979.

1385; L.A. Regier; ONR; "The Optimization of Acoustic Backscatter Techniques to Measure Current Profiles from Moving Vessels"; December 4, 1978.

1388; J.J. Sullivan; NOAA; "UCSG: International Cooperation Assistance Program"; n.d.

1393; J.D. Isaacs; ONR; "Remote Synoptic Measurement of Surface Circulation Phase II"; December 13, 1978.

1394; A.A. Yayanos; NSF; "In Situ and Lab Studies with Deep-Sea Amphipods and Some of Their Interactions with Microbes"; December 13, 1978.

1396; C.G. Adelseck; NSF; "A 500,000 Year Cycle in Deep-Sea Sedimentation: Processes and Implications"; December 15, 1978.

1397; E. Brinton; NOAA; "Collecting, Sorting, Analysis, and Preparation of Otolith of Fish Larvae Prerecruits and Adults"; December 12, 1978.

1398; C.S. Cox; ONR; "Study of the Conductivity of the Oceanic Lithosphere"; December 22, 1978.

1399; L.M. Dorman, R.D. Moore; USGS; "Improvements in Digital Data Processing"; December 19, 1978.

1402; K.C. Macdonald, V. Vacquier; NSF; "Heat Flow Studies at the EPR, 21°N"; December 15, 1978.

1411; R.W. Austin; NADC; "Research, Analysis, and Engineering Support in Optical Oceanography"; January 9, 1979.

1412; J.L. Bada; DOHEW; "Aspartic Acid Racemization: Relationship to Aging"; January 11, 1979.

1415; R.C. Smith; NASA; "Ship and Satellite Bio-Optical Research in the CA Bight"; January 17, 1979.

1417; W.A. Nierenberg; NASA; "Administrative Support NASA Advisory Council Chairmanship"; January 22, 1979.

1420; J. Berger; USGS; "CDO Part D Data Logging Facilities"; January 22, 1979.

1423; J. Berger, J.N. Brune; USGS; "Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; February 2, 1979.

1427; J. Berger, J.N. Brune; USGS; "Seismic Source Mechanism Studies in the Anza-Coyote Canyon Seismic Gap"; February 2, 1979.

1428; J.N. Brune, M.S. Reichle; USGS; "Seismic Hazard and Earthquake Prediction in NW MX and the CA-MX Border Region: A Cooperative US/MX Study"; February 6, 1979.

1429; R.H. Lovberg; DOE; "A Proposal for Experimental Study of the Gas-Embedded Pinch as a CTR System"; April 26, 1979.

1431; J.B. Graham; NSF; "Adaptations for Burrowing and Amphibious Life of the Swamp Eel, *Synbranchus marmoratus*"; January 26, 1979.

1433; V.C. Anderson, F.N. Spiess; ONR; "Deep Tow Technology Transfer"; February 2, 1979.

1435; N.E. Clark; ONR; "Large-Scale Heat Exchange Processes across the Air/Sea Interface in the N Pacific Ocean"; February 8, 1979.

1436; R.L. Fisher; DARPA; "AUSEX-Active Surveillance Program: Use of the R/V Thomas Washington"; February 2, 1979.

1439; J. Berger, F. Gilbert; USGS; "Very Long Period Seismic Studies in the USSR"; February 14, 1979.

1440; J.L. Bada; NIH; "Racemization of Aspartic Acid in the Metabolically Stable Proteins in Living Mammals"; February 7, 1979.

1442; E.A. Hemmingsen; DOHEW; "Studies of Cavitation in Biological Systems"; February 9, 1979.

1444; Y. Chung, H. Craig, J. Lupton; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; February 12, 1979.

1447; R.L. Fisher; ONR; "Shipboard Equipment"; February 8, 1979.

1453; J.W. Hawkins, G.G. Shor; NSF; "The Mariana-Philippine Transect Zone: Seismic Refraction, Underway Geophysics, and Sampling, in the Interinstitutional SEATAR Program"; n.d.

1455; V.C. Anderson, F.N. Spiess; NSC; "Seafloor Observations"; February 16, 1979.

1457; B.E. Volcani; DOHEW; "Biochemical Studies on Siliceous Skeletal Formation"; February 20, 1979.

1460; V.C. Anderson, F.N. Spiess; NORDA; "Upper Ocean Background"; February 27, 1979.

1461; J.J. Sullivan; NOAA; "UCSG: Nearshore Sediment Transport Studies"; March 19, 1979.

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1462; R.A. Ackerman; NSF; "Avian Body Temperature Regulation and the Control of Egg Temperature and Gas Exchange during Incubation"; March 5, 1979.

1463; J. Berger, J.N. Brune; NSF; "S CA Geophysical Instrumentation Facility"; March 8, 1979.

1464; V.C. Anderson, F.N. Spiess; NORDA; "Computer Software for NORDA's PDP-11"; February 27, 1979.

1467; V.C. Anderson, F.N. Spiess; ONR; "Multibeam Echo Sounder Investigations"; March 2, 1979.

1470; D.W. Wilkie; DOHEW; "IMS Program General Operating Support"; March 2, 1979.

1471; D.J. Faulkner; NSF; "Chemical Ecology in the Marine Environment"; March 15, 1979.

1474; R.W. Austin; NASA; "Remote Sensing Surface Truth Cruise of the R/V Oceanus"; March 14, 1979.

1477; T.P. Barnett, J.O. Roads; NSF; "Study of Predictability and Variability of the N Hemisphere Climate"; March 21, 1979.

1478; S.E. Pazan; NSF; "NORPAX Data Program"; March 21, 1979.

1480; W.H. Munk, B.D. Zetler; NOAA; "Tidal Studies"; April 3, 1979.

1489; J.H. Filloux; NSF; "MT Exploration of the N Pacific: Improved Resolution, Deeper Penetration, and W Extension"; April 2, 1979.

1490; K.E. Kenyon; NSF; "On the Permanent Circulation of the N Pacific"; April 3, 1979.

1491; P.F. Lonsdale; NSF; "Deep-Tow Studies of Plate Accretion in the Mariana Trough Back-Arc Basin"; April 3, 1979.

1492; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; April 9, 1979.

1494; J.D. Macdougall; NASA; "Origin and Evolution of Carbonaceous Meteorites"; April 6, 1979.

1499; E.D. Goldberg; EPA; "Mussel Watch Extension to Historical Records and the Novel Pollutants"; April 12, 1979.

1500; V.C. Anderson, F.N. Spiess; ONR; "Seafloor Observation Technology"; April 25, 1979.

1501; W.H. Wilson; NOAA; "Atmospheric Transmittance and Path Radiance Measurement and Analysis"; April 13, 1979.

1502; L.M. Dorman, T.H. Jordan, J.A. Orcutt; DARPA; "Seismic Detection and Discrimination Using OBS"; April 19, 1979.

1502R1; L.M. Dorman, T.H. Jordan, J.A. Orcutt; DARPA; "Seismic Detection and Discrimination Using OBS"; August 8, 1979.

1506; R.J. Cicerone; NASA; "Scientific and Applications Investigations Based on HALOE Satellite Measurements of Stratospheric Trace Gases"; April 18, 1979.

1508; J. Namias; NSF; "Large-Scale Air-Sea Interaction over the N Hemisphere and Associated Impact on Seasonal and Longer Scale Weather and Climate"; April 27, 1979.

1510; R.W. Eppley; DOE; "Research on the Marine Food Chain"; June 1, 1979.

1512; R.L. Parker; NSF; "Exact Non-Linear Inversion of the EM Induction Problem"; April 30, 1979.

1513; P.K. Dayton, L.A. Levin; NSF "Patterns and Implications of Larval Dispersal in S CA Back-Bay Polychaetes"; April 25, 1979.

1514; G.O. Williams; NSF; "Growth and Decay of the Internal Wave Spectrum"; April 27, 1979.

1516; J.F.T. Saur, W.B. White; NSF; "Large-Scale Standing and Traveling Waves in the Subsurface Temperature Field in the NE Pacific"; April 27, 1979.

1519; W.R. Riedel, A. Sanfilippo; NSF; "Radiolarian Stratigraphy, Taxonomy and Evolution"; May 7, 1979.

1522; J. Berger, J.N. Brune; NSF; "Precision Measurements of Crustal Deformation"; May 10, 1979.

1527; D.L. Cutchin; NSF; "NORPAX Program Administration"; May 4, 1979.

1527R1; D.L. Cutchin; NSF; "NORPAX Program Administration"; September 11, 1979.

1529; E.A. Hemmingsen; DOHEW; "Studies of Cavitation in Biological Systems"; May 9, 1979.

1530; V.C. Anderson; NOSC; "Dynamic Beamformer Display"; June 14, 1979.

1531; K.C. Macdonald, F.N. Spiess; NSF; "RISE Program: Curating and Preliminary Sample Description"; May 11, 1979.

1532; G.O. Williams; ONR; "Growth and Decay of the Internal Wave Spectrum"; May 10, 1979.

1534; M.C. Hendershott; NOAA; "Calculation of Open Ocean O1, P1, and N2 Tides"; May 11, 1979.

1535; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; May 14, 1979.

1536; F.N. Spiess; CIT; "Transducer Technology Transfer"; May 15, 1979.

1537; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; May 16, 1979.

1540; J.W. Miles; ONR; "Wave Propagation"; May 24, 1979.

1541; J.R. Curray, G.F. Moore; NSF; "The Sunda Transect, Part 2: Extension of the Transect to the Java Area (SEATAR)"; May 16, 1979.

1544; E.D. Goldberg; DOE; "Marine Geochemistry Research"; May 18, 1979.

1545; J.L. Bada; DOHEW; "Aspartic Acid Racemization: Relationship to Aging"; May 17, 1979.

1546; K.H. Nealson; ONR; "Mechanisms of Bioluminescence: Kinetics-Spectral and Biochemical Properties as a Probe of Marine Communities and Interactions"; May 23, 1979.

1548; G.A. Meyers, W.B. White; NSF; "Large-Scale Variation in Subsurface Temperature of the Tropical Pacific Ocean"; May 22, 1979.

1549; V.C. Anderson, F.N. Spiess; ONR; "Deep Tow System Improvement"; May 22, 1979.

1552; H. Craig; USGS; "Gaseous Isotopic Tracers in Geothermal Systems"; May 23, 1979.

1553; R.A. Knox; NSF; "Tropical Pacific Wind Stress Analysis"; June 26, 1979.

1554; B.E. Volcani; DOHEW; "Biochemical Studies on Siliceous Skeletal Formation"; May 31, 1979.

1555; D.L. Cutchin, W.C. Patzert; NSF; "Surface Weather Observations from Ships in the Tropical Pacific"; June 22, 1979.

1556; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; May 31, 1979.

1557; R.T. Williams; NSF; "Oceanographic Data Collection and Processing Equipment"; May 1979.

1558; R.T. Williams; NSF; "Operations Management for Transient Tracers in the Oceans: N Atlantic Study"; February 1980.

1560; O. Holm-Hansen, J.H. Middleton; NSF; "A Multidisciplinary Study of the E Scotia Sea"; June 8, 1979.

1563; R.E. Davis; ONR; "N Pacific FRONTS Pilot Experiment"; June 4, 1979.

1565; R.F. Weiss; NSF; "Transient Tracers in the Ocean: CO2 and N2O Measurements in the N Atlantic"; June 7, 1979.

1568; K.F. Priestley; USGS; "Analysis of Old (1888-1950) Duplex-Pendulum and Wiechert Seismograms of Large and Moderate Earthquakes in W NA"; June 5, 1979.

1570; F.H. Fisher, R.B. Williams; NORDA; "Multipath and Caustics"; June 11, 1979.

1574; R.L. Fisher; NSF; "Improvements for Basic Ship Operations"; June 25, 1979.

1575; R.L. Fisher; NSF; "Permanent Shipboard Scientific Installations"; June 25, 1979.

1581; P.K. Dayton, D.J. Faulkner; NSF; "Chemical Ecology and the Structure of Temperate Sponge-Dominated Assemblages"; December 14, 1979.

1582; V.C. Anderson; ARPA; "Anomalous Absorption"; June 19, 1979.

1583; V.C. Anderson, F.N. Spiess; ONR; "MPL Core Program"; June 20, 1979.

1584; V.C. Anderson, F.N. Spiess; NORDA; "MPL Core Program"; June 21, 1979.

1585; F. Gilbert, T.H. Jordan; NSF; "Observation and Interpretation of Attenuation and Moment Tensors"; July 18, 1979.

1587; R.T. Williams; UW; "CTD Support to FRONT Experiment"; June 1979.

1589; R.E. Flick, R.T. Guza, D.L. Inman, C.D. Winant; ONR; "Fluid-Sediment Interaction on Beaches and Shelves"; June 14, 1979.

1592; R.J. Seymour; UD; "SB Field Experiment Support"; June 20, 1979.

1595; J. Berger, F. Wyatt; NASA; "Improvements in Benchmark Stability for Precision Tilt Measurements of Crustal Dynamics"; July 16, 1979.

1597; R.A. Lewin; NSF; "Abscission of Cilia or Flagella: Its Induction and Control"; June 21, 1979.

1601; R.R. Hessler; SL; "The Biology of the Central N Pacific"; June 21, 1979.

1602; F.N. Spiess; NSF; "Deep Tow Cable"; June 26, 1979.

1603; V.C. Anderson, F.N. Spiess; ONR; "Augmentation to Shipboard Handling"; June 28, 1979.

1605; J.D. Macdougall; NASA; "Origin and Evolution of Carbonaceous Meteorites"; August 1, 1979.

1606; R.L. Bernstein; ONR; "Ocean Remote Sensing in the W Mediterranean Project/NEREUS"; July 10, 1979.

1607; R.T. Williams; OSU; "Hydrographic Support for Kuroshia Extension Experiment"; n.d.

1609; G.O. Arrhenius; TESI; "Chemical Heat Transfer at Low Temperature"; July 3, 1979.

1613; T.P. Barnett, J. Namias; NOAA; "Climate Research and Prediction"; July 10, 1979.

[Box 9]

1615; C.D. Keeling; NSF; "A Study of the Abundance of CO2 in the Atmosphere and its Exchange with the Oceans"; August 10, 1979.

1615; C.D. Keeling; NSF; "A Study of the Abundance of CO2 in the Atmosphere and its Exchange with the Oceans"; August 10, 1979.

1615R3; C.D. Keeling; NSF; "A Study of the Abundance of CO2 in the Atmosphere and its Exchange with the Oceans"; February 15, 1980.

1616; E. Brinton; NOAA; "Sorting and Analysis of Plankton from the Bering Sea"; July 12, 1979.

1617; G.L. Kooyman; NSF; "Biology of Weddell Seals During the Austral Winter"; July 6, 1979.

1618; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; July 10, 1979.

1619; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; August 8, 1979.

1622; V.C. Anderson, F.N. Spiess; ARPA; "ADA Program"; July 12, 1979.

1623; R.J. Cicerone; NSF; "Measurements of Trace Gases and Theoretical Studies in Atmospheric Chemistry"; July 18, 1979.

1625; R.T. Williams; UH; "Trans-Equatorial Shuttle Experiment during FGGE"; July 1979.

1626; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; July 17, 1979.

1627; R. Pintel; NORDA; "Environmental Background Measurements"; July 17, 1979.

1629; V.C. Anderson, F.N. Spiess; ONR; "Interdisciplinary Research Program and Related Activities in Marine Physics"; October 11, 1979.

1631; A.F. Carlucci, P.M. Williams; NSF; "Studies on Sea-Surface Films: Chemistry and Microbiology of Film Formation, Composition, and Alteration"; August 7, 1979.

1632; V.C. Anderson, F.N. Spiess; NESG; "Side-Looking Sonar Processor"; July 23, 1979.

1633; J.N. Brune, G. Frazier, J.E. Luco, J.A. Orcutt; NSF; "Numerical and Experimental Study of Earthquake Strong Motion"; August 27, 1979.

1634; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; July 25, 1979.

1635; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; July 25, 1979.

1637; R.T. Williams; UH; "Technical Support for Collection of 14C Samples during FGGE"; July 1979.

1638; R.J. Seymour; ACE; "CA Coastal Data Collection Program Special Studies Program"; July 30, 1979.

1640; V.C. Anderson, F.N. Spiess; RC; "Engineering for Deep Seabed Disposal of Radioactive Wastes"; August 1, 1979.

1641; V.C. Anderson, F.N. Spiess; ONR; "Dynamic Beamformer"; August 7, 1979.

1643; F. Azam; NSF; "Role of Bacteria in Marine Detrital Food-Chain: Microbiology of Copepod Fecal Pellets"; August 28, 1979.

1645; W.K. Melville; NSF; "Wave Shear-Flow Interaction"; August 9, 1979.

1647; R.J. Seymour; UD; "Nearshore Profile Measurements, SB"; August 6, 1979.

1650; K.C. Macdonald, J.A. Orcutt; NSF; "Studies of Microearthquakes in an Active Hydrothermal Vent Area on the EPR"; August 13, 1979.

1653; A.A. Yayanos; NSF; "In Situ and Lab Studies with Deep-Sea Amphipods and Some of Their Interactions with Microbes"; August 13, 1979.

1654; R.J. Seymour; ACE; "CA Coastal Data Collection Program System Modification, Operation, and Maintenance"; August 9, 1979.

1655; R. Revelle; NSF; "Support of a Scientific Secretary for the CCCO"; August 9, 1979.

1656; B.E. Volcani; MKFI; "Morphogenesis and Biochemistry of Silica Sphere in Diatom Shell Formation"; August 8, 1979.

1659; R.W. Austin, B.L. McGlamery; ONR; "Assessment of Modeling of Ocean Optical Properties"; August 15, 1979.

Active Contracts and Grants; August 15, 1979.

1662; R.J. Cicerone; NASA; "Measurements of Key Biogeochemical Gases and Theoretical Studies in Atmospheric Chemistry"; August 23, 1979.

1663; P.S. Doyle; SNL; "Continued Effort to Improve Ichthyolith Stratigraphy in Giant Piston Core-3"; August 18, 1979.

1666; "Establishment at Scripps Institution of Oceanography a DOE Sponsored Energy Program Office"; October 1, 1979.

1668; K.C. Macdonald, R.L. Parker; NSF; "Inversion of the Magnetic Fields Due to Small Seafloor Features"; September 24, 1979.

1669; J. Berger, F. Gilbert; NSF; "Long Period Seismology with the Global IDA Network"; August 28, 1979.

1670; M.C. Hendershott, C.D. Winant; NSF; "Internal Waves over Submarine Canyon Topography"; August 22, 1979.

Active Contracts and Grants; August 24, 1979.

1671; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; August 27, 1979.

1672; R.T. Williams; UH; "Nutrient Measurement for NORPAX"; August 1979.

1673; E. Brinton; NSF; "Distribution, Population Dynamics, and Production in CA Current Euphausiids"; August 31, 1979.

1676; W.H. Thomas; SERI; "Yields, Photosynthetic Efficiencies, and Proximate Chemical Composition of Dense Cultures of Marine Microalgae, as Affected by N₂ Deficiency and Recovery"; September 7, 1979.

1678; W.A. Newman; NSF; "Research on the Systematics of Cirripedia, Including a Revision of the Lepadomorpha"; September 17, 1979.

1680; K. Priestley; UNR; "Surface Waves, Seismic Refraction, and Upper Mantle Structure of the Basin and Range"; September 14, 1979.

1684; R.T. Williams; NSF; "Geochemical Ocean Sections Study: Operations Group"; September 1979.

1685; G.N. Somero; NSF; "Pressure, Temperature, and Solute Effects on Protein Assembly and Enzymatic Catalysis: A Mechanistic and Evolutionary Analysis"; September 25, 1979.

1687; F.N. Spiess; SNL; "Implementation of a High Resolution Sub-Bottom Profiling Unit"; December 12, 1979.

1691; M. Legg; NASA; "CFAULTS-2"; n.d.

1692; M.C. Hendershott, R. Salmon; NSF; "POLYMODE: Statistical Properties of Quasi-Geostrophic Ocean Flow Models and Their Relationship with Solutions Exhibiting Persistent Structure"; September 28, 1979.

1696; P.M. Masters; LSLBF; "Archaeological Research in Israel"; June 18, 1979.

1697; R.T. Williams; DOE; "Technical Support for Collection of 14C Samples during FGGE"; October 1979.

1698; J.J. Sullivan; NOAA; "UCSG: Education, Research, and Advisory Services"; October 1, 1979

1700; F.N. Spiess; SNL; "N Pacific Seafloor Site Survey"; February 11, 1980.

1703; R.L. Salmon; NSF; "Statistical Turbulence Theory Applied to Simple Atmospheric Models"; October 31, 1979.

1705; J. Namias; WRC; "Dynamics of Winter W Coast Precipitation with Emphasis on Long Range Forecasting"; October 25, 1979.

1706; R.W. Austin; NOAA; "Remote Sensing of Ocean Properties by Means of Visible Light"; October 15, 1979.

1708; W.F. Heiligenberg; NSF; "Perception and Evaluation of Electric Stimuli in Fish"; October 16, 1979.

1710; R.J. Cicerone; NASA; "Proposal for Cost Extension of NASA Grant NSG-1590 'HALOE Satellite Science Team Participation'"; October 16, 1979.

1712; A. Soutar; NSF; "Late Quaternary Climatic Change in the Gulf of CA: An Investigation of Terrestrial (Pollen) and Marine (Fish Scale) Evidence Contained in Varved Sediments from the Guaymas Slope"; October 31, 1979.

1715; R.T. Williams; UW; "CTD Support to FRONT Experiment"; October 1979.

1721; K.H. Nealson; NASA; "Research Training Program in Planetary Biology and Microbial Ecology"; October 30, 1979.

1722; A.A. Yayanos; DOHEW; "Volume Changes in Trypsin-Inhibitor Reactions"; October 26, 1979.

1726; W.G. Van Dorn; NSF; "Tide Gages Responses to Tsunamis"; November 12, 1979.

1730; W.R. Riedel; NSF; "Curating of the Deep-Sea Geological Collection at SIO"; November 16, 1979.

1732; J.N. Brune; NSF; "Special Expenses Related to the Imperial Valley Earthquake of October 15, 1979"; December 5, 1979.

1734; W.A. Nierenberg; NSF; "Drilling of Sediments and Shallow Basement Rocks in the Atlantic and Pacific Oceans and Adjacent Seas and the Necessary Curatorial Care, Examination, and Distribution of Resulting Cores"; August 9, 1979.

Active Contracts and Grants; October 31, 1979.

1735; C.S. Cox; ONR; "EM Probing of the Ocean Crust"; November 27, 1979.

1737; G.G. Shor; NSF; "The Mariana-Philippine Transect Zone: Seismic Refraction Studies in the Interinstitutional SEATAR Program"; November 19, 1979.

1738; R.R. Hessler; NSF; "Taxonomy, Phylogeny, and Biogeography of a Deep-Sea Family (Eurycopidae, Isopoda, Crustacea)"; November 27, 1979.

1739; J.W. Hawkins, G.F. Moore; NSF; "Geological Evolution of the Molucca Sea Collision Zone"; December 13, 1979.

1741; K.H. Nealson; NSF; "Energy Transfer in Bacterial Bioluminescence: Properties and Role of a Yellow Fluorescent Protein in *Photobacterium fischeri*"; November 28, 1979.

1742; D.L. Inman; AID; "Coastal Management and Shore Processes in the SE Mediterranean"; November 27, 1979.

1743; D.L. Inman; AID; "Coastal Management and Shore Processes in the SE Mediterranean"; November 27, 1979.

1750; R.L. Bernstein; CIT; "Determination of Time-Variability in the Tropical Pacific Current Systems: An Experiment Using Satellite Altimetry and Conventional Oceanographic Data"; May 16, 1980.

1753; K.C. Macdonald, F.N. Spiess; NSF; "Studies of the Bruhnes/Matuyama Reversal Boundary"; December 11, 1979.

1756; H. Craig, J. Lupton; NSF; "Oceanic Basalts: Rare Gas, H and C Concentrations, and Isotope Ratios"; December 14, 1979.

1758; R.W. Eppley; NSF; "A Method to Determine Phytoplankton C Biomass and In Situ Specific Growth Rate"; December 17, 1979.

1759; R.A. Haubrich; NSF; "The Pole Tide"; December 17, 1979.

1760; G.L. Kooyman; NMFS; "Time-Depth Recorder Construction, Testing, and Analysis for N Fur Seal Project"; December 12, 1979.

1762; T.H. Jordan; NSF; "Modeling of the Earth's Large-Scale Aspherical Heterogeneities"; December 17, 1979.

1767; R.J. Seymour; SFWP; "Installation, Operation and Maintenance of Deepwater Wave Measurement Station"; December 21, 1979.

1768; W.K. Melville; NSF; "Wave Shear-Flow Interaction"; January 8, 1980.

1769; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Investigations of Continental Flood Basalts and Ultramafic Xenoliths from Alkali Basalts and Kimberlites"; January 8, 1980.

1772; W.S. Hodgkiss; PSU; "Study of Medium Effects on the Performance of Adaptive Array Processors"; January 3, 1980.

1775; J.D. Macdougall; NASA; "Equipment Proposal: Photographic System for Research on Carbonaceous Meteorites"; January 8, 1980.

1779; F.H. Fisher; ARPA; "Differential Sound Absorption: A Method to Study Pressure Dependent Ion-Pairing in Seawater"; January 11, 1980.

1781; R.T. Williams; WHOI; "Hydrographic Support for WHOI"; January 1980.

1782; J. Berger, J.N. Brune; USGS; "Seismic Source Mechanism Studies in the Anza-Coyote Seismic Gap"; February 1, 1980.

[Box 10]

1784; J. Berger, F. Wyatt; USGS; "Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; February 5, 1980.

1785; J. Berger; USGS; "CDO, Part D Field Operational Support, Data Logging Facilities and Concurrent Investigations, Supplement to Part H Volumetric Strain Borehole"; February 1, 1980.

1786; B.L. McGlamery; RADC; "CIS Data Analysis Study"; January 17, 1980.

1787; C.S. Cox, D.L. Cutchin; NSF; "NORPAX Travel Grant"; January 23, 1980.

1788; G. Arrhenius; NASA; "Isotopic Reaction Selectivity in the Production and Destruction of Atmospheric Compounds"; January 18, 1980.

1790; R.L. Bernstein; DOC; "An Ocean Mesoscale Eddy Investigation Utilizing SEASAT-A SMMR Data"; January 29, 1980.

1794; R.T. Williams; NSF; "Oceanographic Data Collection and Processing Equipment Supplement"; January 1980.

1795; R.F. Weiss; DOE; "CO2 Measurements in the Equatorial Pacific"; January 28, 1980.

1796; A. Soutar; NSF; "Sediment Trap Fabrication VERTEX"; January 28, 1978.

1798; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; January 31, 1980.

1800R1; J.N. Brune, M.S. Reichle; USGS; "Studies of Historical Seismicity"; August 12, 1980.

1802; V.C. Anderson, F.N. Spiess; NORDA; "Coherent Combination of Sediment Borne and H2O Path Acoustic Signals"; March 21, 1980.

1803; R.E. Flick, R.T. Guza, D.L. Inman, C.D. Winant; ONR; "Fluid-Sediment Interaction on Beaches and Shelves"; February 6, 1980.

1805; W.H. Munk, B.D. Zetler; NOAA; "Tidal Studies"; February 7, 1980.

1807; W.H. Fenical; NSF; "Chemical Defense in Marine Organisms"; February 20, 1980.

1808; R.S. Simons; USGS; "Precise Geodetic Measurements on Rose Canyon Fault Zone in SD"; February 7, 1980.

1811; C.J. Merdinger; NASA; "Administrative Support NASA Advisory Council Chairmanship"; February 18, 1980.

1813; O. Holm-Hansen; SAI; "Effect of Microbial Biota on Weathering of Petroleum Hydrocarbons"; February 11, 1980.

1814; Y. Chung, H. Craig, J. Lupton; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; February 13, 1980.

1816; R.W. Austin; NOAA; "Analysis of CZCS Validation Data"; February 19, 1980.

1819; K.H. Nealson; NSF; "Studies of Mn-Oxidizing Bacteria and the Assessment of Their Role in Marine Mn Deposition"; February 15, 1980.

1820R1; J.S. McClain, J.A. Orcutt; NSF; "EPR Study: Marine Seismology"; November 20, 1980.

1824; F.N. Spiess; NSF; "Acoustic Assessment of Mn Nodule Resources"; February 26, 1980.

1825; V.C. Anderson, F.N. Spiess; ONR; "RUWS Search"; February 26, 1980.

1826; G.O. Arrhenius; TESI; "Chemical Heat Transfer at Low Temperatures"; February 26, 1980.

1827; R.E. Davis, C.D. Winant; NSF; "CODE: The Small Scale Array"; February 27, 1980.

1829; R.E. Davis, C.D. Winant; NSF; "Coastal Ocean Currents off Coast of N CA Pilot Study"; February 27, 1980.

1830; E. Brinton; NOAA; "Sorting and Analysis of Plankton from the Bering Sea"; February 29, 1980.

1840; E.D. Goldberg; NSF; "Charcoal as a Sink for C in the Global CO₂ Cycle"; March 7, 1980.

1841; H. Craig; NSF; "EPR Study: Geochemistry of Mantle Volatiles"; March 7, 1980.

1842; F.N. Spiess; GOC; "Assistance to LGO"; March 19, 1980.

1843; K.H. Nealson; NASA; "Interactions of Biota, H₂O and Sediments in Regulating Metal Chemistry. III. Role of Bacteria in Controlling Fluxes of Fe and Mn in a Large Freshwater Lake"; March 12, 1980.

1848; R.J. Seymour; ACE; "Investigation of Noyo Harbor Dynamics (Modification to DACWO7-79-C-0070)"; March 18, 1980.

1850; R.W. Eppley; NSF; "PRPOO's"; August 22, 1980.

1851; J.H. Filloux; NSF; "Dense Direct Observations of Long-Term Pressure Fluctuations on the Open Ocean Floor"; March 19, 1980.

1852; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; March 19, 1980.

1854; T.H. Shipley; NSF; "Seismic Identification and Geologic Controls on the Occurrence of Gas Hydrates"; April 10, 1980.

1855; R.W. Eppley; DOE; "Research on the Marine Food Chain"; March 21, 1980.

1859; R.A. Knox, W.H. Munk, P.F. Worcester, B.D. Zetler; NSF; "OAT for Measuring Large Scale Variability"; March 31, 1980.

1860; J.R. Arnold; NASA; "Development of an Orbital Gamma Ray Experiment for Lunar and Planetary Geochemistry"; March 18, 1980.

1861; L.M. Dorman, T.H. Jordan, J.A. Orcutt; DARPA; "Seismic Detection and Discrimination Using OBS"; March 27, 1980.

1863; R.W. Austin; NADC; "Research, Analysis, and Engineering Support in Optical Oceanography"; March 27, 1980.

1864; C.S. Cox; ONR; "EM Processes in the Ocean"; March 28, 1980.

1866; J.O. Roads; NASA; "The Nonlinear Response in a Baroclinic Model to Stationary Forcings"; March 31, 1980.

1869; E. Brinton; NOAA; "Sorting and Analysis of Plankton from the Bering Sea"; March 28, 1980.

1870; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; March 31, 1980.

Active Contracts and Grants; March 31, 1980.

1873; P.F. Lonsdale, G.F. Moore; NSF; "Deep Tow Studies of the Mid-America Trench"; April 4, 1980.

1876; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; April 2, 1980.

1878; R.C. Smith; EPA; "The Effects of Suspended Sediments on the Penetration of Solar Radiation into Natural H₂O"; April 8, 1980.

1880; J.W. Miles; ONR; "Wave Propagation"; April 14, 1980.

1881; M. Kastner; NSF; "Mineralogy and Geochemistry of Hydrothermal Deposits, EPR, 21°N"; April 9, 1980.

1882; R.L. Bernstein; NSF; "The SIO SRS Facility"; April 11, 1980.

1885; J. Mammerickx; NSF; "Detection and Analysis of Depth Anomalies in the NE Pacific"; April 11, 1980.

1886; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; April 9, 1980.

1889; R.W. Eppley; DOE; "Research on the Marine Food Chain"; May 19, 1980.

1890; R.W. Johnson; DOAF; "A Smart Transducer System for Airborne Contrast Transmittance Measurements"; April 22, 1980.

1894; J. Berger; NSF; "Precision Measurements of Crustal Deformation"; April 23, 1980.

1895; F.N. Spiess; UCSB; "Deep Tow Studies of the Vema Transform Fault"; April 17, 1980.

1896; R.W. Austin; ONR; "Deep Ocean Optical Data Cruise on R/V Oceanographer"; April 22, 1980.

1900; K. Gopalan, J.D. Macdougall; NSF; "Isotopic and Chemical Studies of the Deccan Plateau"; April 22, 1980.

1902; H.R. Thierstein; NSF; "Mesozoic Calcareous Micro- and Nannofossils: Paleoceanographic and Paleoclimatic Implications"; April 23, 1980.

1904; H. Craig, J. Lupton; NSF; "Continental and Convergent-Margin Volcanism: Isotopic Studies of Rare Gases, C, H, and N₂ in Fluids and Rocks"; April 28, 1980.

1905; H. Craig, R.D. Willis; DOE; "Development of a Laser Detection System for ³⁹Ar and Application to Oceanographic Mixing Studies"; May 7, 1980.

1906; E.D. Goldberg; DOE; "Marine Geochemistry Research"; May 2, 1980.

1907; J.W. Hawkins; NSF; "Evolution of Arc-Backarc Systems Geochemical and Petrological Studies, Mariana Trough and Mariana Trench"; April 30, 1980.

1908; E.S. Vincent; NSF; "CENOP"; May 1, 1980.

1909; E.L. Winterer; NSF; "Tethyan Jurassic Pelagic Sediments"; May 1, 1980.

1911; R.W. Austin; DARPA; "Marine Bioluminescence Studies"; May 1, 1980.

1916; C.D. Winant; NSF; "An Experimental Investigation of the Cross-Shelf Geostrophic Balance"; April 30, 1980.

1917; V.C. Anderson, F.N. Spiess; ONR; "Data Analysis for RUWS Search"; May 8, 1980.

1918; R.J. Seymour; ACE; "Wave Data Collection and Analysis (Modification to DACWO7-77-C-0070)"; May 14, 1980.

1919; V.C. Anderson; NOO; "Computer-Aided Navigation System"; May 13, 1980.

1920; R.A. Knox, L.A. Regier; NSF; "Analysis of Equatorial Upper Ocean Currents Measured with Ship's Acoustic Log"; May 12, 1980.

1921; A.A. Yayanos; NSF; "In Situ and Lab Studies with Deep-Sea Amphipods and Some of Their Interactions with Microbes"; May 12, 1980.

1922; R.W. Austin; NASA; "CZCS Validation Studies"; May 13, 1980.

1926; N.E. Clark; ONR/NORDA; "Large-Scale Heat Exchange Processes across the Air/Sea Interface in the Indian Ocean"; May 22, 1980.

1934; V.C. Anderson; NORDA; "MPL Core Program"; June 24, 1980.

1937; G.G. Shor; NSF; "Oceanographic Instrumentation"; June 20, 1980.

1938; G.G. Shor; NSF; "Shipboard Technician Support"; June 23, 1980.

1939; J.J. Sullivan; NOAA; "UCSG: Model Testing of Structural Configurations to Resist Sea Ice Forces"; n.d.

1940; C.D. Winant; MRC; "Current Meter Deployment for the MRC"; May 27, 1980.

1941; R.E. Davis, C.D. Winant; NSF; "CODE: The Small Scale Array"; September 11, 1980.

1942; D.L. Cutchin; NSF; "NORPAX Travel Grant (Renewal)"; June 6, 1980.

1944; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; June 11, 1980.

1945; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; June 12, 1980.

1946; H. Bradner, F. Reines; DON; "Measurements of Intensity-Time Relations for Bioluminescence with Microsecond Resolution"; June 13, 1980.

1949; P.F. Lonsdale, F.N. Spiess; NSF; "IDOE Mn Nodule Program (Deep Tow Surveys)"; September 11, 1980.

[Box 11]

1950; T.E. DeLaca; NSF; "Physiological Ecology of Benthic Shallow H₂O Foraminifera in McMurdo Sound, Antarctica: A Model for Evaluating the Ecological Significance of Foraminifera in the Deep-Sea"; n.d.

1951; T.P. Barnett; NSF; "Study of Predictability and Variability on the N Hemisphere Climate"; July 8, 1980.

1952; G.G. Shor; NSF; "Ship Operations Support"; June 27, 1980.

1953; G.G. Shor; NSF; "Permanent Shipboard Scientific Installations"; June 23, 1980.

1956; W.R. Riedel; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic and Mesozoic Pelagic Sediments"; June 24, 1980.

1957; V.C. Anderson; ARPA; "Anomalous Absorption"; June 18, 1980.

1959; L.M. Dorman, R.D. Moore; ONR; "OBS Modification"; June 16, 1980.

1961; J.N. Brune, M.S. Reichle; NASA; "Seismic Studies of the Gulf of CA and NW MX"; June 23, 1980.

1963; W.S. Hodgkiss; USC; "Adaptive Least Squares Lattice Structures and Their Applications to Problems in Underwater Acoustics"; June 26, 1980.

1964; J. Simpson; ONR; "The Relationship between the Optical Properties and Physical Dynamics of the Upper Ocean: A Component of the Environmental Effects on Optical Propagation"; June 25, 1980.

1966; T.P. Barnett, J. Namias; NOAA; "Climate Research and Prediction"; July 3, 1980.

1967; R.T. Williams; UW; "Processing of LDE In Situ O2 Data"; June 1980.

Active Contracts and Grants; June 30, 1980.

1968; E. Brinton; NOAA; "Collection, Sorting and Analysis of Otolith Fish Larvae Prerecruits and Adults"; July 10, 1980.

1970; C.D. Keeling; NSF; "Measurements of summation CO2 to High Accuracy in the N Atlantic Ocean"; July 3, 1980.

1971; W.H. Berger, J.S. Killingley, E.S. Vincent; NSF; "Deep-Sea CO2-: Accumulation, Dissolution, and CO2 Flux"; August 13, 1980.

1972; R.A. Lewin; NASA; "Research Expedition to Study Prochloron in Palau"; July 3, 1980.

1973; R. Stewart; JPL; "Support Services for the Air-Sea Interaction Program"; July 7, 1980.

1975; J. Berger; NASA; "Precision Measurements of Benchmark and Monument Displacements for Use in Crustal Dynamics Studies"; July 16, 1980.

1976; W.B. White; NMFS; "Operation of a Ship-of- Opportunity XBT Sampling Program in the Pacific Ocean"; July 16, 1980.

1977; V.C. Anderson, F.H. Fisher; ARPA; "Shallow H2O Duct Modeling"; July 15, 1980.

1979; W.A. Newman; NSF; "Research on the Systematics of Cirripedia, Including a Revision of the Lepadomorpha"; July 15, 1980.

1980; E. Brinton; NOAA; "Seasonal Analysis of Anchovy Gonads"; July 16, 1980.

1981; L. Armi; NSF; "Transient Tracers in the Ocean: Ocean Mixing and Circulation"; July 22, 1980.

1982; G.N. Somero; NSF; "Biological Studies of Hydrothermal Vents: Ecological Physiology Component"; July 14, 1980.

1982; G.N. Somero; NSF; "Biochemical and Physiological Characteristics of the Hydrothermal Vent Community Animals: Adaptations to the Stresses-and Unique Potentials-of the Vent H2O, with Emphasis on the Chemoautotrophic Capacities Found within the Vestimentiferan Tubeworm, Riftia pachyptila"; July 14, 1980.

1984; K.L. Smith; NSF; "Biological Studies of Hydrothermal Vents: Ecological Energetics Component"; August 8, 1980.

1984; K.L. Smith; NSF; "Ecological Energetic Studies of a Deep-Sea Hydrothermal Vent Community on the EPR at 21°N"; August 8, 1980.

1987; G.J. McNally, W.C. Patzert; NSF; "A Drifting Buoy Study of the Pacific N Equatorial Current and Countercurrent in 1979-80, Phase II: Data Analysis"; September 15, 1980.

1989; R.A. Knox; NSF; "Analysis of Wind and Upper Ocean Current Measurements from the NORPAX Equatorial Experiment"; July 30, 1980.

1993; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; July 30, 1980.

1994; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; July 29, 1980.

1995; M. Tsuchiya; NSF; "Subtropical Circulation of the N Pacific Ocean"; July 30, 1980.

1996; G.F. Moore, T.H. Shipley; NSF; "High Resolution Studies of Sediment Accretion and Subduction along the Mid-America Trench"; n.d.

1997; J.M. Gieskes; NSF; "Investigations of Interstitial H2O of DSDP Cores: A Cooperative Study"; August 1, 1980.

1999; T.J. Chow, E.D. Goldberg; NSF; "240Pu/239Pu Ratios, a Geochronological Tool for Marine Studies"; August 11, 1980.

2000; F.H. Fisher, R.B. Williams; NORDA; "Multipath and Caustics"; August 11, 1980.

2001; M. Kastner; NSF; "Diagenesis and Surface Chemistry of Biogenic Silica"; August 12, 1980.

2003; J.W. Hawkins; NSF; "Petrology and Geochemistry of Zambales Range Ophiolite Complex, Luzon, Republic of the Philippines (SEATAR)"; August 7, 1980.

2004; J.F. Gilbert; NSF; "Density Structure of the Earth's Deep Interior and a Geophysical Determination of the Gravitational Constant"; August 13, 1980.

2005; K.L. Smith; NSF; "Program Facilities Support for Biological Studies of Hydrothermal Vents"; August 11, 1980.

2006; R.R. Hessler; NSF; "Community Structure and Small Scale Distribution of Benthic Megafauna at 21°N, EPR"; August 11, 1980.

2006; R.R. Hessler; NSF; "Biological Studies of Hydrothermal Vents: Faunal Ecology Component"; August 11, 1980.

2006; R.R. Hessler; NSF; "Biological Studies of Hydrothermal Vents: Faunal Ecology Component"; September 10, 1980.

2006; R.R. Hessler; NSF; "Biological Studies of Hydrothermal Vents"; March 1, 1981.

2007; V.C. Anderson, F.N. Spiess; ONR; "Maintenance and Performance Evaluation of the Dynamic Beamformer Hardware"; September 24, 1980.

2008; V.C. Anderson, F.N. Spiess; ONR; "Dynamic Beamformer Project"; November 12, 1980.

2009; E. Brinton; NOAA; "Seasonal Analysis of Anchovy Gonads"; August 8, 1980.

2010; R.T. Williams; UW; "Processing of Continuous In Situ O2 Data"; August 1980.

2011; J.R. Curray; NGS; "Bathymetry and Physiography of the NE Indian Ocean"; August 12, 1980.

2012; G.W. Lugmair, J.D. Macdougall; NSF; "Completion of a Working System for Filament Bakeout for MS Filaments"; August 8, 1980.

2013; J.D. Macdougall; NASA; "Origin and Evolution of Carbonaceous Meteorites"; August 13, 1980.

2014; W.R. Riedel, A. Sanfilippo; NSF; "Radiolarian Stratigraphy, Taxonomy and Evolution"; August 25, 1980.

2016; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; August 15, 1980.

2017; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; August 12, 1980.

2018; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; August 13, 1980.

2019; P.K. Dayton; MMC; "Dr. P. Dayton as Chairman, MMC's Committee of SAMM"; August 15, 1980.

2020; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; August 15, 1980.

2022; C.D. Keeling; NSF; "A Study of the Abundance of CO2 in the Atmosphere and its Exchange with the Oceans"; August 27, 1980.

2023; D. Goodman; NOAA; "Analysis of Age Distribution Data from a Harvest"; August 14, 1980.

2024; J.F.T. Saur, W.B. White; NSF; "Large-Scale Standing and Traveling Waves in the Subsurface Temperature Field in the NE Pacific"; August 21, 1980.

2025; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; August 20, 1980.

2029; J. Anderson; USGS; "Synthesis of Seismicity and Geological Data in CA"; September 9, 1980.

2030; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; August 22, 1980.

2034; M.M. Mullin; NSF; "The Use of the Stable Isotopes to Dissect Pollutant Pathways and Food Webs in Marine Plankton"; August 25, 1980.

2036; R.C.J. Somerville; NOAA; "An Experimental Climate Forecast Center at SIO"; August 28, 1980.

2038; R.L. Bernstein; ONR; "Indian Ocean Satellite Processing"; n.d.

2039; G.A. Meyers, W.B. White; NSF; "Large-Scale Variation in Subsurface Temperature of the Tropical Pacific Ocean"; September 5, 1980.

2040; R.C. Finkel, J.D. Macdougall; NSF; "Magma Evolution and Chronology for Cascade Volcanoes"; September 8, 1980.

2041; R.T. Williams; NSF; "Operations Management for Transient Tracers in the Oceans: N Atlantic Study"; September 1980.

2043; G.A. Meyers; NSF; "Spatial Scale of Interannual, Annual, and Higher Frequency Temperature Variability Observed during the HI- Tahiti Shuttle Experiment"; n.d.

2043R1; G.A. Meyers; NSF; "Spatial Scale of Interannual, Annual, and Higher Frequency Temperature Variability Observed during the HI- Tahiti Shuttle Experiment"; April 27, 1980.

2045; R.F. Weiss; NSF; "MANOP Bottom Lander Project"; September 5, 1980.

2046; J. Berger; USGS; "PFGO"; September 4, 1980.

2047; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; September 8, 1980.

2049; W.F. Heiligenberg; NSF; "Perception and Evaluation of Electric Stimuli in Fish"; September 15, 1980.

2050; D.L. Cutchin; NSF; "NORPAX Program Administration"; September 12, 1980.

2052; R. Pinkel; NORDA; "Environmental Background Measurement Program"; September 18, 1980.

2054; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 16, 1980.

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2055; J.J. Sullivan; NOAA; "Pacific Sea Grant Advisory Program Phase VIII"; n.d.

2056; K.H. Nealson; ONR; "Mechanisms of Bioluminescence: Kinetic-Spectral and Biochemical Properties as a Probe of Marine Communities and Interactions"; September 18, 1980.

2058; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; September 19, 1980.

2059; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; September 22, 1980.

2060; W.R. Riedel; NSF; "Curating of the Deep-Sea Geological Collections at SIO"; October 27, 1980.

2062; J.R. Arnold, D.R. Criswell; SSI; "Development of an HF-Based Chemical Processing System for the Extraction of Major Oxides and Elements from the Common Lunar Materials"; September 30, 1980.

2066; F. Azam; NSF; "Role of Bacteria in the Marine Planktonic Food Chain: Microbial Interactions with Zooplankton Feces"; August 18, 1980.

2067; B.L. McGlamery; RADC; "Evaluation of CIS Performance"; September 29, 1980.

2068; J. Namias; NSF; "Large-Scale Air-Sea Interaction over the N Hemisphere and Associated Impact on Seasonal and Longer Scale Weather and Climate"; October 8, 1980.

2069; A.F. Carlucci, P.M. Williams; NSF; "Studies of Sea-Surface Films: Chemistry and Microbiology of Film Formation, Composition, and Alteration"; September 22, 1980.

2070; R.A. Knox, W.H. Munk, P.F. Worcester; NOAA- AOML; "Research in Acoustic Tomography"; September 26, 1980.

2071; K.H. Nealson; NSF; "Studies of Mn-Oxidizing Bacteria and Assessment of Their Role in Marine Mn Deposition"; September 29, 1980.

Active Contracts and Grants; September 30, 1980.

2073; C.S. Cox; ONR; "EM Probing of the Ocean Crust and Study of Anomalous Magnetic Fields over the Ocean"; October 21, 1980.

2074; J.H. Filloux; NSF; "MT Exploration of the N Pacific: Improved Resolution, Deeper Penetration, and W Extension"; October 7, 1980.

2075; E.L. Winterer; JOII; "Operation of the JOIDES Office at SIO"; October 6, 1980.

2076; R.C. Smith; NASA; "Ship and Satellite Bio- Optical Research in the CA Bight"; October 9, 1980.

2077; R.E. Flick, R.T. Guza, D.L. Inman, C.D. Winant; ONR; "Fluid-Sediment Interaction on Beaches and Shelves"; October 10, 1980.

2077; R.E. Flick, R.T. Guza, D.L. Inman, C.D. Winant; ONR; "Fluid-Sediment Interactions on Beaches and Shelves"; September 10, 1981.

2079; P.S. Doyle; SNL; "Refinements and Applications of Ichthyolith Age Correlations"; October 15, 1980.

2080; W.S. Hodgkiss; PSU; "Study of Reverberation Rejection Capability of Adaptive Array Processors"; December 31, 1980.

2083; D.J. Faulkner; DOHEW; "Antibiotics from Marine Organisms"; October 17, 1980.

2084; L.M. Dorman, K.C. Macdonald, J.A. Orcutt; NSF; "Studies of Microearthquakes in an Active Hydrothermal Vent Area on the EPR"; October 24, 1980.

2085; V.C. Anderson, F.N. Spiess; ONR; "Scientific and Advisory Services for Ocean Engineering Study"; October 22, 1980.

2086; A. Soutar; NSF; "Late Quaternary Climatic Change in the Gulf of CA: An Investigation of Terrestrial (Pollen) and Marine (Fish Scale) Evidence Contained in Varved Sediments from the Guaymas Slope"; October 30, 1980.

2087; Y. Chung, H. Craig, J. Lupton; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; October 28, 1980.

2088; J.H. Filloux; NSF; "Observation of Tidal and Other Pressure Fluctuations on the Open Ocean Floor"; November 14, 1980.

2089; A.A. Benson; NSF; "Oceanic Arsenic Detoxication"; November 3, 1980.

2090; J.R. Curray, G.F. Moore; NSF; "The Sunda Transect, Part II: Central Java Transect"; November 25, 1980.

2091; R.W. Austin; ONR; "Assessment and Modeling of Ocean Optical Properties"; November 10, 1980.

2092; J.L. Reid; NOAA; "Collection, Archiving, and Processing of Satellite Images"; November 10, 1980.

2095; F.N. Spiess; GOC; "Transponder Navigation, Search with Magnetometer and High Resolution Side- Looking-Sonar, Photo, and Slow-Scan TV Coverage"; December 10, 1980.

2096; C.S. Cox; NSF; "Active Source EM Sounding of the Oceanic Lithosphere"; January 15, 1981.

2096R1; C.S. Cox, A. Chave; NSF; "Active Source EM Sounding of the Oceanic Lithosphere"; October 8, 1981.

2099; R. Hey; HIG; "Investigations of Rift Propagation and Plate Tectonics"; November 14, 1980.

2100; R.N. Hey; JOII; "Synthesis of Geological and Geophysical Data over the Galapagos Spreading Center (Area VIII-3)"; November 17, 1980.

2104; J. Berger; NASA; "Geodynamic Observing Site at PFGO"; November 14, 1980.

2106; M.C. Hendershott, D. Luther; NSF; "Normal Modes of the Pacific: Observations and Theory"; December 13, 1980.

2108; J.R. Curray, G.F. Moore, G.G. Shor; NSF; "The Sunda Transect, Part 1: Central Sumatra Transect"; December 8, 1980.

2110; R.W. Austin; CIT; "Fisheries Demonstration Program"; November 24, 1980.

2114; V.C. Anderson; ONR; "Support of the R/P Flip and Orb"; December 1, 1980.

2115; J.N. Brune, K. Priestley, M. Reichle; NSF; "Long Period Seismography Array for Crust and Mantle Studies in MX"; December 15, 1980.

2116; J. Namias; UCD; "Dynamics of Winter W Coast Precipitation with Emphasis on Long Range Forecasting"; December 18, 1980.

2117; R.W. Austin; NOAA; "Remote Sensing of Ocean Properties by Means of Visible Light"; December 10, 1980.

2119; R.L. Bernstein; DOC; "An Ocean Mesoscale Eddy Investigation Utilizing SEASAT-A SMMR Data"; December 19, 1980.

2120; R.H. Stewart; CIT; "Radar Studies of the Sea Surface"; December 12, 1980.

2122; J. Berger; NSF; "IDA Station at Urumqi, PRC"; December 19, 1980.

2124; M. Mullin; NRC; "Borrowed Personnel Agreement M. Mullin: A Review of the Academic Research Fleet"; December 19, 1980.

2126; F. Gilbert, T.H. Jordan; NSF; "Observation and Interpretation of Attenuation and Moment Tensors"; December 22, 1980.

Active Contracts and Grants; January 5, 1981.

2130; R. Hey, P. Lonsdale, F.N. Spiess; NSF; "High- Resolution Study of Propagating Rifts"; January 14, 1981.

2131; J. Berger, F. Gilbert; NSF; "Long Period Seismology with the Global IDA Network"; January 13, 1981.

2132; G.L. Kooyman; NSF; "Biology of Weddell Seals during the Austral Winter"; n.d.

2135; M. Tsuchiya; NSF; "Tropical and Subtropical Circulation of the Atlantic Ocean"; January 12, 1981.

2135R1; M. Tsuchiya; NSF; "Tropical and Subtropical Circulation of the Atlantic Ocean"; May 8, 1981.

2136; J. Berger, J.N. Brune; USGS; "Seismic Source Mechanism Studies in the Anza-Coyote Seismic Gap"; February 6, 1981.

2137; J. Berger; USGS; "Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; February 6, 1981.

2137R1; J. Berger; USGS; "Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; December 16, 1981.

2138; J. Berger; USGS; "CDO Part D Field Operational Support, Data Logging Facilities, and Concurrent Investigations"; February 6, 1981.

2139; O. Holm-Hansen; SAI; "To Extend Support for 'Effect of Microbial Biota on Weathering of Petroleum Hydrocarbons'"; January 9, 1981.

2142; G.O. Arrhenius; TESI; "Thermochemical Principles of Crystallization and Hydration"; January 14, 1981.

2145; A.E.J. Engel; NSF; "Late Mesozoic-Cenozoic Tectonics along the Salton Trough Peninsular Range Boundary"; January 23, 1981.

2149; J.N. Brune, M.S. Reichle; USGS; "Seismic Hazard and Earthquake Prediction in NW MX and CA/MX Border Region: A Cooperative US/MX Study"; February 4, 1981.

2154; G.N. Somero; NSF; "Pressure, Temperature, and Solute Effects on Protein Assembly and Enzymatic Catalysis: A Mechanistic and Evolutionary Analysis"; January 23, 1981.

2156; R.W. Austin; NASA; "CZCS Validation Studies: Request for Supplemental Funds"; January 27, 1981.

2158; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; n.d.

2160; J.R. Curray; NSF; "The Burma and Andaman Transects, Sunda Arc"; January 30, 1981.

2161; Y. Chung, R.C. Finkel; NSF; "Hydrothermal Fluids and Precipitates from the EPR: U and Th Series Radioisotopes Study"; n.d.

2163; J.J. Sullivan; NOAA; "Use of Underwater Habitats as Coral Reef Research Tools"; January 29, 1981.

2164; Y. Chung; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; February 11, 1981.

2166; J.W. Hawkins, G.F. Moore; NSF; "Geological Evolution of the Molucca Sea Collision Zone"; February 4, 1981.

2167; E.A. Hemmingsen; DOHEW; "Studies of Cavitation in Biological Systems"; February 4, 1981.

2168; N.E. Clark; NOAA; "Characteristics of Large Scale Heat Exchange between Ocean and Atmosphere"; February 4, 1981.

2175; J.D. Frautschy; NASA; "Administrative Support NASA Advisory Council Chairmanship"; February 10, 1981.

2177; J.H. Filloux; NSF; "SFMT Exploration: Extension Beyond the Pacific Plate"; February 11, 1981.

2180; B.E. Volcani; DOHEW; "Biochemical Studies of Siliceous Skeletal Formation"; February 17, 1981.

2181; J.R. Beers; NSF; "Non-Loricata Oligotrichous Ciliates in the Plankton: Their Biology, Ecology and Role in the Food Web"; February 20, 1981.

2182; R.F. Weiss; NSF; "Transient Tracers in the Ocean: CO₂ and N₂O Measurements in the N Atlantic"; February 19, 1981.

2183; D.P. Costa; NOAA; "Bioenergetics of the N Fur Seal, *Callorhinus ursinus*"; February 23, 1981.

2185; L. Cheng; NSF; "Halobates in the Diet of Seabirds"; February 24, 1981.

2188; R.N. Hey; HIG; "Investigations of Rift Propagation near the Galapagos Islands (Fund Transfer)"; February 26, 1981.

2191; W.A. Newman; NSF; "Research on the Systematics of Cirripedia: Symbionts of Hermit Crabs as Biological Parameters Affecting the N Limit of the Obligate Commensal, *Trypetesa lateralis* Tomlinson, in the CATZ"; March 17, 1981.

2192; R.W. Austin; ONR; "Marine Bioluminescence Studies, Task I, Phase II"; March 3, 1981.

2193; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; March 3, 1981.

2194; J.N. Brune, M.S. Reichle; NASA; "Seismic Studies of the S Gulf of CA"; March 4, 1981.

2199; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; March 6, 1981.

2200; R.W. Austin; GTESI; "Marine H₂O Parameter Measurement Program"; March 11, 1981.

2201; P. Lonsdale, F.N. Spiess; JOII; "Survey for Hydrogeology Leg 84 (EPR Traverse)"; March 9, 1981.

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2202; F.H. Fisher; NSF; "Ion-Pairing in Seawater"; March 10, 1981.

2203; V.C. Anderson, F.N. Spiess; ONR; "Data Analysis for the RUWS Search"; March 12, 1981.

2204; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; March 18, 1981.

2206; J.H. Filloux; NSF; "MT Sounding across a Subduction Zone"; March 18, 1981.

2207; D.C. Agnew, J. Berger, F. Wyatt; NASA; "Towards a Statistical Understanding of Tectonic Motions Analysis of Crustal Dynamics Observations"; March 19, 1981.

2208; R.T. Williams; LGO; "Engineering Support to LGO"; March 24, 1981.

2210; J.O. Roads; CSI; "Cloud Sensitivity Studies with Simple Climate Models"; March 24, 1981.

2217; R. Knox; NSF/IDOE; "Tropical Wind Stress Analysis"; April 1, 1980.

Active Contracts and Grants; April 1, 1981.

2218; A.A. Benson; NSF; "Physiology and Ecology of Halobacteria"; n.d.

2219; A.A. Benson; DOE; "Physiology and Ecology of Halobacteria"; April 5, 1981.

2220; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; April 3, 1981.

2222; R.A. Lewin; NSF; "Abscission of Cilia or Flagella: Its Induction and Control"; April 7, 1981.

2223; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Studies of EPR Basalts"; April 17, 1981.

2224; T.E. DeLaca; NSF; "Physiological Ecology of Benthic Shallow H₂O Foraminifera in McMurdo Sound, Antarctica: A Model for Evaluating the Ecological Significance of Foraminifera in the Deep-Sea"; n.d.

2225; R.W. Eppley; DOE; "Research on the Marine Food Chain"; April 14, 1981.

2227; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean"; April 15, 1981.

2228; P. Dustan; CSI; "Spatial and Temporal Dynamics of Phytoplankton Blooms"; April 15, 1981.

2229; J.J. Simpson; CSI; "An Investigation of Eddies in the CA Current"; April 14, 1981.

2231; J. Berger; NSF; "Precision Measurements of Crustal Deformation"; April 17, 1981.

2232; R.C. Finkel; CSI; "Cosmogenic Radioisotopes Studies in Polar Ice Sheets Using Van de Graaff AMS"; April 21, 1981.

2234; B.W. Fitch; CSI; "Remote Sensing by Means of the Polarization of Light"; April 16, 1981.

2235; D.A. Leonard; CSI; "Remote Sensing of Subsurface Ocean H₂O Temperature Profiles"; April 17, 1981.

2236; R.W. Eppley; DOE; "Coordination of the S CA Bight Regional Marine Program"; April 17, 1981.

2238; E.D. Goldberg; DOE; "Marine Geochemistry Research"; April 17, 1981.

2239; Y. Chung, H. Craig; NSF; "Joint Chinese-US Investigations of Fluid-Phase Geochemical Characteristics and Their Applications to Tectonics and Earthquake Studies"; April 20, 1981.

2239R1; Y. Chung, H. Craig; NSF; "Joint Chinese-US Investigations of Fluid-Phase Geochemical Characteristics and Their Applications to Tectonics and Earthquake Studies"; October 19, 1981.

2244; R. Somerville; CSI; "Predictability Studies Using Numerical Models"; April 20, 1981.

2245; T.H. Jordan, J.A. Orcutt; DARPA; "Seismic Detection and Discrimination Using OBS"; April 20, 1981.

2246; R. Lasker; CSI; "Satellite Ocean Remote Sensing Studies Related to Marine Fishery Resources off CA"; April 17, 1981.

2247; J.R. Arnold; NASA; "Development of an Orbital Gamma Ray Experiment for Lunar and Planetary Geochemistry"; May 8, 1981.

2248; R.A. Knox; NOAA; "Digitization of Island Wind Data from the Tropical Pacific"; April 28, 1981.

2249; D.A. Leonard; NOAA; "Remote Sensing of Subsurface Ocean H₂O Temperature Profiles"; May 4, 1981.

2252; L. Armi; WHOI; "Continuation of Work Started at WHOI"; May 5, 1981.

2254; R.J. Seymour; DBW; "CDIP"; May 11, 1981.

2257; O. Holm-Hansen; SAI; "To Extend Support for 'Effect of Microbial Biota on Weathering of Petroleum Hydrocarbons'"; May 8, 1981.

2260; R.C. Smith; NASA; "Photo- and Radiometric Calibration of a NASA-Owned Hand Held Contrast Reduction Meter"; May 12, 1981.

2262; V.C. Anderson; NSSC; "Development and Evaluation of a New Isolation Module"; May 13, 1981.

2266; W.H. Thomas; NSF; "Microcomputing Equipment for Phytoplankton Data Analysis"; May 18, 1981.

2268; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; May 19, 1981.

2269; R. Bernstein; ONR; "Indian Ocean Satellite Processing"; May 20, 1981.

2270; P.F. Lonsdale; NSF; "Mid-America Trench Expedition and Subsequent Deep Tow Operations"; May 20, 1981.

2271; A. Fleminger; SI; "Identification of Calanid Copepods in Eltanin Cruises 8, 24, and 25"; May 21, 1981.

2275; C.D. Keeling; NSF; "Absolute Abundance and Variability of Dissolved Inorganic C in Ocean H₂O"; June 1, 1981.

2276; W.R. Riedel, A. Sanfilippo; NSF; "Stratigraphy, Taxonomy, and Paleoecology of Cenozoic Radiolaria"; June 1, 1981.

2279; R.T. Guza; ACE; "Analysis of Longshore Current Data"; May 25, 1981.

2281; D.C. Agnew; ONR; "Sea Level Variations and Ocean Dynamics in the Aleutian Islands"; June 3, 1981.

2282; R.L. Salmon; NSF; "Hamiltonian Methods Applied to Ocean Circulation Problems"; May 28, 1981.

2285; W.H. Fenical; NSF; "The Development of New Agrichemical Resources from Marine Organisms"; May 15, 1981.

2285R1; W. Fenical; NSF; "The Development of New Agrichemical Resources from Marine Organisms"; November 17, 1982.

2286; R.T. Williams; UW; "Study of the Thermohaline Structure and Circulation near the Emperor Seamounts"; June 1981.

2288; R.T. Williams; NSF; "3H in the Tropical N Atlantic"; June 1981.

2289; K.H. Neelson; NASA; "Followup Work to the NASA Summer Program by Mr. J. Cowen"; June 11, 1981.

2291; J.W. Miles; NSF; "Geophysical Fluid Dynamics"; June 9, 1981.

2292; J.M. Gieskes; NSF; "Mn-Geochemistry in the Guaymas Basin (Gulf of CA): Hydrothermal and Diagenetic Influences"; June 9, 1981.

2293; G.G. Shor; NSF; "Ship Operations Support: A Continuation of OCE 80-24472 (2nd Year Funding)"; June 26, 1981.

2294; G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; June 26, 1981.

2296; V. Vacquier; NSF; "Refit of Large-Scale Resistivity Experiment for Data Acquisition in DSDP Holes"; June 10, 1981.

2297; A.F. Carlucci; NSF; "Sites of Microbial Nitrification in Marine Environments"; June 11, 1981.

2297R1; A.F. Carlucci; NSF; "Sites of Microbial Nitrification in Marine Environments"; October 5, 1981.

2298; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; June 9, 1981.

2299; W.F. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing in Electric Fish"; June 12, 1981.

2299S1; W. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing"; July 31, 1981.

2300; R.L. Fisher; NSF; "Structural and Petrologic Study of the Antarctic Plate Boundary in the SW Indian Ocean: Field Program"; June 10, 1981.

2301; R.E. Davis; OSU; "Work to be Accomplished in Support of OSU Cruise, November 14-24"; June 8, 1981.

2303; J. Namias; NSF; "Large Scale Air-Sea Interactions over the N Hemisphere and Associated Impact on Short-Term Climate of the Ocean Atmosphere"; June 12, 1981.

2303R1; J. Namias; NSF; "Large-Scale Air-Sea Interactions over the N Hemisphere and Associated Impact on Short-Term Climate of the Ocean Atmosphere"; September 15, 1981.

2304; W.F. Heiligenberg; DOHHS; "Sexual Differentiation of a Communicatory Signal"; June 12, 1981.

2306; H.T. Hammel; NSF; "Osmoregulatory Responses of Ducks and Penguins to Altered Plasma Concentration"; June 12, 1981.

2307; C.J. Koblinsky; NSF; "Direct Estimates of the Wind Forced Response in the NW Atlantic"; n.d.

2308; E.S. Vincent; NSF; "CENOP"; June 15, 1981.

2312; W.R. Riedel; ACS; "Paleoenvironmental Interpretation of CA Neogene Radiolarians"; June 17, 1981.

2313; M.H. Salisbury; UM; "UM Subcontract R.C. #2764"; June 16, 1981.

2314; J.L. Bada; DOHEW; "Aspartic Acid Racemization: Relationship to Aging"; June 18, 1981.

2316; O. Holm-Hansen; NSF; "A Multidisciplinary Study of the E Scotia Sea"; June 18, 1981.

2317; H. Craig; NSF; "EPR SeaBeam and Hydrothermal Vent Survey: Cooperative Work"; July 1, 1981.

2321; J. Berger; NASA; "Precision Measurements of Benchmark and Monument Displacements for Use in Crustal Dynamics Studies"; July 1, 1981.

2322; J.R. Curray, G.F. Moore, G.G. Shor; NSF; "The Sunda Transect, Part 1: Central Sumatra Transect"; June 26, 1981.

2323; N.E. Clark, J. Namias, B.C. Weare; CSI; "W Coast Regional Long-Range Forecast Development"; n.d.

2324; J.R. Curray, G.F. Moore; NSF; "The Sunda Transect, Part II: Central Java Transect"; June 26, 1981.

2325; G.G. Shor; NSF; "Oceanographic Instrumentation"; June 29, 1981.

2327; G.G. Shor; NORDA; "Shiptime for Project Diana Tests"; June 26, 1981.

2330; J.W. Hawkins; NSF; "Petrology and Geochemistry of Zambales Range Ophiolite Complex, Luzon, Republic of the Philippines (SEATAR)"; July 1, 1981.

2331; R.E. Flick; DBW; "Longard Tube Survey and Documentation Del Mar, CA"; June 19, 1981.

2332; R.E. Flick; CCC; "Longard Tube Survey and Documentation Del Mar, CA"; June 19, 1981.

2333; R.E. Flick; LADCE; "Coastal Processes and Sediment Management for S CA"; June 26, 1981.

2335; R.E. Davis, C.D. Winant; NSF; "CODE: The Small Scale Array"; June 30, 1981.

2336; G.A. Jackson, C.D. Winant; DOE; "Physical Oceanography of Coastal Marine Basins: A Component of the S CA Regional Marine Program"; July 7, 1981.

[Box 14]

2338; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; July 7, 1981.

Active Contracts and Grants; July 7, 1981.

2339; V.C. Anderson; NORDA; "Coherent Recombination of Sediment Born and H₂O Path Acoustic Signals"; July 10, 1981.

2340; J.D. Macdougall; NSF; "Isotopic and Chemical Studies of the Deccan Plateau: Support for Field Work"; July 9, 1981.

2342; H.T. Hammel; NSF; "Measurements of Phloem Pressure and Correlates in Trees"; July 13, 1981.

2343; J.D. Macdougall; NASA; "Origin and Evolution of Carbonaceous Meteorites"; August 11, 1981.

2345; G.J. McNally, W.C. Patzert; NSF; "Variability of Tropical Pacific Surface Ocean Currents during 1979-80 Using Drifting Buoys, Phase II: Data Analysis"; September 28, 1981.

2346; T.P. Barnett; NSF; "Study of Predictability and Variability of the N Hemisphere Climate"; July 16, 1981.

2347; W. Rison; NSF; "Mt. Erebus and the McMurdo Volcanic Province: Isotopic Studies of Rare Gases, C, H and N₂ in Fluid and Rocks"; July 14, 1981.

2349; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; July 17, 1981.

2350; E. Brinton; NOAA; "Seasonal Analysis of Anchovy Gonads"; July 27, 1981.

2351; J.N. Brune, J.E. Luco, J.A. Orcutt; NSF; "Numerical and Experimental Study of Earthquakes and Earthquake Strong Motion"; July 17, 1981.

2352; D.L. Cutchin; NSF; "NORPAX Administration Grant Continuation"; July 23, 1981.

2353; V.C. Anderson, F.H. Fisher; ARPA; "Shallow H₂O Duct Modeling"; July 28, 1981.

2354; V.C. Anderson; ARPA; "Anomalous Absorption"; July 22, 1981.

2355; P.K. Dayton; MMC; "Extension of Contract #1801095-6"; July 21, 1981.

2356; R.W. Eppley; NSF; "Coordination and Logistics for the PRPOO's Program"; August 3, 1981.

2357; D. Goodman; NOAA; "Age Structure Analysis on Spotted Porpoise Populations Subject to Incidental Fishing Mortality"; July 30, 1981.

2358; M.J. Tegner; CDFG; "Experimental Abalone Enhancement Program (Supplement)"; July 22, 1981.

2359; R.C. Smith; NASA; "Photoecology, Optical Properties, and Remote Sensing of Warm Core Rings"; August 7, 1981.

2360A; H.R. Thierstein; EPRC; "Mid-Cretaceous Black Shales A Result of Excessive Fertility of Global Anoxia?"; July 31, 1981.

2360I; H.R. Thierstein; TBRL; "Mid-Cretaceous Black Shales A Result of Excessive Fertility of Global Anoxia?"; September 17, 1981.

2363; R.W. Austin; NASA; "CZCS Validation Studies"; July 28, 1981.

2365; G.A. Meyers, W.B. White; NSF; "Large-Scale Variation in Subsurface Temperature of the Tropical Pacific Ocean"; August 3, 1981.

2366R1; J. Berger; USGS; "Supplement to: CDO Part D Field Operational Support Data Logging Facilities and Concurrent Investigations"; August 28, 1981.

2367; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; July 31, 1981.

2369; V.C. Anderson; ONR; "Traineeship Support"; August 3, 1981.

2370; F.H. Fisher, R.B. Williams; NORDA; "Multipath and Caustics"; August 3, 1981.

2371; V.C. Anderson, K.M. Watson; ONR; "Marine Physics Applied to USN Undersea Missions"; August 13, 1981.

2373; V.C. Anderson, W.S. Hodgkiss; NAVELEX; "A Freely Drifting Infrasonic Measurement System"; August 12, 1981.

2374; A.D. Chave, C.S. Cox; NSF; "Mantle Conductivity from Induction by Ocean Tides"; n.d.

2374R2; A.D. Chave, C.S. Cox; NSF; "Mantle Conductivity from Induction by Ocean Tides"; March 3, 1982.

2375; W.R. Riedel; NSF; "Curating of the Deep-Sea Geological Collections at SIO"; September 1, 1981.

2375R1; W.R. Riedel; NSF; "Curating of the Deep-Sea Geological Collections at SIO"; January 12, 1982.

2376; D. Roemmich; WHOI; "Subcontract for Analysis of Satellite Altimetric Data"; August 5, 1981.

2377; E.L. Winterer; JOII; "Operation of JOIDES Office at SIO"; August 12, 1981.

2378; R.C. Smith; NASA; "Ship and Satellite Bio- Optical Research in the CA Bight"; August 21, 1981.

2379; A.A. Benson; ACS; "Microbiology and Organic Chemistry in a Modern Hypersaline Environment: A Potential Petroleum Source"; August 6, 1981.

2381; R.L. Michel; NSF; "3H Distributions in the Arctic Seas"; August 13, 1981.

2382; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; August 10, 1981.

2385; D.C. Agnew, J. Berger, F. Gilbert; NSF; "Project IDA: A Global Research Network for Very Long Period Seismology"; n.d.

2385R1; D.C. Agnew, J. Berger, F. Gilbert; NSF; "Project IDA: A Global Research Network for Very Long Period Seismology"; April 2, 1982.

2386; J.R. Arnold; NASA; "Research into Selected Key Factors of Space Industrialization and Lunar Utilization"; August 10, 1981.

2389; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; August 19, 1981.

2390; R. Pinkel; NORDA; "Upper Ocean Background Measurements"; August 18, 1981.

2392; D. Roemmich; NSF; "Studies of Large Scale Meridional Transport in the Ocean"; August 22, 1981.

2394; A.A. Benson; NSF; "Membrane Molecular Effects of Acid Rain"; November 1, 1981.

2395; A.A. Benson; DOE; "Membrane Molecular Effects of Acid Rain"; November 1, 1981.

2397; R.C.J. Somerville; NASA; "The Effects of FGGE Tropical Data on Predictability of Planetary Waves"; August 24, 1981.

2398; P.M. Masters; WHDF; "Prehistoric Marine Archaeology off S CA"; August 21, 1981.

2399; D.A. Kiefer; NSF; "Seasonal Primary Production in the Scotia Sea: Data Analysis and Development of a Simulation Model for N₂"; June 25, 1981.

2400; F.J. Faulkner; NSF; "Structural Elucidation of Marine Natural Products"; August 27, 1981.

2401; R.E. Flick, R.J. Seymour; DBW; "Beach Profile Collection and Analysis"; September 4, 1981.

2402; R.W. Austin; NASA; "CZCS Validation Studies"; August 26, 1981.

2403; P.M. Masters; WHDF; "Marine Archaeology at SIO: Future Development"; August 28, 1981.

2409; J.F. Gilbert, T.H. Jordan, J.A. Orcutt, R.L. Parker; EPRC; "Wave Propagation in Exploration Seismology"; November 16, 1981.

2410; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Investigations of Continental Flood Basalts and Ultramafic Xenoliths from Alkali Basalts and Kimberlites"; September 9, 1981.

2411; H. Craig; NSF; "Continental and Convergent- Margin Volcanism: Isotopic Studies of Rare Gases, C, H, and N₂ in Fluids and Rocks"; September 3, 1981.

2412; E. Brinton, M. Huntley; NSF; "Distribution, Physiology and Growth of Some Key Antarctic Zooplankton"; September 1, 1981.

2415; E.D. Goldberg; NSF; "Charcoal as a Sink for C in the Global CO₂ Cycle"; September 8, 1981.

2419; V.C. Anderson, K.M. Watson; ONR; "Seafloor Backscatter Studies with SeaBeam"; September 28, 1981.

2420; D.J. Faulkner; NSF; "Chemical Ecology in the Marine Environment"; September 8, 1981.

2421; J.F. Gilbert, T.H. Jordan; NSF; "Green's Functions, Source Mechanisms, and Attenuation"; September 14, 1981.

2423; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 10, 1981.

2424; J.H. Filloux, C.J. Koblinsky; NSF; "Direct Measurements of the Bottom Pressure Field in the NE Pacific"; September 25, 1981.

2425; J.H. Filloux; NSF; "Dense Direct Observations of Long-Term Pressure Fluctuations on the Open Ocean Floor"; September 14, 1981.

2426; R.L. Fisher; NSF; "Forearc Composition and Emplacement Processes in the 3 Deepest Trenches: Petrologic and Geochemical Comparative Studies of Igneous and Metasomatic Rocks from the Deep Walls of Challenger Deep (Mariana Trench), Tonga Trench, and Philippine Trench"; September 16, 1981.

2427; J. Berger; USGS; "Modification of Contract 14-08-0001-18398"; September 14, 1981.

2428; D.J. Faulkner; DOHHS; "Antibiotics from Marine Organisms"; October 5, 1981.

2429; P.M. Masters; DOA; "D-Amino Acid Analyses of Wool and Treated Protein Samples"; n.d.

2431; R.T. Williams; NSF; "CO32- Chemistry in the Tropical Atlantic"; September 1981.

2432; R.T. Williams; NSF; "Large Volume Sample Acquisition and Radiocarbon Extraction in the Tropical Atlantic"; September 1981.

2433; R.T. Williams; OSU; "Hydrographic Support for Kuroshio Extension Experiment"; September 1981.

2434; L. Armi; NSF; "Transient Tracers in the Ocean: Ocean Mixing and Circulation"; September 15, 1981.

2436; R.W. Austin; ONR; "Remote Sensing of Bioluminescence"; September 17, 1981.

2437; A.F. Carlucci, P.M. Williams; NSF; "Studies on Sea-Surface Films: Chemistry and Microbiology of Film Formation, Composition, and Alteration"; September 24, 1981.

2437R1; A.F. Carlucci, P.M. Williams; NSF; "Studies on Sea-Surface Films: Chemistry and Microbiology of Film Formation, Composition, and Alteration"; February 3, 1982.

2439; F. Azam; NSF; "Role of Bacteria in Marine Detrital Food-Chain: Microbiology of Copepod Fecal Pellets"; September 25, 1981.

2440; J. Anderson, J. Brune, J.E. Luco; NSF; "Strong Motion Array along the MX Subduction Thrust"; October 1, 1981.

2443; J.F. Gilbert, M. Reichle; CDOC; "CA-MX Seismic Hazards Reduction Program"; September 25, 1981.

2444; W.S. Hodgkiss; PSU; "Study of Reverberation Rejection Capability of Adaptive Array Processors"; September 25, 1981.

2448; B.W. Fitch; NASA; "Determination of Spatial and Temporal Variations in the Optical Properties of the Earth's Atmosphere and Their Effects on Remotely Sensed Characteristics of Surface Reflected Light"; September 24, 1981.

2452; H.T. Hammel; DOHEW; "Thermoregulatory Threshold and Sensitivity of Pigs"; n.d.

2453; J. Namias; DWR; "Qualitative Precipitation Forecasts"; October 6, 1981.

2454; R.A. Lewin; SERI; "Algal Bioflocculation: An Energy-Conserving Process for Flocculating and Harvesting Algal Biomass"; September 29, 1981.

2455; J. Namias; NOAA; "Investigation of N Pacific Air-Sea Interactions Using Updated Stepwise Multiple Regression Relationships"; September 29, 1981.

2456; T.P. Barnett; NOAA; "Predictability Studies of Intraseasonal Climate Variability"; September 29, 1981.

2458; P.F. Lonsdale, F.N. Spiess; NSF; "IDOE Mn Nodule Program (Deep Tow Surveys)"; October 9, 1981.

2459; W.A. Nierenberg; TF; "Amplification of Existing Program of Cooperations with and Assistance to LAMSI"; n.d.

2461; J.M. Gieskes; NSF; "Investigations of Interstitial H₂O of DSDP Cores: A Cooperative Study"; October 9, 1981.

Active Contracts and Grants; October 9, 1981.

2463; R.W. Austin; CIT; "Fisheries Demonstration Program"; October 13, 1981.

2464; M. Huntley; NSF; "The Role of Food Limitation in the Growth Strategies of Subarctic Pacific Copepods"; October 13, 1981.

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2465; E. Brinton; NSF; "Omnivorous Feeding by NE Pacific Euphausiids"; October 19, 1981.

2467; C.D. Keeling; NSF; "Measurements of CO₂ to High Accuracy in the N Atlantic Ocean"; October 20, 1981.

2470; R.W. Austin; ONR; "Assessment and Modeling of Ocean Optical Properties"; October 27, 1981.

2471; D.L. Cutchin, W.B. White; ONR; "Operation of a Ship-of-Opportunity XBT Deployment Program in the Pacific Ocean"; October 30, 1981.

2472; W.S. Hodgkiss; JHU; "Feasibility of a High Resolution Doppler Sonar"; October 27, 1981.

2473; V.C. Anderson; NORDA; "Design of a Seafloor Work System"; October 29, 1981.

2474; E. Brinton; NOAA; "Analysis of Otoliths of Fish"; October 30, 1981.

2475; P.S. Doyle, W.R. Riedel; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic and Mesozoic Pelagic Sediments"; October 30, 1981.

2476; H. Craig, R.D. Willis; ORNL; "Development of a Laser Detection System for ³⁹Ar and Application to Oceanographic Mixing Studies"; November 18, 1981.

2477; H. Craig, W. Rison; GRI; "Rare Gases in the Continental Crust: Isotopic Studies of Sources and Migration Patterns"; April 11, 1983.

2479; W.H. Thomas; BEC; "Development of a System for Automating the Measurement of Biomass Yields and Efficiencies of Light Utilization by Microalgae"; November 3, 1981.

2481; J.F. Gilbert; NSF; "Symposiums on Mathematical Geophysics"; November 6, 1981.

2482; R.W. Eppley; NSF; "A Method to Determine Phytoplankton C Biomass and In Situ Specific Growth Rate"; November 9, 1981.

2483; R.A. Knox, W.H. Munk, P.F. Worcester; NOAA- AOML; "Research in Acoustic Tomography"; December 4, 1981.

2484; G.N. Somero; NSF; "Biochemical and Physiological Characteristics of the Hydrothermal Vent Community Animals"; November 14, 1981.

2485; B.L. McGlamery; RADC; "Evaluation of CIS Performance, II"; November 16, 1981.

2487; R.A. Knox, W.H. Munk, P.F. Worcester, B. Zetler; NSF; "Development and Testing of Acoustic Techniques for Studies of Large-Scale Ocean Variability"; November 13, 1981.

2488; J.J. Simpson; OSU; "ODEX Equipment"; November 17, 1981.

2489; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; November 20, 1981.

2490; M. Tsuchiya; NSF; "Subtropical Circulation of the N Pacific Ocean"; November 18, 1981.

2491; R.R. Hessler; ONR; "Long-Term Deployments of Free-Vehicle Camera Systems"; November 16, 1981.

2492; W.H. Berger, J.S. Killingley, E.S. Vincent; NSF; "Deep-Sea CO₂-: Accumulation, Dissolution and CO₂ Flux"; November 1, 1981.

2493; V.C. Anderson, K.M. Watson; NSSC; "MPL's Research Program in USN Related Technologies"; November 30, 1981.

2494; S.M. Smith; DMA; "Digitizing of Additional Bathymetric Data from Past SIO Cruises"; November 20, 1981.

2496; C. Gautier; NSF; "Satellite Estimations of Large-Scale Insolation over the Tropical Oceans"; n.d.

2497; R.C.J. Somerville; NSF; "Orographic Effects on Planetary Waves"; November 30, 1981.

2498; R.F. Weiss; NSF; "MANOP Bottom Lander Project"; December 1, 1981.

2499; R.F. Weiss; NSF; "Transient Tracers in the Ocean: CO₂ and N₂O Measurements in the N Atlantic"; February 1, 1982.

2500; R.C. Finkel, J.D. Macdougall; NSF; "Magma Evolution and Chronology for Cascade Volcanoes"; n.d.

2501; J.F. Gilbert; NSF; "Density Structure of the Earth's Deep Interior and a Geophysical Determination of the Gravitational Constant"; December 2, 1981.

2502; R. Knox; NSF; "Analysis of Wind and Upper Ocean Current Measurements from the NORPAX Equatorial Experiment"; December 18, 1981.

2503; V.C. Anderson; NORDA; "Augmentation of Design of Seafloor Work System"; December 4, 1981.

2505; J.J. Simpson; OSU; "ODEX Equipment"; December 11, 1981.

2506; R.C.J. Somerville; NOAA; "An Experimental Climate Forecast Center at SIO"; December 17, 1981.

2507; R.R. Hessler, G.D. Wilson; NSF; "Taxonomy, Phylogeny and Biogeography of a Deep-Sea Family (Eurycopidae, Isopoda, Crustacea); December 10, 1981.

2508; J. Namias; DWR; "CA Rainfall Project"; n.d.

2509; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; December 11, 1981.

2510; J.N. Brune, A.H. Olson; NSF; "Inversion of Earthquake Ground Motion for Dynamic Fault Slip"; December 15, 1981.

2511; J.R. Curry; NSF; "DSRV Alvin Diving on the W FL Escarpment"; January 25, 1982.

2512; W.R. Riedel; NSF; "Quantification of Morphological Change in Evolving Eocene and Oligocene Radiolarians"; December 16, 1981.

2515; M.J. Tegner; LAFGC; "Transplantation of Broodstock Abalones at Palos Verdes"; December 16, 1981.

2516; V.C. Anderson, K.M. Watson; ONR; "R/P Flip Support"; December 15, 1981.

2517; R.R. Hessler; NSF; "Community Structure and Small Scale Distribution of Benthic Megafauna at 21°N, EPR"; December 18, 1981.

2518; R.E. Davis; NASA; "Development of a Self- Contained ADVP"; December 16, 1981.

2519; R.C.J. Somerville; NSF; "Nonlinear Interactions Between Convection, Rotations, and Shear Flows"; December 17, 1981.

2520; T.H. Jordan; NSF; "Studies of the Earth's Aspherical Heterogeneities"; December 18, 1981.

2521; K.H. Neelson, NSF; "Energy Transfer in Bacterial Bioluminescence: Properties and Role of Yellow Fluorescent Protein in *Vibrio fischeri*"; December 4, 1981.

2521; W.H. Fenical; NSF; "Natural Products Chemistry of Marine Algae from the S China Sea"; January 8, 1982.

2523; K.H. Neelson, J. Warner; ONR; "Mechanism of Bioluminescences: Kinetic-Spectral and Biochemical Properties as a Probe of Marine Communities and Interactions"; December 4, 1981.

Active Contracts and Grants; January 1982.

2525; E.L. Winterer; NSF; "Jurassic and Early Cretaceous Tectonic and Sedimentation History of the Central Atlantic, W Tethys, and Pacific Ocean Basins"; January 20, 1982.

2526; R.L. Parker; NSF; "Exact Nonlinear Inversion of Electrical Soundings"; January 15, 1982.

2526R1; R.L. Parker; NSF; "Exact Nonlinear Inversion of Electrical Soundings"; May 12, 1982.

2528; S.A. Tont; NSF; "On the Analysis and Prediction of Phytoplankton Populations near the Coast of S CA"; n.d.

2529; K.E. Kenyon; NSF; "N Pacific Sea Surface Temperature Studies"; January 18, 1982.

2530; M.M. Mullin; NSF; "Feeding, Growth, and Population Dynamics of the Marine Cladocera, *Penilia avirostris* Lab and Field Studies"; January 8, 1982.

2532; V.C. Anderson, K.M. Watson; ONR; "Vertical Digital Array"; November 1, 1982.

2533; P. Lonsdale, F.N. Spiess; JOII; "Transponder Acquisition for Hydrogeology Leg 84 Survey"; January 8, 1982.

2534; K.L. Smith; NSF; "Ecological Energetic Studies of a Deep-Sea Hydrothermal Vent Community on the EPR at 21°N"; January 7, 1982.

2535; R.R. Hessler; SNL; "Study of Scavenging Amphipod Populations on the Cascadian Abyssal Plain"; January 12, 1982.

2537; R.L. Michel; NSF; "14C as a Tracer for CO2 Uptake by the Ocean: Termination of 14C and 3H in Upwelling H2O Masses of the CA Current"; n.d.

2538; D.P. Costa; NSF; "Bioenergetics of the Antarctic Fur Seal, *Arctocephalus gazella*"; January 12, 1982.

2539; R.W. Johnson; DOAF; "Optical IR Model for Operations Support"; January 14, 1982.

2540; J. Cox, M. Huntley; NSF; "Feeding Activity and the Kinetics of Laminarinase β -1, 3 glucanohydrolase) in Zooplankton Herbivores: A Quantitative Lab Study"; January 6, 1982.

2541; J.S. McClain, J.A. Orcutt; NSF; "Microseismicity on the EPR at 20°S"; January 18, 1982.

2542; W.H. Berger, C.D. Keeling, R.C.J. Somerville; EPRI; "Interdisciplinary Research on CO2 and Climate"; January 18, 1982.

2543; D.W. Wilkie; IMS; "Request for General Operating Support"; January 15, 1982.

2544; R.R. Hessler; SNL; "Photo Survey, Cascadian Abyssal Plain"; January 21, 1982.

2545; F.N. Spiess; UCSB; "Deep Tow Studies of the EPR 20°S"; January 18, 1982.

2546; R.N. Hey, J.A. Orcutt, F.N. Spiess; NSF; "High Resolution Study of Rift Propagation on the Juan de Fuca Spreading Center"; January 26, 1982.

2547; J.D. Frautschy, M.M. Mullin; NSF; "Controlled Environment Facility (Deep Tank)"; January 19, 1982.

2549; D.L. Inman; DON; "Studies in Sedimentation Control for USN Harbors"; January 22, 1982.

2550; R.W. Eppley; NSF; "Request for a 15N Emission Spectrometer for Plankton Rate Process Measurements in the Ocean"; January 21, 1982.

2551; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Studies of EPR and W Pacific Basin Basalts"; January 25, 1982.

2552; G.L. Kooyman, F.N. White; NSF; "Rehabilitation of Marine Animal Research Pools"; January 29, 1982.

2553; C.D. Keeling; NSF; "Absolute Abundance and Variability of Dissolved Inorganic C in Ocean H2O"; January 27, 1982.

2553R1; C.D. Keeling; NSF; "Absolute Abundance and Variability of Dissolved Inorganic C in Ocean H2O"; July 8, 1982.

2554; R.L. Parker; NSF; "Generalized Separability"; March 1, 1982.

2555; P.F. Lonsdale, G.F. Moore; NSF; "Deep Tow Studies of the Mid-America Trench"; January 27, 1982.

2556; G.N. Somero; NSF; "Pressure, Temperature, and Solute Effects on Protein Assembly and Enzymatic Catalysis: A Mechanistic and Evolutionary Analysis"; January 27, 1982.

2557; W.R. Riedel; WHOI; "Pelagic Opal: Seasonality, Production, Flux, and Preservation of Biogenic Silica Particles"; January 25, 1982.

2558; F. Azam; NSF; "Bacterial Growth and the Turnover of Organic Compounds in Coastal H₂O"; January 29, 1982.

2561; A.A. Yayanos; NSF; "Characterization and Ecology of Deep-Sea Barophilic Bacteria"; January 28, 1982.

2563; H.W. Menard; NSF; "Oceanic Midplate Volcanoes and Swells"; January 28, 1982.

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2564; G.O. Arrhenius; TESI; "Thermochemical Principles of Crystallization and Hydration"; January 30, 1982.

2565; Y. Chung; NSF; "Geochemical Studies of ²²⁶Ra and ²¹⁰Pb in the NE Pacific: Radioactive Disequilibrium, ²¹⁰Pb Partitioning, and Particle Abundance and Size Distribution"; January 29, 1982.

2566; R.C. Finkel; NSF; "The Marine Geochemistry of Be: Determination of ¹⁰Be Concentrations in Seawater"; February 1, 1982.

2567; J. Berger, J.N. Brune; USGS; "Seismic Source Mechanism Studies in the Anza-Coyote Seismic Gap"; February 23, 1982.

2568; J. Berger, F. Wyatt; USGS; "Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; February 23, 1982.

2568R1; J. Berger; USGS; "Studies of the Seismic and Crustal Patterns of an Active Fault: PFGO"; August 6, 1982.

2569; D.C. Agnew, J. Berger, F. Wyatt; USGS; "CDO Part D Field Operational Support, Data Logging Facilities, and Concurrent Investigations"; February 23, 1982.

2569R1; J. Berger; USGS; "CDO, Part D Field Operation Support, Data Logging Facilities, and Concurrent Investigations"; August 6, 1982.

2570; E.D. Goldberg; EPA; "Historical Acid Rain Records in Lake Sediments"; n.d.

2571; K.E. Kenyon; SAI; "Velocity Measurements of the Gulf Stream and a Nearby Eddy from Images of Surface Waves"; February 3, 1982.

2572; J.R. Beers; NSF; "Acquisition of an Inverted Microscope: A Marine Biological Research Equipment Proposal"; February 3, 1982.

2574; K.H. Neelson; NSF; "Studies of Mn-Oxidizing Bacteria and Assessment of Their Role in Marine Mn Deposition"; n.d.

2575; W.H. Thomas; SERI; "Preparation of a Bibliography on Microalgae in the American SW Desert Area"; February 5, 1982.

2577; D.H. Roemmich; NSF; "An Equatorial Current Monitoring Experiment"; February 8, 1982.

2578; K.H. Neelson; NSF; "Microelectrode, Geochemical, and Microbiological Analyses of Anaerobic Sediments: The Role of Beggiatoa in C-S Cycling and Sediment Formation"; February 8, 1982.

2579; R.R. Hessler, J.L. Reid, F.N. Spiess, F.N. White; NSF; "Rehabilitation of Space for Use by Visiting Scientists"; February 8, 1982.

2580; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; February 10, 1982.

2581; F. Gilbert; ONR; "Symposium on Mathematical Geophysics"; February 13, 1982.

2582; F. Gilbert; DARPA; "Symposium on Mathematical Geophysics"; February 13, 1982.

2583; F. Gilbert; NASA; "Symposium on Mathematical Geophysics"; February 13, 1982.

2584; J. Berger; USGS; "Supplement To: Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; February 11, 1982.

2585; R.T. Williams; NSF; "Operations Management for Transient Tracers in the Oceans: N Atlantic Study"; February 1982.

2586; R.R. Hessler; WHOI; "Participation in HEBBLE Cruise"; February 11, 1982.

2587; W.S. Hodgkiss; USC; "Adaptive Least Squares Lattice Structures and Their Applications to Problems in Underwater Acoustics"; February 11, 1982.

2588; J. Roads, R.C.J. Somerville; NSF; "Predictability in Atmospheric Models with Topography"; February 18, 1982.

2589; G. Meyers; NSF; "NORPAX: Spatial Scales of Interannual, Annual, and Higher Frequency Temperature Variability Observed during the HI- Tahiti Shuttle Experiment"; February 1982.

2590; R.N. Hey, F.N. Spiess; NSF; "Galapagos Rift System: High Resolution Study of Propagating Rifts"; March 25, 1982.

2592; R. Knox; NSF; "Tropical Wind Stress Analysis"; February 25, 1982.

2593; R.W. Austin; ONR; "Deep Ocean Optical Data Cruise on USNS Bartlett"; February 26, 1982.

2594; F.N. Spiess; UCSB; "Vema Transform Fault: Structure and Tectonics"; February 18, 1982.

2595; F.N. Spiess; NSF; "MANOP Seafloor Investigations and Support"; June 30, 1982.

2596; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; February 18, 1982.

2597; R. Revelle; NSF; "Support for a Scientific Secretary for the CCCO of the SCOR"; February 16, 1982.

2598; J. Namias; NSF; "'Large-Scale Air-Sea Interactions over the N Hemisphere and Associated Impact on Short-Term Climate': Supplement for Workshop March 29-31, 1982"; February 18, 1982.

2599; D.L. Cutchin, W.B. White; ONR; "Procurement of XBT Probes, XBT Recorder, and Satellite Data Transmission Terminal"; February 25, 1982.

2601; Y. Chung; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; February 25, 1982.

2602; F.I. Tsuji; NSF; "Gene Cloning Studies of Firefly Luciferase and Aequorea Apoaequorin"; February 15, 1982.

2603; J.H. Filloux; NSF; "Observation of Tidal and Other Pressure Fluctuations on the Open Ocean Floor"; February 25, 1982.

2604; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; February 24, 1982.

2606; J.G. Anderson; USGS; "Accelerographs for the Study of Wave Propagation during Aftershock Sequences"; February 26, 1982.

2607; V.C. Anderson, K.M. Watson; ONR; "Vertical Noise Analysis"; March 1, 1982.

2608; V.C. Anderson, K.M. Watson; ONR; "Acoustic Surface Duct Fluctuations"; March 1, 1982.

2609; B.E. Volcani; DOHHS; "Biochemical Studies of Siliceous Skeletal Formation"; February 26, 1982.

2610; W.S. Hodgkiss; PSU; "Applications of Dynamic Beamforming to Towed Line Arrays"; March 1, 1982.

2611; V.C. Anderson, D.E. Andrews; PSU; "Development and Evaluation of a New Isolation Module"; March 1, 1982.

2613; J.D. Macdougall; NSF; "Isotopic and Chemical Studies of the Deccan Plateau"; March 2, 1982.

2614; D.A. Leonard; NOAA; "Research on the Effect of Volume Depolarization of Laser Raman Measurement in H₂O"; March 6, 1982.

2615; J.S. McClain, J.A. Orcutt; NSF; "EPR Study: Marine Seismology"; March 17, 1982.

2617; G.L. Kooyman; NSF; "Feeding Behavior and Onshore/Offshore Cycles of SA Fur Seals in Peru"; March 11, 1982.

2620; R.W. Austin; NASA; "CZCS Validation Studies"; March 26, 1982.

2623; R. Parker; UOCC; "Exact Nonlinear Inversion of MT Soundings"; April 26, 1982.

2624R1; W.B. White; NSF; "The Understanding of Atmospheric and Oceanic Processes Responsible for Short-Term Climatic Changes in the Baroclinic Structure of the NW Pacific Ocean Associated with ENSO"; January 12, 1983.

2625; R.E. Lange; ONR; "Physics and Biology of the Upper Ocean"; March 25, 1982.

2626; R.E. Lange; NSF; "Physics and Biology of the Upper Ocean"; March 25, 1982.

2631; R.E. Davis; NPGS; "Illustration Regional Oceanographic Features of the Indian Ocean I"; March 24, 1982.

2633; D.P. Costa; NOAA; "Bioenergetics of the N Fur Seal, Callorhinus ursinus"; March 26, 1982.

2635; V.C. Anderson, K.M. Watson; ONR; "Freely Drifting Swallow Floats"; March 26, 1982.

2636; K.M. Watson; NOSC; "Undersea Vehicle Handling Crane Modifications"; March 29, 1982.

2637; C. Gautier; NSF; "Improvement of Surface Wind Field for SEQUAL Using Satellite Data"; April 5, 1982.

2638; O. Holm-Hansen; NSF; "Studies on the Biomass and Metabolic Activity of Micro- and Nannoplankton in the Ice-Edge Zone of Circum-Continental Antarctic H₂O"; April 14, 1982.

2639; R.T. Williams; UW; "Nutrient Measurements for the Emperor Seamounts Expedition"; March 1982.

Active Contracts and Grants; March 31, 1982.

2640; S.M. Smith; CIT; "Bathymetric Charts, Digital Data on Magnetic Tape, and SEASAT Altimeter Sea Height Profiles on Mercator Projection Plots"; April 2, 1982.

2640; H.T. Hammel; NSF; "Osmoregulatory Responses to Altered Plasma and Interstitial Fluid in Duck and Penguin"; April 12, 1982.

2641; A.E.J. Engel; NSF; "Late Mesozoic-Cenozoic Tectonics along the Salton Trough Peninsular Range Boundary"; April 2, 1982.

2642; C.H. Gautier; CSI; "Large-Scale Latent Heat Flux from Satellite Measurements"; April 15, 1982.

2643; J.O. Roads; CSI; "Diagnosis and Parameterization of Large-Scale Cloudiness for GCM"; April 8, 1982.

2645; V.C. Anderson, K.M. Watson; NORDA; "Spectral Fine Structure Characteristics of Boundary and Volume Reverberation"; April 8, 1982.

2646; V.C. Anderson, W.S. Hodgkiss; DON; "Dynamic Array Element Signal Synthesis"; April 8, 1982.

2647; J.W. Miles; ONR; "Wave Propagation"; April 14, 1982.

2648; J.R. Arnold; NASA; "Development of an Orbital Gamma Ray Experiment for Lunar and Planetary Geochemistry"; April 28, 1982.

2649; J.R. Arnold; UCLA; "Support of UCLA and UCSD Radiocarbon Labs"; April 8, 1982.

2650; W.S. Hodgkiss; DON; "Applications of Dynamic Beamforming to Towed Line Arrays"; April 9, 1982.

2651; F. Arrhenius; KAU; "The Role of Fe Oxyhydroxides in the Environmental Chemistry of the Red Sea"; April 12, 1982.

2652; W.H. Thomas; SERI; "Travel Funds in Conjunction with 'Yields, Photosynthetic Efficiencies, and Proximate Chemical Composition of Dense Cultures of Marine Microalgae, as Affected by N₂ Deficiency and Recovery'"; April 9, 1982.

2653; W.R. Riedel; JOII; "Use of R/V Thomas Washington"; April 13, 1982.

2654; D.A. Leonard; CSI; "Aircraft and Shipboard Instrumentation for Continuous Remote Sensing of Subsurface Ocean Temperature Profiles"; April 16, 1982.

2655; J.J. Simpson; CSI; "An Investigation of the Net Long-Wave Radiative Flux over the Open Ocean"; April 14, 1982.

2656; J.J. Simpson; CSI; "Physical Processes Affecting the Calibration and Interpretation of Remotely-Sensed SST"; April 14, 1982.

2657; R. Lasker; CSI; "Satellite Ocean Remote Sensing Studies Related to Marine Fishery Resources off CA"; April 12, 1982.

2658; D.P. Costa; NGS; "Reproductive Energetics of the Antarctic Fur Seal, *Arctocephalus gazella*"; April 16, 1982.

2659; R.W. Austin; SAI; "Ocean Natural Resources Assessment"; April 16, 1982.

2660; O. Holm-Hansen; NSF; "N₂ Assimilation Rates by Microbial Cells in Circum-Continental Antarctic H₂O"; April 16, 1982.

2662; J. Berger; NSF; "Precision Measurements of Crustal Deformation"; April 22, 1982.

2663; D.L. Cutchin, W.B. White; ONR; "Enhancement of Existing Ship-of-Opportunity XBT Program"; April 21, 1982.

2664; J.J. Simpson; OSU; "ODEX Logistics"; April 21, 1982.

2665; P.F. Lonsdale; JOII; "Use of R/V Thomas Washington"; April 21, 1982.

2667; R.F. Weiss; NSF; "Tropical Atlantic Study: CIFIC4 Measurements"; April 22, 1982.

2667R1; R.F. Weiss; NSF; "Tropical Atlantic Study: CIFIC4 Measurements"; July 14, 1982.

2670; R.E. Davis; NSF; "Current Following Drifters in OPUS"; April 26, 1982.

2671; R.E. Flick; CO; "Beach Sand Level Measurements, Oceanside, CA"; May 3, 1982.

2672; R.E. Flick, D.L. Inman, F.P. Shepard; ACE; "Coast of CA Storm and Tidal Waves: Historical Climate and Shoreline Position Studies"; May 12, 1982.

2673; R.C.J. Somerville; CSI; "Tropical Pacific Heat Fluxes and Climate: A Coupled Ocean-Atmosphere Model"; April 16, 1982.

2674; J.J. Simpson; ONR; "ODEX Logistics"; April 28, 1982.

2675; L. Cheng; NSF; "Constructing a Working Key for the Identification of Nymphs of Oceanic Halobates Species"; April 27, 1982.

2676; E.L. Winterer; NSF; "Stratigraphic and Structural Changes at Crucial Stages in the Evolution of a Typical Tethyan Passive Margin: End of Rifting (Breakup), Drift, End of Drift"; August 23, 1982.

2676R1; E.L. Winterer; NSF; "Stratigraphic and Structural Changes at Crucial Stages in the Evolution of a Typical Tethyan Passive Margin: End of Rifting (Breakup), Drift, End of Drift"; January 27, 1983.

2678; R. Pinkel; NSF; "Intensive Velocity and Density Profiling on the Equator"; June 10, 1982.

2679; C.H. Gautier; NSF; "Heat and Momentum Fluxes at the Atmosphere-Ocean Interface in the Tropics from Combined Satellite and In Situ Measurements: A Contribution to the TROPIC HEAT Program"; June 7, 1982.

2680; A.A. Yayanos; HI; "Lasers and Biofouling"; April 30, 1982.

2681; G.E. Backus, F. Gilbert; ONR; "Geophysical Inverse Problems"; May 20, 1982.

2682; R.R. Hessler; SNL; "Biology of the Central N Pacific"; May 5, 1982.

2683; T.P. Barnett; NSF; "Studies of Climate Predictability and Dynamics"; April 29, 1982.

Active Contracts and Grants; April 30, 1982.

2684; R.W. Eppley; NASA; "Moored Arrays to Help Assess Ocean Productivity from Satellite Measurements"; May 6, 1982.

2684R1; R.W. Eppley; NASA; "Assessing Ocean Productivity from Satellite Measurements"; November 12, 1982.

2687; J.L. Reid; NSF; "An Investigation of the Circulation of the S Atlantic Ocean, the Weddell Gyre, and the Scotia Sea"; May 5, 1982.

2688; T.H. Jordan, J.A. Orcutt; AFOSR; "Seismic Detection and Discrimination Using OBS"; May 5, 1982.

2689; R.F. Weiss; NSF; "MANOP Bottom Lander Project"; July 20, 1982.

2691; E. Brinton; NOAA; "Seasonal Analysis of Anchovy Gonads"; May 6, 1982.

2692; H. Craig, W. Rison; NSF; "Continental and Convergent-Margin Volcanism: Isotopic Studies of Fluids and Rocks"; May 6, 1982.

2694; G.W. Lugmair, J.D. Macdougall; NSF; "Subcontinental Mantle Characteristics Inferred from Isotopic and Chemical Studies of Continental Flood Basalts and Ultramafic Xenoliths from Alkali Basalts"; May 17, 1982.

2694R1; G.W. Lugmair, J.D. Macdougall; NSF; "Subcontinental Mantle Characteristics Inferred from Isotopic and Chemical Studies of Continental Flood Basalts and Ultramafic Xenoliths from Alkali Basalts"; September 27, 1982.

2695; J.G. Stewart; NSF; "An Assessment of Factors that May Regulate Dominance of Algal Anchor Species and Phyllospadix, Respectively, in 2 Adjacent Intertidal Zones"; May 12, 1982.

[Box 17]

2696; G.A. Meyers; NSF; "Large-Scale Variation in Subsurface Temperature of the Tropical Pacific Ocean"; May 7, 1982.

2698; R.E. Flick; ACE; "Longard Tube Assessment Report, Del Mar, CA"; May 6, 1982.

2699; R.T. Guza; NSF; "Analysis of Longshore Current Data"; May 14, 1982.

2700; R.T. Williams; LGO; "Supplemental Funding for Engineering Support to LGO"; May 10, 1982.

2701; J.G. Anderson, J.N. Brune, J.E. Luco; NSF; "Strong Motion Array along the MX Subduction Thrust"; June 23, 1982.

2702; E.A. Hemmingsen; DOHEW; "Studies of Cavitation in Biological Systems"; May 14, 1982.

2705; K.M. Watson; NOAA; "Maintenance, Mobilization and Demobilization of Deep-Sea Crane"; May 13, 1982.

2706; C. Friehe, C.D. Winant; UCI; "Coastal Environmental Program"; n.d.

2707; K.M. Watson; LGO; "Crane Support"; May 13, 1982.

2708; R.J. Seymour; DBW; "CDIP (Collection, Analysis, Reporting, and Storage of Wave Data)"; June 22, 1982.

2709; R.T. Williams; MIT; "Nutrient Chemistry Support to MIT"; May 1982.

2710; C.S. Cox; ONR; "Active Source EM Profiling Experiments"; May 18, 1982.

2711; C.S. Cox; ONR; "EM Probing of the Ocean Crust and Study of Anomalous Magnetic Fields over the Ocean"; May 18, 1982.

2713; V.C. Anderson; ONR; "Active Baffle Development Under ACSAS Task II Hydrophone and Inner Decoupler"; May 18, 1982.

2715; R.A. Lewin; NSF; "Abscission of Cilia or Flagella: Its Induction and Control"; May 21, 1982.

2716; F.H. Fisher; NSF; "A Summary of Accomplishments and Expenditures from July 1, 1981 and Projected through June 30, 1982 on NSF Grant OCE 81-13068"; May 21, 1982.

2717; E.D. Goldberg; DOE; "Marine Geochemistry Research"; May 24, 1982.

2718; K.H. Neelson, J.A. Warner; ONR; "Mechanism of Bioluminescences: Kinetic-Spectral and Biochemical Properties as a Probe of Marine Communities and Interactions"; May 26, 1982.

2719; R.E. Davis, J.M. Gieskes, D.L. Inman, R.T. Williams, C.D. Winant; EGGE; "SB Channel Circulation Model and Field Study Sub-Contract Proposal"; n.d.

2720; J.A. Orcutt; ACS; "Seismic Constraints on the Structure of the Lower Continental Crust"; May 28, 1982.

2721; M. Tsuchiya; NSF; "Tropical and Subtropical Circulation of the Atlantic Ocean"; May 24, 1982.

2722; R.T. Williams; WHOI; "Nutrient Chemistry Support to WHOI"; May 1982.

2723; R.T. Williams; WHOI; "Nutrient Chemistry Support to WHOI"; May 1982.

2724; C. Gautier; NSF; "Satellite-Derived Characteristics of Insolation in the Tropical Pacific and Indian Ocean during FGGE"; July 16, 1982.

2725; F.H. Fisher, R.B. Williams; ARPA; "Shallow H₂O Duct Experiments"; May 25, 1982.

2726; H.W. Menard; NSF; "Early Stages of Insular Subsidence"; June 7, 1982.

2727; E.S. Vincent; NSF; "Environmental Changes and Diversification of Foraminifera during the Early Miocene in the Equatorial Pacific Ocean"; June 15, 1982.

2728; J. Mammerickx; NSF; "In Search of True Low Heat Flows: Jurassic Lithosphere of the W Pacific"; June 8, 1982.

2729; R.C. Finkel, J.D. Maccougall; NSF; "U-Th Isotope Disequilibrium Systematics in EPR Basalts"; May 28, 1982.

2730; P.K. Dayton, G. Jackson, M.J. Tegner, C.D. Winant; NSF; "How Do Kelp Forests Interact with the Ocean?"; June 15, 1982.

2732; P.S. Doyle, W.R. Riedel; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic Pelagic Sediments"; June 1, 1982.

2733; R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "OAT: A Gyre-Scale Experiment"; June 9, 1982.

2736; L.A. Regier; OSU; "Statement of Work to be Performed by L.A. Regier, SIO, UCSD, in a Cooperative Experiment with D.R. Caldwell, T.M. Dillon, C.A. Paulson, School of Oceanography, OSU"; June 2, 1982.

2737; R. Davis, R. Knox, D. Luther, D. Roemmich; NSF; "Observations and Analyses of Equatorial Pacific Upper Ocean Currents and Temperatures and of Surface Meteorological Fields in TROPIC HEAT"; June 3, 1982.

2738; T.J. Chow, E.D. Goldberg; NSF; "240Pu/239Pu Ratios, a Geochronological Tool for Marine Studies"; June 2, 1982.

2739; H.R. Thierstein; NSF; "Stable Isotopes of Quaternary Calcareous Nannofossils"; June 2, 1982.

2740; R.L. Michel; NSF; "Changes in N Pacific Subtropical 3H Distributions"; June 9, 1982.

2741; G.A. Meyers; NSF; "Large Scale Variation in Surface Heat Storage and Thermocline Topography of the Tropical Pacific Ocean"; June 10, 1982.

2742; W.T. Coulbourn; NSF; "Late Pleistocene Climatic Cycles Recorded in Foraminiferal Sediments of the Caribbean Sea"; June 11, 1982.

2743; K.M. Watson; NORDA; "R/P Flip and Boom Support"; June 3, 1982.

2744R1; D.J. Pierotti; NSF; "Distribution of Natural Halogenated Hydrocarbon in the Environment"; February 28, 1983.

2745; R.C. Tyce; NORDA; "Side Looking Sonar for AUSS"; June 4, 1982.

2746; G.G. Shor; NSF; "Ship Operations Support: A Continuation of OCE 80-24472"; June 18, 1982.

2747; R.T. Williams; NSF; "Sea-Going Equipment Acquisition and Development"; June 1982.

2747R1; R.T. Williams; NSF; "Sea-Going Equipment Acquisition and Development"; April 21, 1983.

2748; K.H. Nealson; NSF; "Rates of Bacterial Mn (II) Oxidation in the Marine Environment"; n.d.

2749; L.M. Dorman, M.S. Reichle; NSF; "A Lithospheric Profile Using Earthquakes in the Aleutians"; June 10, 1982.

2752; J.L. Bada; DOHHS; "Aspartic Acid Racemization: Relationship to Aging"; June 21, 1982.

2754; J.N. Brune, M. Reichle; DOC; "CA-MX Seismic Hazards Reduction Program"; June 7, 1982.

2755; R.C. Finkel; NSF; "The Marine Geochemistry of Be: Determination of 10Be Concentrations in Seawater"; n.d.

2757; G.G. Shor; NSF; "Shipboard Technician Support"; June 29, 1982.

2759; G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; June 29, 1982.

2759R1; G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; November 30, 1982.

2760; J.R. Arnold; LANL; "Condensation Processes in the Early Solar System"; June 14, 1982.

2761; C.D. Keeling; EPRI; "Interdisciplinary Research on CO₂ and Climate"; June 18, 1982.

2762; Y. Chung; NSF; "210Pb and 226Ra in the E Basin of the Pacific"; June 15, 1982.

2763; J.W. Hawkins; NSF; "Mariana Fore-Arc Tectonics-Petrology (Joint Project with UH)"; June 18, 1982.

2764; F.C. Knowles; NSF; "The Regulatory Role of 3,4-anhydribose-5-phosphate in Photosynthesis"; June 17, 1982.

2765; P.P. Niiler; NSF; "Measurements of Air-Sea Fluxes and Local Heat Storage in the Tropical Pacific"; June 16, 1982.

2766; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; June 21, 1982.

2767; R.A. Knox, W.H. Munk, P.F. Worcester; ONR; "OAT: A Gyre-Scale Experiment"; June 9, 1982.

2769; R.J. Seymour; DBW; "Beach Profile Collection and Analysis"; June 22, 1982.

2770; R.N. Hey; NSF; "Tectonic Evolution of the Easter Microplate/Propagating Rift System"; June 22, 1982.

2771; J.B. Graham; NSF; "Contributions of Endothermy to the Myotomal Muscle Specializations and Energetics of Locomotion of Tunas, Family Scombridae"; June 21, 1982.

2772; M. Huntley; NSF; "Particle Rejection Behavior in Marine Copepods"; June 23, 1982.

2773; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; June 22, 1982.

2774; R.R. Hessler, G.D. Wilson; NSF; "Systematics of a Deep-Sea Family (Eurycopidae, Isopoda, Crustacea)"; June 23, 1982.

2775; H.D.I. Abarbanel; DARPA; "Nonlinear Dynamics and Internal Waves"; July 29, 1982.

2776; J.J. Sullivan; NOAA; "UCSG Program"; June 18, 1982.

2777; V.C. Anderson; ONR; "Active Baffle Development under ACSAS Task II Hydrophone and Inner Decoupler"; June 28, 1982.

2778; A.A. Yayanos; DOHHS; "Volume Changes in Trypsin-Inhibitor Reactions"; June 29, 1982.

Active Contracts and Grants; July 1, 1982.

2779; J.N. Brune, K. Priestley, M.S. Reichle; NSF; "Long Period Seismograph Array for Crust and Mantle Studies in MX"; July 14, 1982.

2780; T.D. DeLaca, W.L. Stockton; NSF; "The Ecology of the Shallow-H₂O Benthos of McMurdo Sound, Antarctica"; July 9, 1982.

2781; R.A. Lewin; NASA; "Prochloron Workshop"; July 7, 1982.

2783; H. Craig, W. Rison; NSF; "Oceanic Basalts: Rare Gas, H and C Concentrations, and Isotope Ratios"; July 13, 1982.

2783R1; H. Craig, W. Rison; NSF; "Oceanic Basalts: Rare Gas, H and C Concentrations, and Isotope Ratios"; September 27, 1982.

2784; G.F. Moore, T.H. Shipley; NSF; "High Resolution Studies of Sediment Accretion and Subduction along the Mid-America Trench"; July 26, 1982.

2785; J. Berger; USGS; "Supplement to: Studies of Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; July 13, 1982.

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2786; R.E. Davis, C.D. Winant; NSF; "CODE: The Small Scale Array"; July 9, 1982.

2787; R.W. Austin; CIT; "Fisheries Demonstration Program"; July 19, 1982.

2790; P.P. Niiler; OSU; "Subcontract for 'Circulation of the Upper Pacific Ocean'"; July 12, 1982.

2792; R. Pinkel; NORDA; "Upper Ocean Background Measurements"; July 16, 1982.

2793; R.T. Williams; LGO; "Support to LGO Ra Program during the Tropical Atlantic Study"; August 1982.

2794; A. Soutar; UCSC; "Subcontract from UCSC for Development and Testing of Sediment Trap Device"; July 17, 1982.

2795; A. Soutar; OSU; "Subcontract for Participation in Program Entitled 'Mn Nodule Program, 1983-85'"; July 13, 1982.

2796; C.J. Koblinsky, P.P. Niiler; NSF; "Direct Measurements of the Circulation in the NE Pacific Ocean"; August 2, 1982.

2797; J. Berger; NASA; "Absolute Gravity Measurements near Crustal Dynamics Project Sites"; July 20, 1982.

2798; J. Berger; NASA; "High Precision Measurements of Crustal Dynamics in S CA"; July 20, 1982.

2800; R.W. Davis; NSF; "Bio-Energetics of Gentoo and Macaroni Penguins on S Georgia Island"; July 20, 1982.

2801; J. Berger; USGS; "Supplement to Contract 14-08-0001-18397"; July 21, 1982.

2802; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; July 27, 1982.

2804; M.H. Salisbury; NSF; "Geophysical Logging in the Troodos Ophiolite Complex"; August 16, 1982.

2804R1; M.H. Salisbury; NSF; "Geophysical Logging in the Troodos Ophiolite Complex"; February 18, 1983.

2805; G.W. Lugmair; NASA; "Isotopic, Chemical and Mineralogical Investigations of Extraterrestrial Materials"; August 3, 1982.

2806; G.E. Backus; NSF; "The EM Properties of the Lower Mantle and Upper Core"; August 5, 1982.

2808; F.H. Fisher, R.B. Williams; NORDA; "Multipath/Caustics"; July 29, 1982.

2809; J.W. Miles; MIT; "Wave Shear-Flow Interaction"; July 29, 1982.

2810; J.S. Killingley; ACS; "Occurrence and Diagenesis of Organic C in Marine Sediments: Applications to Oceanic Paleofertility and Geochronology"; July 30, 1982.

2811; J.H. Filloux; NSF; "SFMT Exploration W Pacific Studies"; August 2, 1982.

2812; F. Gilbert, T.G. Masters; NSF; "Density Structure of the Earth's Deep Interior"; August 10, 1982.

2813; W.H. Berger; EPRI; "Ocean-Atmosphere Interaction in the Context of the CO2 Problem"; August 3, 1982.

2814; V.C. Anderson, D.E. Andrews; PSU; "Development and Evaluation of a New Isolation Module"; August 4, 1982.

2815; H. Craig; NSF; "CH4, He, and Trace Gases in Polar Ice Cores"; August 11, 1982.

2816; H. Craig; NSF; "Isotopic Studies: Atmospheric CH4 and N2O; 81Kr in Polar Ice Cores"; August 4, 1982.

2817; T.H. Jordan, R.D. Moore, J.A. Orcutt; ONR; "Modernization of SIO's OBS Support Instrumentation"; August 30, 1982.

2818; R.E. Davis; ONR; "Production and Interpretation of IR Images of the Ocean: Thermal Structure Description and Prediction"; August 5, 1982.

2820; A.D. Chave, C.S. Cox; ONR; "Deep Controlled Source EM Soundings to Detect Low Electrical Conductivity Zones in the Lithosphere"; August 12, 1982.

2821; J.M. Gieskes; NSF; "Mn-Geochemistry in the Guaymas Basin (Gulf of CA): Hydrothermal and Diagenetic Influences"; July 20, 1982.

Active Contracts and Grants; July 30, 1982.

2822; A.A. Benson; NSF; "Oceanic Arsenic Detoxication"; n.d.

2824; G.L. Kooyman; NOAA; "Effects of Net Entanglement on Cost of Transport in a Sea Lion"; n.d.

2825; O. Holm-Hansen; NSF; "Photoecology of Phytoplankton in Antarctic H2O"; October 7, 1982.

2826; W.R. Riedel; UD; "Radiolaria and Microtektites near the Eocene/Oligocene Boundary on Barbados"; August 11, 1982.

2827; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; August 13, 1982.

2829; F.N. Spiess; NASA; "Development of a Method for Accurately Tying Sea Surface Positions to a Deep-Sea Floor Reference Point"; August 12, 1982.

2830; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; August 13, 1982.

2832; D.L. Cutchin, W.B. White; ONR; "Operation of a Ship-of-Opportunity XBT Deployment Program in the Pacific Ocean"; August 17, 1982.

2833; T.E. DeLaca; NSF; "The Trophic Positions of Benthic Rhizopoda in Antarctic Communities"; August 17, 1982.

2834; A.D. Chave; ONR; "An Environmental Assessment of EM Fields in the Ocean"; August 17, 1982.

2835; J.H. Natland; NSF; "The Samoan Linear Volcanic Chain: Influence of an Undepleted Upper Mantle Lava Source Evaluated in Time and Space"; August 30, 1982.

2835R1; J.H. Natland; NSF; "The Samoan Linear Volcanic Chain: Influence of an Undepleted Upper Mantle Lava Source Evaluated in Time and Space"; January 5, 1983.

2836; W.H. Berger, R.S. Keir, J.S. Killingley, E.S. Vincent; NSF; "Deep-Sea CO32-: Accumulation, Dissolution, and CO2 Flux"; September 7, 1982.

2836R1; W.H. Berger, R.S. Keir, J.S. Killingley, E.S. Vincent; NSF; "Deep-Sea CO32-: Accumulation, Dissolution, and CO2 Flux"; January 25, 1983.

2837; K.D. Macdonald, J. Mammerickx; ONR; "SeaBeam Investigations of a Jumped Spreading Ridge, the Orozco Fracture Zone and the EPR (the ROSE Areas)"; August 18, 1982.

2838; G. Arrhenius; NASA; "Template Directed Synthesis of Polynucleotides in 1-D Mineral Substrate Sites"; August 27, 1982.

2839; J.M. Gieskes; NSF; "Investigations of Interstitial H₂O of DSDP Cores: A Cooperative Study"; n.d.

2840; R.L. Michel; NSF; "3H Distributions in Bering Sea H₂O Masses"; August 23, 1982.

2841; D.L. Inman; NJMSC; "Coastal Management and Shore Processes in the SE Mediterranean. A Joint US/Egyptian/Israeli Cooperative Study"; August 18, 1982.

2842; G.G. Shor; URI; "SeaBeam and Underway Data Services on R/V Thomas Washington"; August 19, 1982.

2843; V.C. Anderson, K.M. Watson; ONR; "Program in Marine Physics Applied to USN Undersea Missions"; September 10, 1982.

2844; H.R. Thierstein, E. Vincent; NSF; "Geometric Shape Analyses of Modern Neogene Planktonic Foraminifera"; August 26, 1982.

2845; J. Berger; NSF; "AGM Construction and Deployment"; August 24, 1982.

2846; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; August 25, 1982.

2847; K.H. Neelson; NSF; "Studies of Mn-Oxidizing and Reducing Bacteria and the Assessment of Their Roles in the Marine Mn Cycle"; n.d.

2848; E. Brinton, M. Huntley; NSF; "Feeding, Growth and Early Development of *Euphausia superba* Dana in the S Scotia Sea"; August 27, 1982.

2851; V.C. Anderson, K.M. Watson; ONR; "Continuation of the Interdisciplinary Research Program at MPL"; September 15, 1982.

2852; F.N. Spiess; NOAA; "Support of LCDR A.E. Theberge"; August 31, 1982.

2853; R.W. Austin; ONR; "Assessment and Modeling of Ocean Optical Properties"; October 21, 1982.

2855; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; September 10, 1982.

2856; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; September 13, 1982.

2857; M.E. Huntley; NSF; "Food Preferences of Larval *Euphausia superba* and Other Antarctic Ice-Edge Zooplankton"; September 8, 1982.

2858; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; September 7, 1982.

2859; J. Namias; NSF; "NSF ATM 81-18115 Continuation"; September 2, 1982.

2860; W.R. Riedel, A. Sanfilippo; NSF; "Application of Radiolarian and Ichthyolith Stratigraphy to Some Problems of Paleogene Microtektites"; September 23, 1982.

2860R1; W.R. Riedel, A. Sanfilippo; NSF; "Application of Radiolarian and Ichthyolith Stratigraphy to Some Problems of Paleogene Microtektites"; January 10, 1983.

2861; F.N. Spiess; NASA; "Hyperbolic Transponder Augmentation to Development of a Method for Accurately Tying Sea Surface Positions to a Deep-Sea Floor Reference Point"; September 13, 1982.

2863; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean"; September 8, 1982.

2864; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 9, 1982.

2865; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 9, 1982.

2866; D.L. Inman; CITE; "Effects of Waves, Winds, and Currents on the Stability of the Ebro Delta"; September 9, 1982.

2867; T.H. Shipley; JOII; "Site Surveys of the Peru Trench"; September 14, 1982.

2868; J.J. Simpson; OSU; "ODEX Logistics Tug Support for R/P Flip"; September 14, 1982.

2869; P.K. Dayton, G.L. Kooyman; NSF; "Life Under Thick Ice"; September 15, 1982.

2870; N.D. Holland; NSF; "Microevents of Particle Capture during Suspension Feeding by Feather Stars (Echinodermata: Crinoidea)"; September 15, 1982.

2871; J.S. Killingley; NSF; "Effects of Diagenetic Recrystallization on the $\delta^{18}\text{O}$ Values of Deep-Sea Sediments and Implications for Paleotemperature Reconstructions"; September 23, 1982.

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2872; R.H. Rosenblatt; NSF; "A Genetic Study of Allopatric Populations of Shorefish Species from an Oceanic Island and a Mainland Coast"; September 22, 1982.

2873; J.B. Graham; NSF; "Specializations for Air Breathing and Aspects of the Ecology and Natural History of the Swamp Eel, *Synbranchus marmoratus*, (Bloch): Comparison of Central and SA Populations"; n.d.

2874; J.R. Curray, T.H. Shipley; NSF; "Increasing Seismic Reflection Capabilities on the R/V Thomas Washington during Mid-Life Overhaul"; September 22, 1982.

2874R1; J.R. Curray, T.H. Shipley; NSF; "Increasing Seismic Reflection Capabilities on the R/V Thomas Washington during Mid-Life Overhaul"; April 27, 1983.

2876; R.T. Williams; NSF; "A National Facility for Hydrographic and Chemical Data Acquisition"; September 1982.

2877; R.W. Austin; ONR; "Deep Ocean Optical Data Cruise on USNS Desteiguer"; September 22, 1982.

2879; R.R. Hessler; SNL; "The Biology of the Central N Pacific"; n.d.

2881; H. Craig; ONR; "Equipping a Dedicated Lab for Geochemical Research Using DSV"; September 23, 1982.

2882; W.R. Riedel, A. Sanfilippo; NSF; "Stratigraphy, Taxonomy, and Paleocology of Cenozoic Radiolaria"; September 24, 1982.

2883; J.S. McClain, J.A. Orcutt; NSF; "EPR Study: Marine Seismology"; October 1, 1982.

2884; F. Azam; NSF; "Fate of Bacterial Secondary Production in the Sea: The Role of Marine Bdellovibrios as Predators of Bacteria"; October 1, 1982.

2885; E. Brinton; NSF; "Omnivorous Feeding by NE Pacific Euphausiids"; September 29, 1982.

2886; J.L. Bada; DOHHS; "Aspartic Acid Racemization: Relationship to Aging"; September 30, 1982.

2887; W.A. Nierenberg; WMKF; "Equipment and Shelter to Support Research on the Detection of Electric and Magnetic Fields by Marine Organisms"; October 1, 1982.

2889; J.D. Horel; NSF; "An Analysis of Spatial Persistence and Quasi-Stationary Regimes"; October 1, 1982.

2893; R.T. Guza; ONR; "Measurement Systems for Directional Properties of Gravity Waves"; n.d.

2894; R.E. Flick, R.T. Guza, D.L. Inman, S.A. Jenkins, C.D. Winant; ONR; "Fluid Sediment Interactions of Beaches and Shelves"; n.d.

2895; R.C. Finkel, M. Kastner; NSF; "Paleohydrothermal Sedimentation and Diagenesis in the S Pacific across the W Flank of the EPR at ~19°S, 116°-130°W"; October 7, 1982.

2896; C.D. Keeling; NSF; "N Atlantic Study of the Transient Tracers and the Ocean Programs Measurements of CO₂ to High Accuracy in the N Atlantic"; October 18, 1982.

2897; M.M. Mullin; NSF; "In Situ Measurements of Grazing on Bacteria and Phytoplankton"; October 12, 1982.

2898; G.N. Somero; NSF; "Temperature, Pressure, and Solute Effects on Protein Assembly and Enzymic Catalysis: Mechanisms of Cellular Regulation and Molecular Evolution"; October 11, 1982.

2898R1; G.N. Somero; NSF; "Temperature, Pressure, and Solute Effects on Protein Assembly and Enzymic Catalysis: Mechanisms of Cellular Regulation and Metabolic Evolution"; May 15, 1983.

2899; E. Brinton, R.E. Lange; NSF; "Biology, Physics, and Chemistry of Large Patches of 'Krill' (Euphausia superba)"; October 12, 1982.

2900; A.F. Carlucci, P.M. Williams; NSF; "Studies on Sea Surface Films: Chemistry, and Microbiology of Film Formation, Composition and Alteration"; October 15, 1982.

2901; J.T. Enright; NSF; "Studies of Ocular Translation"; October 21, 1982.

2902; R.W. Austin; CIT; "Fisheries Demonstration Program"; October 18, 1982.

2904; T.H. Jordan, J.A. Orcutt; NORDA; "SIO Participation in S Pacific Deployment of the Marine Seismic System"; October 11, 1982.

2905; J.A. Orcutt; PAC; "Directional Properties of Seismic Noise at High Frequencies"; January 4, 1983.

2906; R.C. Finkel, J.D. Macdougall; NSF; "U-Th Isotope Disequilibrium Systematics in the EPR Basalts"; October 13, 1982.

2907; K.M. Watson; NORDA; "R/P Boom Support"; October 14, 1982.

2908; G.N. Somero; NSF; "The Transport and Detoxification of S₂- by Animals from S₂-Rich Marine Habitats"; October 13, 1982.

2909; J.H. Filloux; NSF; "Continuation of a Program of Broadband Observations of Pressure Fluctuations on the Deep-Sea Floor"; October 10, 1982.

2910; R.W. Austin; ONR; "Remote Sensing of Bioluminescence"; October 21, 1982.

2915; K.E. Kenyon; NSF; "Velocity Measurements of the CA System from Images of Surface Waves"; October 22, 1982.

2916; J.B. Graham; NSF; "A Study of the Metabolic Cost of Locomotion for Tunas and Other Pelagic Fishes"; October 26, 1982.

2917; C.D. Keeling; NOAA; "Continuance and Intercomparison of Atmospheric CO₂ Measurements at MLO"; November 5, 1982.

2918; C.D. Keeling; NBS; "Calibration of CO₂ Standard Reference Material"; November 5, 1982.

2920; G.N. Somero; DOHHS; "The Transport and Detoxification of S2- by Animals from S2--Rich Marine Habitats"; October 27, 1982.

2921; J.G. Anderson, J.N. Brune, J.E. Luco; NSF; "Numerical and Experimental Studies of Earthquakes and Earthquake Strong Motion"; November 1, 1982.

2922; R.R. Hessler, F.N. Spiess; NOAA; "A Study of Benthic Impacts of Test Mining at DOMES Site 'C'"; November 29, 1982.

2923; R.E. Flick, R.T. Guza, D.L. Inman, S.A. Jenkins, C.D. Winant; ONR; "Positioning-Tracking- Data Transmission System"; November 1, 1982.

2924; B.L. McGlamery; RADC; "Evaluation of CIS Performance"; November 3, 1982.

2925; L. Armi; NSF; "Transient Tracers in the Ocean: Ocean Mixing Circulation"; November 1, 1982.

2928; D.J. Faulkner; DOHHS; "Antibiotics from Marine Organisms"; November 5, 1982.

2931; G.G. Shor; ONR; "Shipboard Computer Replacement: R/V Melville and Thomas Washington"; November 23, 1982.

2932; G.G. Shor; ONR; "Increasing Geochemical Research Capabilities of the 6 Large University Research Ships"; November 23, 1982.

2935; G.G. Shor; NSF; "New Early Solar System"; November 10, 1982.

2936; R.L. Michel; UERG; "Migration of Chemical Constituents in Snowpack and Snowfall"; November 11, 1982.

2936; W.F. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing in Electric Fish"; November 18, 1982.

2940; W. Fenical; ONR; "Natural Shark Repellants: Chemical Studies of Marine Defensive Agents"; November 19, 1982.

2941; W.S. Hering, R.W. Johnson; ONR; "Atmospheric Effects Upon Visible and IR Image Propagation"; November 22, 1982.

2942; J.R. Curray, T.H. Shipley; ONR; "Increasing Seismic Reflection Capabilities on the R/V Thomas Washington"; November 12, 1982.

2945; M. Hendershott, D. Luther; NSF; "Normal Modes of the Pacific: Observations and Theory"; November 15, 1982.

2946; A.J. Kalmijn; DOD; "Detection and Control of Ultra Weak DC and Low-Frequency EM Fields of Marine Animals and Underwater Equipment"; November 17, 1982.

2947; R.H. Lovberg, M.A. Zumberge; ONR; "Atomic Wavelength Standard for High Precision Geodesy"; November 22, 1982.

2950; J.B. Graham; ONR; "A Continuous Regulated Flow Swimming Channel for Experimental Analyses of the Swimming Kinematics and Transport Efficiencies of Large Pelagic Fishes Such as Tunas"; November 18, 1982.

2951; R.A. Knox; ONR; "Equipment for Moored Oceanographic Measurements"; November 5, 1982.

2952; G.G. Shor; WHOI; "Support Service for CR Rift Expedition on the R/V Ellen Browning Scripps"; November 19, 1982.

2953; R.T. Williams; ONR; "Pressure, Temperature, and Conductivity Calibration Facility"; November 1982.

2954; V.C. Anderson, K.M. Watson; ONR; "RUM III"; November 19, 1982.

2955; V.C. Anderson, K.M. Watson; ONR; "R/P Flip Instrumentation Program"; November 19, 1982.

2956; V.C. Anderson, K.M. Watson; ONR; "Deep Tow Cable Testing System"; November 19, 1982.

2957; V.C. Anderson, K.M. Watson; ONR; "Acoustic Calibration System"; November 19, 1982.

2957R1; V.C. Anderson, K.M. Watson; ONR; "MPL Research Instrumentation"; June 29, 1983.

2958; V.C. Anderson, K.M. Watson; ONR; "Computer Aided Design System"; November 19, 1982.

2959; V.C. Anderson, K.M. Watson; ONR; "Deep Ocean Recovery System"; November 19, 1982.

2960; V.C. Anderson, K.M. Watson; ONR; "Seafloor Gravimeter System"; November 19, 1982.

2961; V.C. Anderson, K.M. Watson; ONR; "Digital Test Instrumentation"; November 19, 1982.

2963; D.L. Inman, E.L. Winterer; ONR; "Multisystem, Multichannel High-Resolution Seismic Reflection Profiling System in Support of Research in Submarine Geology and Geophysics"; November 22, 1982.

2964; C.D. Keeling; EPRI; "Global CO2 Sources and Sinks"; November 29, 1982.

2965; G.A. Meyers; NSF; "Large-Scale Variation in Subsurface Temperature and Trade Winds of the Tropical Pacific Ocean, 1979-82"; November 24, 1982.

2966; V.C. Anderson, K.M. Watson; NSSC; "R/P Flip and Orb Support"; November 30, 1982.

2968; J.J. Sullivan; NOAA; "UCSG: National Internship"; November 1, 1982.

Active Contracts and Grants; December 6, 1982.

2970; R.L. Fisher; MIT; "Tectonics of S Oceans: Project 4. Evolution of the SW Indian Ridge: Tectonic Studies W of 35°E"; December 8, 1982.

2972; F. Gilbert; NSF; "IDA Records"; December 7, 1982.

2973; R. Stewart; JPL; "Support Services for Satellite Oceanography Program"; December 10, 1982.

2974; L. Tauxe; NSF; "Rock Magnetism and SEM of the Siwalik Group Red Beds: An Investigation into the Processes of Remanence Acquisition"; December 15, 1982.

2975; J.F.T. Saur, W.B. White; NSF; "Meridional Eddy Heat Flux in the E Subtropical N Pacific"; December 28, 1982.

2976; M. Baltuck; CIT; "SIR-A Data Analysis: Radar Imagery in the Central American Suture Zone"; December 20, 1982.

2977; R.W. Austin; NELO; "Ocean Natural Resources Assessment"; December 22, 1982.

2978; H. Craig, R.D. Willis; ORNL; "Development of a Laser Detection System for ³⁹Ar and Application to Oceanographic Mixing Studies"; n.d.

2979; O. Holm-Hansen; NSF; "The Influence of Pico- and Nannoplankton upon the Dynamics of the Food Web in Antarctic H₂O"; December 21, 1982.

2980; A.J. Kalmijn; NSF; "Hydrodynamics of Lateral- Line Detection"; December 28, 1982.

2981; J.R. Arnold; NASA; "Large Antenna Systems and External Tanks"; December 28, 1982.

Active Contracts and Grants; January 1983.

2982; K.H. Neilson; CPF; "The Stimulation and Response of Bioluminescence from Marine Organisms"; January 4, 1983.

2983; R.L. Bernstein, C.H. Gautier; NASA; "Remote Sensing of Ocean Surface Properties with Advanced Visible-IR Sensor Techniques"; January 3, 1983.

2984; K.M. Watson; LGO; "Crane Support"; January 4, 1983.

2987; D.J. Faulkner; DOHHS; "Antibiotics from Marine Organisms"; January 7, 1983.

2988; R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "Development and Testing of Acoustic Techniques for Studies of Large-Scale Ocean Variability"; January 13, 1983.

2989; R.L. Michel; UCD; "Migration of Chemical Constituents in Snowpack and Snowfall"; January 17, 1983.

2990; J. Namias; NOAA; "Investigation of Some Aspects of Short Term Climate Variability over NA and Adjacent Oceans"; February 1, 1983.

2992; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; January 12, 1983.

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2993; T.P. Barnett; NOAA; "Predictability Studies of Intraseasonal Climate Variability"; January 12, 1983.

2994; F.N. Spiess; UCSB; "UCSD/UCSB Deep Tow/SeaBeam Expedition"; January 13, 1983.

2995; C.D. Keeling; NSF; "A Study of the Abundance of CO₂ in the Atmosphere and its Exchange with the Oceans"; February 17, 1983.

2998; G.G. Shor; WHOI; "Support Services for Work aboard R/V Melville in the Scotia Sea"; January 17, 1983.

2999; P.K. Dayton, M.J. Tegner; NSF; "How Do Kelp Forests Interact with the Ocean?"; January 25, 1983.

3000; A. Chave, J. Filloux; NSF; "A Detailed Evaluation of EM Induction Fields in the Deep Ocean"; January 19, 1983.

3001; H. Craig; NSF; "Hydrothermal Vent Studies at 13°N, EPR: DSRV Alvin Sampling"; January 31, 1983.

3001R1; H. Craig; NSF; "Hydrothermal Vent Studies at 13°N, EPR: DSRV Alvin Sampling"; June 13, 1983.

3003; S.H. Bloomer, J.H. Natland; NSF; "Textural, Mineralogic and Geochemical Studies of Basalts and Gabbroic Rocks from the Central and SW Indian Ridges Characterization of Magma Chambers at Slow Spreading Ridges"; January 31, 1983.

3004; J.L. Bada; NSF; "Kinetically Coupled Organic Diagenetic Reactions and Their Geochemical Implications"; January 24, 1983.

3005; D.C. Agnew, J. Berger, F. Wyatt; USGS; "CDO Part D Field Operational Support, Data Logging Facilities, and Concurrent Investigations"; February 3, 1983.

3005R1; D.C. Agnew, J. Berger, F. Wyatt; USGS; "CDO Part D Field Operational Support, Data Logging Facilities, and Concurrent Investigations"; July 26, 1983.

3006; D.C. Agnew, J. Berger, F. Wyatt; USGS; "Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; February 3, 1983.

3007; J. Berger, J.N. Brune; USGS; "Seismic Source Mechanisms Studies in the Anza-Coyote Seismic Gap"; February 4, 1983.

3008; M.A. Zumberge; USGS; "Absolute Gravity Measurements in S CA"; February 3, 1983.

3009; P.F. Lonsdale, K.C. Macdonald, S.P. Miller, J.H. Natland, F.N. Spiess; NSF; "Fine Scale Investigation of Overlapping Rift Zones"; January 28, 1983.

3009 (3205); P.F. Lonsdale, K.C. Macdonald, S.P. Miller, J. Natland, F.N. Spiess; NSF; "Overlapping Rift Zone Investigations"; May 31, 1983.

3011; J.G. Anderson, J.N. Brune; USGS; "Parametric Description of High-Frequency Spectral Amplitudes for Strong Ground Motion in the LA-SD Region of S CA (A Joint UCSD-CDMG Proposal)"; February 10, 1983.

3012; K.H. Nealson; NSF; "The Respiratory Turnover of Organic C in the Benthic Boundary Layer: A Geochemical and Microbiological Investigation"; January 26, 1983.

3013; D.H. Roemmich, J.H. Swift; NSF; "A Trans- Pacific Section along 24°N"; January 27, 1983.

3014; R.A. Lewin; NASA; "The Joining of Dr. H. Pearl to the Forthcoming Expedition to Study Prochloron in Palau"; January 27, 1983.

3015; J.G. Anderson; USGS; "Revised Seismicity for S CA as a Consequence of Earthquake Prediction Program Observations"; February 7, 1983.

3016; D.C. Agnew, J. Berger, F. Wyatt; USGS; "Supplement to: CDO Part D Field Operational Support, Data Logging Facilities, and Concurrent Investigations"; January 31, 1983.

3018; W.F. Heiligenberg; DOHHS; "Differentiation of a Communicatory Signal"; February 2, 1983.

3020; R.T. Williams; NSF; "Operations Management for Transient Tracers in the Oceans: N Atlantic Study"; February 1983.

3021; R.L. Michel; NSF; "14C Distributions in the S Ocean"; February 2, 1983.

3022; W.R. Riedel; NSF; "Curating of the Deep-Sea Geological Collections at SIO"; February 4, 1983.

3024; M. Kastner; ACS; "Geochemistry and Diagenesis of Organic-Rich Siliceous Sediments in the Monterey Formation and Gulf of CA"; February 12, 1983.

3025; A. Badan-Dangon, C.D. Winant; NSF; "Variability of the Atmospheric Forcing over the Gulf of CA, Part I"; February 11, 1983.

3026; J.S. Killingley; OSU; "Stable C and O2 Isotope Measurements"; February 9, 1983.

3027; N.A. Bray; NSF; "Convective H2O Mass Formation and Thermohaline Circulation in the Gulf of CA"; February 11, 1983.

3028; Y. Chung; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; February 11, 1983.

3029; R.L. Fisher; ONR; "Participation in the 13-14 March S Atlantic/SW Indian Ocean Workshop at LGO"; February 9, 1983.

3031; R.T. Williams; UOM; "Hydrographic Support to UOM"; March 7, 1983.

3032; H. Felbeck, G.N. Somero; NSF; "Biochemical and Physiological Characteristics of the Hydrothermal Vent Community Animals"; February 14, 1983.

3033; R.W. Johnson; DON; "A System for Real Time Determinations of Cloud Free Fields of View"; February 16, 1983.

3034; W.S. Hodgkiss; NSSC; "Adaptive Signal Processing"; February 14, 1983.

3035; R.T. Williams; UW; "Hydrographic Support to UW"; February 1983.

3036; R.R. Hessler; NSF; "Spatial and Temporal Distribution of Megafauna at the Galapagos and Mariana Hydrothermal Vents"; February 16, 1983.

3037; G.N. Somero; DOHHS; "S2--Binding-Proteins and S2- Detoxication by Animals"; February 17, 1983.

3038; D.J. Faulkner; NSF; "Chemical Ecology of Marine Organisms (Chemistry)"; February 22, 1983.

3039; R.F. Weiss; NSF; "Transient Tracers in the Ocean: CO2 and N2O Measurements in the N Atlantic"; February 17, 1983.

3040; L. Armi; NSF; "Ocean Mixing Processes: A Study of Mediterranean Salt Lenses"; February 17, 1983.

3041; Y. Chung; USGS; "Intercomparison Studies of 2 Ra Monitors at the PFGO: (Investigation of Ra and He as Possible Fluid-Phase Precursors)"; February 18, 1983.

3042; G.G. Shor; NSF; "Shipboard Scientific Support Equipment: Winch Supplement to OCE 82-15937"; February 18, 1983.

3044; R.N. Hey; NSF; "Galapagos Rift System: High Resolution Study of Propagating Rifts"; February 22, 1983.

3045; G.N. Somero; NSF; "Biochemical and Physiological Characteristics of the Hydrothermal Vent Community Animals"; n.d.

3046; H.D.I. Abarbanel; DOE; "Studies in the Nonlinear Dynamics of Dissipative Systems"; March 23, 1983.

3046R; H.D.I. Abarbanel; DOE; "Studies in the Nonlinear Dynamics of Dissipative Systems"; December 12, 1983.

3047; B.E. Volcani; DOHHS; "Biochemical Studies of Siliceous Skeletal Formation"; February 23, 1983.

3049; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; February 24, 1983.

3051; R.C.J. Somerville; NOAA; "An Experimental Climate Forecast Center at SIO"; March 3, 1983.

3052; D.L. Cutchin, W.B. White; NOAA; "Deployment of an ADCP aboard a Commercial 'Ship-of-Opportunity'"; March 17, 1983.

3053; J.H. Filloux; UURI; "EM Induction over an Oceanic Spreading Ridge: Model Prediction vs Observations"; June 11, 1983.

3055; L. Haury, T. Hayward, E. Venrick; NSF; "Biological Observations on Trans-Pacific Sections along 24°N and 43°N"; April 6, 1983.

3056; M. Baltuck; NASA; "SIR-B over Guatemala: The Trace and Breadth of the Guatemala Suture Zone"; March 14, 1983.

3057; J.R. Beers; NSF; "Non-Loricat Oligotrichous Ciliates in Plankton: Their Biology, Ecology and Role in the Food Web"; March 11, 1983.

3058; D.W. Wilkie; IMS; "Request for General Operating Support"; March 4, 1983.

3059; R.W. Austin; NOAA; "Remote Sensing Support for Fisheries Research"; March 16, 1983.

3061; R.B. Bacastow; ORNL; "Development of a 3-D Model of the Natural C Cycle in the Ocean and its Perturbation by Anthropogenic CO₂"; May 9, 1983.

3062; R.R. Hessler; NSF; "Community Structure and Small Scale Distribution of Benthic Megafauna at 21°N, EPR"; March 15, 1983.

3063; J.R. Arnold; LANL; "Condensation Processes in the Early Solar System"; n.d.

3064; R.A. Knox; ONR; "Funding for Production of a Volume of the Lectures Given Last October at the W. Munk Symposium"; March 21, 1983.

3065; C.D. Keeling; EPRI; "Interdisciplinary Research on CO₂ and Climate"; March 31, 1983.

3066; W.H. Berger, R.S. Keir; EPRI; "Ocean- Atmosphere Interaction in the Context of the CO₂ Problem"; April 10, 1983.

3067; A. Chave, R. Parker; UOCC; "Calculation of EM Response Functions"; June 24, 1983.

3070; R.E. Davis; ONR; "Production and Interpretation of IR Images of the Ocean: Thermal Structure Description and Prediction"; March 23, 1983.

3071; R.C.J. Somerville; NASA; "The Effects of Global Tropical Weather Satellite Data on Predictability of Planetary Waves"; March 30, 1983.

3071R2; R.C.J. Somerville; NASA; "The Effects of Global Tropical Weather Satellite Data on Predictability of Planetary Waves"; n.d.

3072; N.A. Bray; CSI; "Remote Sensing of Equatorial Mesoscale Variability"; March 29, 1983.

3073; B.W. Fitch; NASA; "Effects of Diffuse Skylight on Measurements of Directional Reflectance Properties of Natural Surfaces"; March 25, 1983.

3074; J.J. Simpson; OSU; "Equipment for ODEX Program"; March 18, 1983.

3076; J.O. Roads; CSI; "Cloud Parameterization and Sensitivity Experiments"; April 8, 1983.

3077; G.G. Shor; ONR; "Shipboard Scientific Support Equipment"; March 30, 1983.

3078; G.G. Shor; NSF; "Shipboard Scientific Support Equipment: 10cm Radar for R/V Melville Supplement to OCE 82-15937"; March 30, 1983.

3079; M. Abbott; JPL; "Studies of Ocean Productivity"; March 29, 1983.

3080; B.W. Fitch; CSI; "A Stokes Vector Representation of Directional Reflectance for 3 Mineral Surfaces"; April 4, 1983.

3081; J.H. Filloux; NSF; "SFMT Exploration: Tasman Sea and Juan de Fuca Ridge"; March 31, 1983.

3083; G.K. Vallis; CSI; "A Study of Coastal CA Clouds"; April 8, 1983.

3084; R.W. Austin; ONR; "SRS Design Study"; April 18, 1983.

3085; C. Gautier; CSI; "Environmental Effects on the Variations in Primary Production Derived from Satellite Observations a Feasibility Study"; April 15, 1983.

3086; D.C. Agnew, M.A. Zumberge; DOE; "Absolute Gravity Measurements near Regions of Suspected Magma Intrusion"; May 4, 1983.

3087; R.T. Williams; UW; "Hydrographic Support for the UW"; April 1983.

3089; R.W. Austin; CSI; "Remote Sensing of Bioluminescence at Sea and from Orbit"; April 11, 1983.

3090; B.D. Zetler; NOAA; "Tide Prediction Using Node Constituents"; April 12, 1983.

3091; M. Abbott; CSI; "Mesoscale Biological and Physical Processes in the CA Current System"; April 6, 1983.

3092; E. Brinton; NOAA; "Seasonal Analysis of Anchovy Gonads"; April 7, 1983.

3093; S.D. Nozette; CSI; "An Evaluation of Lunar Derived Silane as a Liquid Rocket Propellant"; April 15, 1983.

3094; D.C. Agnew, J. Berger, F. Wyatt; USGS; "Unsolicited Supplement to: Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; April 8, 1983.

3094; S.D. Nozette; CSI; "Chemical Processing of Asteroidal Materials"; April 15, 1983.

3095; D.C. Agnew, J. Berger, F. Wyatt; USGS; "Supplement to: CDO Part D Field Operation Support, Data Logging Facilities, and Concurrent Investigations"; April 8, 1983.

3096; R.W. Austin; CSI; "Remote Sensing of Manifestations of the ENSO Phenomenon"; April 13, 1983.

3097; R.C.J. Somerville; CSI; "Nonlinear Interactions Between Convection, Rotation, and Shear Flows"; April 13, 1983.

[Box 21]

3098; R.J. Seymour; ACE; "Wave Data and Analysis"; April 8, 1983.

3099; J.D. Macdougall; NSF; "U and Th Decay Series Disequilibrium in Volcanic Rocks as Indicators of Mantle Composition and Magmatic Processes"; April 28, 1983.

3100; R.C.J. Somerville; CSI; "A 1-D Coupled Ocean- Atmosphere Model"; April 13, 1983.

3101; J.D. Horel; CSI; "A Survey of the Annual Cycle in the Surface Air Temperature in a Coastal Zone"; April 15, 1983.

3102; J.R. Arnold; MMC; "ATA Studies"; April 28, 1983.

3103; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; April 18, 1983.

3104; E.D. Goldberg; NSF; "Marine Chemistries of the Platinum Metals"; April 20, 1983.

3105; H.R. Thierstein; NSF; "Mesozoic Bio- and Magnetochronology"; April 25, 1983.

3106; D.C. Agnew, J. Berger, F. Gilbert; NSF; "Project IDA: A Global Research Network for Very Long Period Seismology"; April 22, 1983.

3107; R.J. Seymour; PGEC; "Wave Data Analysis"; April 20, 1983.

3109; J.J. Simpson; CSI; "Radiative Transfer during an ENSO Event in the CA Current System"; April 14, 1983.

3110; K.H. Neelson; NASA; "Anaerobic CH₄ Oxidation"; n.d.

3111; R.T. Williams; NSF; "Supplement to 3H and CO₂- Chemistry in the Tropical Atlantic"; April 1983.

3112; Y. Chung; NSF; "Development of Techniques for Easy Sampling and Rapid Measurements on Soil Gas and Dissolved Gas in Groundwaters for Earthquake Prediction Studies in S CA"; April 21, 1983.

3113; R.W. Austin; JHU; "The Development of an Underwater Light Sensor System for Measuring Bioluminescence"; April 22, 1983.

3115; D.C. Agnew, J. Berger, M.A. Zumberge; NSF; "Precision Measurements of Crustal Deformation"; April 26, 1983.

3116; A.A. Yayanos; NSF; "Characterization and Ecology of Deep-Sea Barophilic Bacteria"; April 25, 1983.

3117; G.G. Shor; ONR; "Wire Tensioners, and Wire Tensioner Design, for Shipboard Use"; April 25, 1983.

3118; G.G. Shor; ONR; "Truck-Mounted Spooling Device"; April 25, 1983.

3119; G.G. Shor; ONR; "Fuel-Efficiency Sensor System for R/V Melville"; April 25, 1983.

3121; G.G. Shor; ONR; "CTD Winch for R/V Thomas Washington"; April 25, 1983.

3123; F.N. Spiess; ONR; "Winch and Equipment Handling Design Studies"; May 5, 1983.

3126R1; C.D. Winant; DOI; "Central CA Coastal Circulation Study Subtask I: In Situ Observations Subtask II: Analysis and Interpretation of Observed Data Fields"; June 17, 1983.

3127; J.W. Miles; ONR; "Nonlinear Wave Motion"; June 9, 1983.

3128; R.W. Austin; NOSC; "Preparation and Characterization of a Facility for Calibrating the ASSAS"; May 2, 1983.

3129; C.H. Gautier; CIT; "Pilot Ocean Data System Task Support"; May 9, 1983.

3130; C.H. Gautier; CIT; "Satellite Oceanic Data Collection, Copy, and Image Processing"; May 9, 1983.

3131; D.H. Roemmich; NSF; "Studies of Large Scale Meridional Transport in the Ocean"; May 4, 1983.

3133; J.N. Brune; CDOC; "CA-MX Seismic Hazards Reduction Program"; June 8, 1983.

3134; M.M. Mullin; EPA; "Evaluation of Marine Cladoceran, *Penilia avirostris*, as a Bioassay Organism for Routine Monitoring of Sublethal Effects of Pollutants and Examination of the Fate of a Heavy Metal in a Simple Food Chain"; May 4, 1983.

3135; R.W. Eppley; NSF; "Coordination and Logistics for the PRPOO's Program"; June 6, 1983.

3136; G.G. Shor; NSF; "Shipboard Scientific Support Equipment: CTD Winch for R/V Thomas Washington"; May 5, 1983.

3138; V.C. Anderson, K.M. Watson; ONR; "Program in Marine Physics Applied to USN Undersea Missions"; May 9, 1983.

3141; R.T. Williams; UW; "Data Processing Support to UW"; May 1983.

3143; A.D. Chave; NSF; "Mantle Conductivity from Induction by Ocean Tides"; May 6, 1983.

3149; V.C. Anderson, K.M. Watson; NSSC; "Technical Support for USN DSVs"; May 17, 1983.

3150; C.H. Gautier; ONR; "Variability of the Surface Radiation Budget during MILDEX Derived from Satellite Measurements"; May 25, 1983.

3150R1; C.H. Gautier; ONR; "Variability of the Surface Radiation Budget during MILDEX Derived from Satellite Measurements"; July 18, 1983.

3151; P.P. Niiler; OSU; "Circulation of the Upper Pacific Ocean"; May 19, 1983.

3152; R.R. Hessler; KAPL; "Sorting Amphipods from the Hatteras Abyssal Plain"; May 23, 1983.

3153; T.H. Jordan, J.A. Orcutt; DARPA; "Analysis of MSS and OBS Data Collected during the Ngendei Seismic Experiment"; May 25, 1983.

3154; F. Azam; NSF; "The Flux of C through Bacterioplankton in the Oligotrophic Ocean"; May 26, 1983.

3156; V.C. Anderson, K.M. Watson; ONR; "Large Scale Ocean Circulation and the Interaction of Internal Waves with Mesoscale Circulation"; May 24, 1983.

3157; R.S. Detrick; NSF; "A Multichannel Seismic Investigation of the EPR at 9°N and 13°N"; April 28, 1983.

3159; M.M. Mullin; NSF; "Epipelagic Patterns and Processes: The Vertical Position of Particle- Grazing Copepods Relative to Their Food and the Consequences"; May 27, 1983.

3159; J.R. Arnold; NASA; "Development of an Orbital Gamma Ray Experiment for Lunar and Planetary Geochemistry"; August 15, 1983.

3161; B.E. Volcani; DOHHS; "Biochemical Studies on Siliceous Skeletal Formation"; May 27, 1983.

3162; F.N. Spiess; NASA; "Development of a Method for Accurately Tying Sea Surface Positions to a Deep-Sea Floor Reference Point"; June 3, 1983.

3163; J.J. Simpson; ONR; "Optical Variability in the Ocean: A Process-Oriented Approach"; July 1, 1983.

3164; H. Staudigel; NSF; "Hydrothermal Processes at Mid-Ocean Ridges: Trace Element Mobility, Radiogenic Isotope Systematics, Bulk Effects"; June 13, 1983.

3166; H.W. Menard, R.N. Hey; NSF; "Evolution of Ridges with Changing and Asymmetrical Spreading"; June 10, 1983.

3167; F.H. Fisher, R.B. Williams; ONR; "Fixed Vertical Array"; July 5, 1983.

3168; F.H. Fisher, R.B. Williams; ARPA; "Arctic Shallow H₂O"; July 6, 1983.

3169; O. Holm-Hansen; KLI; "Food Web Dynamics in Peard Bay, AK"; June 8, 1983.

3170; D.J. Pierotti; NSF; "Distribution of Natural Halogenated Hydrocarbons in the Environment"; June 3, 1983.

3171; G.A. Jackson; CIT; "A Model of Kelp Photosynthesis and Growth"; June 3, 1983.

3172; M. Abbott; JPL; "Studies of Ocean Productivity"; June 6, 1983.

3173; R.J. Seymour; DBW; "Beach Profile Collection and Analysis"; June 13, 1983.

3174; R.J. Seymour; DBW; "CDIP (Collection, Analysis, Reporting, and Storage of Wave Data)"; June 13, 1983.

3175; J.S. Killingley; NSF; "Effects of Diagenetic Recrystallization of the 18O Values of Deep-Sea Sediments and Implications for Paleotemperature Reconstructions"; June 6, 1983.

3176; R.N. Hey; NSF; "DSRV Alvin/AII Investigation of the Galapagos 95.5°W Propagating Rift System"; June 10, 1983.

3177; M.R. Abbott; NSF; "Satellite Measurements of Near-Surface Chlorophyll and SST during CODE"; June 6, 1983.

3179; J.J. Simpson; OSU; "R/P Flip Shiptime for ODEX"; June 6, 1983.

3180; J.J. Simpson; OSU; "ODEX Equipment Repair and Calibration"; June 6, 1983.

3181; J.M. Gieskes; NSF; "Mn-Geochemistry in the Guaymas Basin: Hydrothermal and Diagenetic Influences"; June 13, 1983.

3182; C.D. Keeling; NSF; "Determination of the Absolute Abundance of Dissolved Inorganic C in Ocean H₂O in the S Atlantic Ocean"; June 13, 1983.

3183; R.F. Weiss; NSF; "Transient Tracers in the Ocean: ClFICH₄ and Surface H₂O Trace Gas Measurements in the S Atlantic"; June 8, 1983.

3183R1; R.F. Weiss; NSF; "Transient Tracers in the Ocean: Interpretation of ClFICH₄ in the S Atlantic"; April 5, 1983.

3184; P. Dayton, M. Tegner; NSF; "Scales of Disturbance and Catastrophe: The Effects of an ENSO on Kelp Forest Communities"; June 9, 1983.

3185; W. Fenical; NSF; "Chemical Defense in Marine Organisms"; June 9, 1983.

3186; R.T. Williams; NSF; "Hydrographic Support to Transient Tracers in the Ocean, S Atlantic Study"; October 1983.

3187; R.F. Weiss; NSF; "Bottom Lander Operations"; June 10, 1983.

3188; R.A. Jahnke; NSF; "P Recycling in Marine Surface Sediments"; June 10, 1983.

3189; M.E. Huntley; NSF; "Assimilation Efficiency of Euphausiid Crustacean"; June 13, 1983.

3190; O. Holm-Hansen; NSF; "Studies on the Biomass and Metabolic Activity of Micro- and Nannoplankton in the Ice-Edge Zone of Circum-Continental Antarctic H₂O"; June 14, 1983.

3191; R. Revelle; NSF; "Continuing Support for the Scientific Secretary for the CCCO of the SCOR"; June 13, 1983.

3192; H.T. Hammel; DOHHS; "Mammalian Thermoregulatory Threshold and Sensitivity"; May 14, 1983.

3193; R.T. Williams; OSU; "Hydrographic Support to OSU"; June 1983.

3194; D.L. Inman; ACE; "Sediment Volume Changes in the Vicinity of Oceanside Harbor, CA"; June 15, 1983.

3195; R.F. Weiss; NSF; "Tropical Atlantic Study: ClFICH₄ Measurements"; June 14, 1983.

3196; A.A. Yayanos; NSF; "O₂ Utilization and Microbial Activity in Deep Ocean Sediments: Lab and In Situ Studies with Microelectrodes"; n.d.

3197; A. Soutar; KAPL; "Box Coring in the NW Atlantic Ocean Site"; June 20, 1983.

3198; W.H. Berger, A.D. Chave, C.S. Cox, L.M. Dorman, J.F. Gilbert, J.A. Orcutt, W.R. Riedel; SOHIO; "Participation in CSE Program, in the Areas of 'Geophysical and Geologic Science' and 'Control Theory and Systems'"; June 17, 1983.

3200; J.J. Carroll, B.W. Fitch; NSF; "Large Scale Spacial and Temporal Variations of Spectral Reflection from Snow"; June 21, 1983.

3201; J.R. Curray, L.M. Dorman; NSF; "Geology and Geophysics of the SE Indian and Sri Lankan Continental Margins"; June 14, 1983.

3202; J.W. Hawkins, P.F. Lonsdale; NSF; "Spreading- Center Processes and Products in the Mariana Trough Back-Arc Basin"; June 17, 1983.

3203; E.D. Goldberg; DOE; "Marine Geochemistry Research"; June 20, 1983.

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3204; J.B. Graham; NSF; "Function of the Pericardioperitoneal Canal in Elasmobranchs"; June 15, 1983.

3205; P.F. Lonsdale, K.C. Macdonald, S.P. Miller, J.H. Natland, F.N. Spiess; NSF; "Fine Scale Investigation of Overlapping Rift Zones"; June 13, 1983.

3206; R.J. Seymour; WES; "Wave Data and Analysis"; June 15, 1983.

3207; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; June 13, 1983.

3209; W.B. Thompson, W.G. Van Dorn; NSF; "Tide Gage Response to Tsunamis: Phase II"; July 5, 1983.

3212; A. Soutar; UCSC; "Development and Testing of a Sediment Trap Device"; June 20, 1983.

3213; T.E. DeLaca; NSF; "Decomposition of Organic Matter in Abyssal Sediments: The Significance of Agglutinated Foraminiferal Tests"; June 21, 1983.

3214; J.W. Miles; NSF; "Geophysical Fluid Dynamics"; June 27, 1983.

3215; J.N. Brune, G. Masters; NSF; "Long Period Seismograph Array for Crust and Mantle Studies in MX"; April 29, 1983.

3216; M.E. Huntley; NSF; "Population Dynamics and Feeding of Arctic Marine Zooplankton"; June 27, 1983.

3218; L. Tauxe; WMKF; "Equipment for Paleomagnetic Lab for Research on the Magnetic Properties of Rocks"; July 1, 1983.

3219; G.G. Shor; NSF; "Shipboard Technician Support (For Non-DPP Programs)"; June 30, 1983.

3220; G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; June 30, 1983.

3221; G.G. Shor; NSF; "Ship Operations Support: A Renewal of OCE 80-24472"; June 21, 1983.

3223; G.L. Kooyman; NSF; "Emperor and King Penguins Brooding and Foraging Energetics"; n.d.

3224; H. Craig; NSF; "Ocean-Atmosphere Investigations"; October 31, 1983.

3225; G.G. Shor; NSF; "Oceanographic Instrumentation"; n.d.

3227; R.L. Michel; NSF; "3H Distributions in the E Pacific of Subtropical Gyre"; July 12, 1983.

3228; G.G. Shor; NSF; "Shipboard Technician Support (For DPP Programs)"; June 30, 1983.

3229; G.W. Lugmair; NASA; "Isotopic, Chemical, and Mineralogical Investigations of Extraterrestrial Materials"; August 3, 1983.

3230; D.W. Wilkie; TPF; "SIO Aquarium Educational Graphics Project"; June 30, 1983.

3231; W.R. Riedel; NSF; "Curation of DSDP and Advanced ODP Cores and Associated Info, 1984-94"; July 19, 1983.

3232; A.A. Yayanos; NOAA; "Contaminant Levels and Relative Sensitivities to Contamination in Deep Ocean Communities"; July 5, 1983.

3233; R.W. Austin; NELO; "Ocean Natural Resources Assessment (Request for Supplemental Funding)"; August 8, 1983.

3235; J.A. Welhan; NSF; "Hydrothermal Vent Gases on the Juan de Fuca Ridge: DSRV Alvin Sampling"; July 20, 1983.

3237; J.G. Anderson, J.N. Brune, J.E. Luco; NSF; "Numerical and Experimental Studies of Earthquakes and Earthquake Strong Motion (Earthquake Engineering)"; July 28, 1983.

3238; O. Holm-Hansen; NSF; "Grazing by Microbial Cells upon Pico- and Nannoplankton, and its Significance upon the Food Web in Antarctic H₂O"; July 12, 1983.

3239; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; July 13, 1983.

3239R1; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; September 28, 1983.

3240; L. Tauxe; NSF; "Investigation of Fine Scale Features of the Magnetostratigraphic Record Obtained by Continuous Measurement of 'U' Channel Samples"; July 20, 1983.

3241; B.J. Javor; NSF; "Physiology and Ecology of Halophilic Bacteria"; July 15, 1983.

3243; H. Craig, J.A. Welhan; NSF; "Hydrothermal Vent Studies on Loihi Seamount: DSRV Alvin Sampling"; July 21, 1983.

3244; W.S. Hodgkiss; NSSC; "Reverberation Dynamics"; July 20, 1983.

3245; A.G. Dickson; NSF; "Acid Base Chemistry in Seawater"; July 20, 1983.

3246; M.A. Zumberge; ONR; "Absolute Gravity Measurements in S CA"; July 20, 1983.

3247; C.D. Keeling; NSF; "Absolute Abundance and Variability of Dissolved Inorganic C in Ocean H₂O"; June 21, 1983.

3248; T.H. Jordan; NSF; "Studies of the Earth's Aspherical Heterogeneities"; July 25, 1983.

3249; R.J. Seymour; LADCE; "Nearshore Bathymetric Survey Report"; July 25, 1983.

3252; R.J. Seymour; FOR; "Grant to Establish an Ocean Engineering Research Program"; July 25, 1983.

3253; E. Brinton; NOAA; "Analysis of Otoliths of Fish"; July 27, 1983.

3254; W.R. Riedel; WHOI; "Pelagic Opal: Seasonality, Production, Flux, and Preservation of Biogenic Silica Particles (NSF OCE 82-08638)"; August 1, 1983.

3257; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean"; August 26, 1983.

3258; G.G. Shor; NORDA; "Supporting Services for the Long Range Sound Speed Calibration Project"; July 29, 1983.

3260; K.H. Nealson; ONR; "Mechanism of Bioluminescence: Kinetic-Spectral and Biochemical Properties as a Probe of Marine Communities and Interactions"; n.d.

3261; R. Stewart; JPL; "Support Services for Satellite Oceanography Program"; August 1, 1983.

3262; L.M. Dorman; NORDA; "OBS Development and Construction"; August 11, 1983.

3263; J. Berger, F. Wyatt, M.A. Zumberge; NSF; "Acquisition of an Atomic Wavelength Standard for High Precision Geodesy"; August 5, 1983.

3264; J. Berger, W.E. Farrell; NSF; "A Digital Seismograph"; August 5, 1983.

3265; R.W. Austin; NOS; "Preparation and Characterization of a Facility for Calibrating the ASSAS"; August 3, 1983.

3266; G.W. Lugmair, J.D. Macdougall; NSF; "An Isotopic Study of Subcontinental Mantle Characteristics (Earth Science)"; August 3, 1983.

3267; J.D. Macdougall; NASA; "The Earth's Mantle and Crust: Isotopic and Chemical Studies"; August 31, 1983.

3268; H. Craig, W. Rison; NSF; "Oceanic Basalts: Rare Gas, H and C Concentrations, and Isotope Ratios"; August 4, 1983.

3269; T.P. Barnett; NSF; "Studies of Climate Predictability and Dynamics"; August 4, 1983.

3270; J.L. Bada; NSF; "The Oceanic Chemistry of Oxalic and Glyoxalic Acids"; September 29, 1983.

3271; M.E. Huntley; NSF; "Assimilation Efficiency of C and N₂ by *Euphausia superba* (Dana)"; August 12, 1983.

3272; T.D. Foster, R.F. Weiss; NSF; "A Physical and Chemical Oceanographic Investigation of the W Weddell Sea"; August 12, 1983.

3275; R.R. Hessler; NOAA; "Analysis of Epibenthic Sled Samples from the Tropical Pacific Ocean"; August 15, 1983.

3276; P.M. Masters; DOHHS; "Nonenzymatic Reactions in Human Dentin Proteins"; August 12, 1983.

3277; R. Pinkel; NORDA; "Upper Ocean Background Studies"; August 17, 1983.

3278R; S.M. Smith; TAMU; "Digitizing of Navigation and Bathymetric Data"; August 9, 1983.

3279; R.J. Seymour; ACE; "Verification of Bagnold's Equilibrium Transport Model in an Oscillatory Flow Tunnel"; August 25, 1983.

3280; F. Gilbert; NSF; "Source Mechanisms of Earthquakes from Free Oscillation Data"; August 16, 1983.

3282; H.D.I. Abarbanel; DARPA; "Nonlinear Dynamics and Internal Waves"; August 23, 1983.

3283; F.H. Fisher, R.B. Williams; NORDA; "CONTRACK VI Propagation Analysis"; August 23, 1983.

3284; K.M. Watson; NSSC; "R/P Flip and Orb Support"; August 26, 1983.

3286; T.E. DeLaca, W.L. Stockton; NSF; "The Ecology of the Shallow H₂O Benthos of McMurdo Sound, Antarctica"; August 19, 1983.

3287; J.R. Curray; NSF; "Acquisition of High- Resolution Multichannel Seismic Reflection Profiling System in Support of Research in Submarine Geology and Geophysics"; August 26, 1983.

3288; J.O. Roads, G.K. Vallis; NSF; "Predictability in Atmospheric Models with Topography"; August 29, 1983.

3290; V.C. Anderson; NSF; "RUM III"; August 29, 1983.

3291; A. Soutar; KAPL; "Box Coring aboard R/V Endeavor"; August 30, 1983.

3293; J.N. Brune, A.H. Olsen; NSF; "Inversion of Earthquake Ground Motion for Dynamic Fault Slip"; August 1, 1983.

3293R; J.N. Brune, A.H. Olsen; NSF; "Inversion of Earthquake Ground Motion for Dynamic Fault Slip"; January 17, 1984.

3295; L. Armi, P.P. Niiler; NASA; "Satellite Imagery of the W Coast of NA Including the CA Current System"; n.d.

3296; V.C. Anderson; K.M. Watson; NSSC; "MOST Committee Support"; January 12, 1984.

3298; K.H. Nealson; NSF; "Rates of Bacterial Mn (II) Oxidation in the Marine Environment"; September 6, 1983.

3299; M. Tsuchiya; NSF; "Seasonal Variation of the Pacific Equatorial Undercurrent"; September 7, 1983.

3300; R.W. Austin; CIT; "Fisheries Demonstration Program"; September 12, 1983.

3301; V.C. Anderson; WMKF; "RUM III Phase II"; September 12, 1983.

3305; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 12, 1983.

3306; D.C. Agnew; NSF; "An Observational Study of P3 Tides in the Pacific"; September 15, 1983.

3306R1; D.C. Agnew; NSF; "An Observational Study of P3 Tides in the Pacific"; July 19, 1984.

3307; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; September 13, 1983.

3307R/3315R; R.R. Hessler, K.L. Smith; SNL; "Contracts #47-5718 & #47-5719"; March 13, 1984.

3308; J.H. Swift; NSF; "High-Quality Hydrographic Sampling in the Greenland-Spitsbergen Passage and the Arctic Ocean"; September 14, 1983.

3310; J.H. Swift; NSF; "N Hemisphere Deep Circulation"; September 15, 1983.

3311; R.L. Salmon; NSF; "Hamiltonian Methods Applied to Ocean Circulation Problems"; September 19, 1983.

3312; D.L. Cutchin, W.B. White; NOAA; "Operation of a Ship-of-Opportunity XBT Deployment Program in the Pacific Ocean"; September 21, 1983.

[Box 23]

3313; R.A. Knox, W.H. Munk, P.F. Worcester, B.D. Zetler; NSF; "Development and Testing of Acoustic Techniques for Studies of Large-Scale Ocean Variability"; September 23, 1983.

3314; A.A. Benson; NSF; "Oceanic Arsenic Detoxication"; August 31, 1983.

3315; R.R. Hessler; SNL; "Benthic Biological Studies"; September 19, 1983.

3316; V.C. Anderson, K.M. Watson; ONR; "Continuation of the Interdisciplinary Research Program at MPL"; September 30, 1983.

3318; V.C. Anderson; ONR; "Support for Operation CONTRACK VI"; October 3, 1983.

3319; R.A. Jahnke; NSF; "Solubility of Substituted Forms of Fluorapatite"; September 28, 1983.

3320; H.R. Thierstein; NSF; "Stable Isotopes of Quaternary Calcareous Nannofossils"; September 26, 1983.

3321; F. Gilbert; LLNL; "Calculation of Synthetic Seismograms Using Free Oscillations"; September 27, 1983.

3322; N.D. Holland; NSF; "Microevents of Particle Capture during Suspension Feeding by Feather Stars (Echinodermata: Crinoidea)"; September 27, 1983.

3323; P.K. Dayton; NSF; "Why Are Seamounts so Productive?"; September 29, 1983.

3324; W.G. Van Dorn; NSF; "Tsunami Recorder Installation at Wake Island"; October 4, 1983.

3327; H. Craig, J. Welhan; NSF; "Submersible Studies in the Mariana Trough: Hydrothermal Vents and Basalts"; October 7, 1983.

3328; R. Parker; UOCC; "Exact Nonlinear Inversion of MT Soundings"; October 3, 1983.

3329; R.L. Parker; NSF; "Bilayer Expansion"; October 28, 1983.

3331; F.J. Emmel; ONR; "Echo Characteristics as Related to Sediment Types, and Late Pleistocene History of the N Andaman Sea"; October 4, 1983.

3332; C.D. Keeling; NBS; "Calibration of CO2 Standard Reference Materials"; October 5, 1983.

3333; C.D. Keeling; NOAA; "Continuance and Intercomparison of Atmospheric CO2 Measurements at MLO"; October 6, 1983.

3334; A.P. Klimley; NSF; "Homing of Pelagic Hammerheads to a Seamount: An Experimental Study"; September 3, 1983.

3335; E.D. Goldberg; NSF; "Air Quality in MX City A Historical Perspective"; October 5, 1983.

3336; D.L. Cutchin, W.B. White; NOAA; "Continuation and Expansion of the SIO/ORSTOM XBT Network in the Tropical Pacific, FY84"; October 4, 1983.

3337; J.N. Brune, R. Lovberg; NSF; "Development of a Modeling Facility for Studying Seismic Site Effect and Seismic Engineering Problems"; October 20, 1983.

3338; F. Gilbert; DARPA; "Symposium on Mathematical Geophysics, Loen, Norway"; October 19, 1983.

3339; F. Gilbert; DOE; "Symposium on Mathematical Geophysics, Loen, Norway"; October 19, 1983.

3340; F. Gilbert; ONR; "Symposium on Mathematical Geophysics, Loen, Norway"; October 19, 1983.

3341; F. Gilbert; NASA; "Symposium on Mathematical Geophysics, Loen, Norway"; October 19, 1983.

3342; F. Gilbert; NSF; "Symposium on Mathematical Geophysics, Loen, Norway"; October 19, 1983.

3342R; F. Gilbert; NSF; "Symposium on Mathematical Geophysics, Loen, Norway"; October 19, 1983.

3343; R.W. Austin; ONR; "Assessment and Modeling of Ocean Optical Properties"; October 26, 1983.

3345; J.L. Bada; ACS; "Kinetically Coupled Organic Diagenetic Reactions and Their Geochemical Applications"; October 10, 1983.

3347; M.M. Mullin; EPA; "Culture of a Marine Cladoceran, *Penilia avirostris*, as a Potential Bioassay Organism"; October 21, 1983.

3349; R.T. Guza; ONR; "Toward Directional Properties of Gravity Waves"; October 14, 1983.

3350; P.S. Doyle, W.R. Riedel; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic Pelagic Sediments"; November 11, 1983.

3351; H. Craig, W. Rison; NSF; "Rare Gases and CH₄ in the Continental Crust: Isotopic Studies of Sources and Migration Patterns"; October 27, 1983.

3354; R.W. Eppley; NASA; "Assessing Ocean Productivity from Satellite Measurements"; November 7, 1983.

3355; K.H. Neelson, D.W. Smith; NSF; "Genetic Probes for Marine Microbial Ecology"; October 27, 1983.

3356; R.J. Seymour; NOAA; "Study of Ocean Dynamics on the Spanish Continental Shelf"; October 28, 1983.

3357; J.A. Orcutt; NSF; "Acquisition of Numerix MARS-432 Array Processor"; October 31, 1983.

3358; V.C. Anderson, K.M. Watson; NESG; "R/P Flip Services in Support of CONTRACK VI"; November 1, 1983.

3359; H. Felbeck; NGS; "Ecophysiological Studies on Gutless Oligochaetes Associated with Chemoautotrophic Bacteria"; November 1, 1983.

3361; J.H. Filloux; NSF; "Equipment Proposal for Data Reduction Equipment for Processing Efficiently SFMT Data"; November 8, 1983.

3361R1; J.H. Filloux; NSF; "Equipment Proposal for Data Reduction Equipment for Processing Efficiently SFMT Data"; May 25, 1984.

3362; J.A. Orcutt; ONR; "Purchase of a High Speed Array Processor"; November 3, 1983.

3363; D.C. Agnew, J. Berger, F. Gilbert; NSF; "Supplement to: Project IDA: A Global Research Network for Very Long Period Seismology"; November 1, 1983.

3363R1; D.C. Agnew, J. Berger, F. Gilbert; NSF; "Supplement to: Project IDA: A Global Research Network for Very Long Period Seismology"; January 1, 1983.

3364; G.G. Shor; NSF; "Geophysical Study of the Shumagin Arc"; January 11, 1984.

3365; F. Gilbert, T.G. Masters; NSF; "Acquisition of Numerix MARS-432 Array Processor"; November 14, 1983.

3366; J.F. Gilbert, T.G. Masters; NSF; "Density Structure of the Earth's Deep Interior"; November 4, 1983.

3368; J.R. Arnold; NASA; "An Investigation of Roles for Tethers on an Evolving Space Station"; November 15, 1983.

3369; J.R. Arnold; NASA; "An Investigation of Roles for Tethers on an Evolving Space Station"; November 15, 1983.

3371; J.L. Bada; NATO; "Application of Accelerator Based Radiocarbon Measurements to Organic Geochemical Problems"; November 9, 1983.

3373; J.A. Orcutt; NSF; "High Resolution, Joint Processing of SeaBeam and Digital Profiler Data"; November 21, 1983.

3374; R.W. Austin; NASA; "CZCS/Net Support and Studies"; November 15, 1983.

3375; J.D. Horel; NSF; "A Diagnostic Study of the ENSO Episode during 1982/83"; November 16, 1983.

3377; J.J. Sullivan; NOAA; "UCSG: National Internship"; November 1, 1983.

3378; K.M. Watson; NOAA; "Support of LCDR A.E. Theberge"; n.d.

3379; H.D.I. Abarbanel; DOD; "Nonlinear Dynamics of Ocean Processes"; December 8, 1983.

3380; F.N. Spiess; DOD; "Ocean ST"; December 8, 1983.

3381; J.F. Gilbert; NSF; "Calculation of Synthetic Seismograms Using Coupled Free Oscillations Density Structure of the Earth's Deep Interior"; December 13, 1983.

3382; R. Pinkel; DOD; "Doppler Acoustic Studies"; n.d.

3383; K.M. Watson; DOD; "Seafloor Topographic Background Studies"; December 8, 1983.

3384; B.E. Volcani; NSF; "Regulation of Gene Expression by Si: Isolation and Characterization of Si Responsive Genes and Gene Products"; November 23, 1983.

3385; H. Craig, W. Rison; NSF; "Continental and Convergent-Margin Volcanism: Isotopic Studies of Fluids and Rocks"; November 1, 1983.

3386; W.F. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing in Electric Fish"; December 29, 1983.

3389; K.M. Watson; DOD; "Young Cratered Seamount Investigation"; December 8, 1983.

3390; V.C. Anderson; DOD; "Multidisciplined Seafloor Science and Engineering"; n.d.

3391; P.F. Lonsdale; DOD; "ONR Marine Geology and Geophysics Program"; December 8, 1983.

3392; J.G. Anderson, J.N. Brune; NSF; "Acquisition of Gain-Ranging Accelerographs"; January 3, 1984.

3393; J.N. Brune, T.G. Masters; NSF; "Long Period Seismograph Array for Crust and Mantle Studies in MX"; January 9, 1984.

3394; K. Becker; DOD; "Long-Spaced, In Situ Electrical Resistivity Experiment"; December 8, 1983.

3395; B.L. McGlamery; RADC; "Analysis and Processing of CIS Images"; December 1, 1983.

3396; R.C.J. Somerville; NASA; "The Effects of Global Tropical Weather Satellite Data on Predictability of Planetary Waves"; November 28, 1983.

3397; J.F. Gilbert; DOD; "Enhancement of SIO Computational Network"; December 12, 1983.

3398; R.W. Austin; CIT; "Fisheries Demonstration Program"; December 8, 1983.

3399; H. Craig; DOD; "Dedicated Instrumentation for Oceanographic Research Using DSVs"; December 12, 1983.

3400; R.A. Knox, W.H. Munk, P. Worcester, B. Zetler; NSF; "Development and Testing of Acoustic Techniques for Studies of Large-Scale Ocean Variability"; December 2, 1983.

3401; W.H. Munk; DOD; "OAT"; December 8, 1983.

3402; B.E. Volcani; NSF; "Si Regulation of cAMP Metabolism: Are Si's Effects on Cellular Metabolism Mediated by cAMP?"; December 5, 1983.

3403; A.J. Kalmijn; DOD; "Biological Sensors for the Detection of Electric, Magnetic, and Hydrodynamic Fields"; December 8, 1983.

3404; M.A. Zumberge; DOD; "An Optical Fiber Atomic Wavelength Standard for PFGO"; December 9, 1983.

3406; D.J. Faulkner; DOD; "Chemical Instrumentation Package for SIO Analytical Facility"; December 9, 1983.

3407; J.F. Gilbert, T.G. Masters; NSF; "Aspherical Structure"; January 31, 1984.

3410; G.O. Arrhenius; DOD; "Molecular Electronic Materials for Future Technology"; December 13, 1983.

3411; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; December 13, 1983.

3411; M. Tsuchiya; NSF; "Tropical and Subtropical Circulation of the Atlantic Ocean"; January 30, 1984.

3412; N.A. Bray; ONR; "Moored Observations of Thermohaline Circulation in the N Gulf of CA"; December 13, 1983.

3413; R.W. Austin; JHU; "The Development of an Underwater Light Sensor for Measuring Bioluminescence"; December 14, 1983.

3414; D.L. Inman; DOD; "Positioning-Tracking-Data Transmission System"; December 14, 1983.

3415; A. Chave, C.S. Cox; NSF; "Supercomputer Supplement to EAR 81-20949, 'Mantle Conductivity from Induction by Ocean Tides'"; December 15, 1983.

3416; C. Tai; NASA; "Determination of Ocean Circulation and the Geoid Using Satellite Altimetry"; December 15, 1983.

3417; W.H. Berger, R.S. Keir, J.S. Killingley, E.S. Vincent; NSF; "Deep-Sea CO₂:- Accumulation, Dissolution, and CO₂ Flux"; December 16, 1983.

3418; C.C. Chou, J.A. Welhan; NSF; "Isotopic Studies: Atmospheric CH₄ and N₂O; 81Kr in Polar Ice Cores"; December 22, 1983.

3419; R.L. Parker; NSF; "Exact Non-Linear Inversion of EM Soundings"; December 19, 1983.

3420; J.R. Arnold; NASA; "A Study of Possible Alternative, Accessible Supplies of H₂O and Other Important Volatiles for Life-Science and Life-Support in Orbit"; December 22, 1983.

3421; J.M. Gieskes; NSF; "Geochemistry of Interstitial H₂O of DSDP Cores"; December 21, 1983.

3422; A. Chave; UW; "Processing of Seafloor EM Data, Project EMSLAB"; January 20, 1984.

3423; J.R. Arnold; NASA; "Trade Study of Options for Early Test in Orbit of the External Tank of the NSTS"; December 21, 1983.

3424; D.L. Cutchin, W.B. White; NOAA; "A Proposal for S CA Tuna Fleet Liaison"; May 31, 1984.

[Box 24]

3425; J. Berger; NSF; "Associated Research Institutions for Earth Sciences: Planning and Coordination of the Global Seismographic Network"; January 10, 1984.

3426; S.B. Bachman, J.R. Curray; NSF; "The Evolution of a Modern Foreland: Fold and Thrust Belt Migration and Foreland Basin Sedimentation Mendoza Province, Argentina"; December 22, 1983.

3427; D.L. Cutchin, W.B. White; ONR; "Operation of a Ship-of-Opportunity XBT Deployment Program in the Pacific Ocean"; December 28, 1983.

3428; J. Namias; NSF; "Large-Scale Air-Sea Interaction Over the N Hemisphere and Associated Impact on Short-Term Climate of the Ocean Atmosphere"; December 29, 1983.

3429; J.R. Arnold, K. Nishiizumi; NSF; "Study of Antarctic Ice Using Radionuclides Produced by Cosmic Rays"; December 27, 1983.

3431; J.H. Filloux; NSF; "EM Study of Litho- and Asthenosphere beneath the Juan de Fuca Plate: SIO's SFMT Participation"; January 3, 1984.

3432; D.C. Agnew, J. Berger, M.A. Zumberge; NSF; "Absolute Gravity Measurements in CA"; January 6, 1984.

3433; G.L. Kooyman; NSF; "Swim Energetics of Free Ranging Galapagos Fur Seals"; January 3, 1984.

3433; D.C. Agnew, J. Berger, F. Wyatt; NSF; "PFGO: A Facility for Studies of Crustal Deformation"; January 27, 1984.

3434; W.R. Riedel; NSF; "Marine Geological Sample Collections: SIO"; January 6, 1984.

3435; J.B. Graham; NSF; "A Recirculating H2O-Tunnel Respirometer for the Study of Pelagic Marine Fishes"; January 6, 1984.

3436; J.J. Simpson; OSU; "The Relationship between Optical Properties and the Physical Dynamics of the Upper Ocean: A Component of the Environmental Effects on Optical Propagation, an SRO-II Proposal"; February 2, 1984.

3438; C.D. Keeling; NSF; "SCOR Working Group 75, 2nd Meeting on Oceanic CO2"; January 6, 1984.

3439; P.M. Williams; NSF; "Investigation of the Marine Organic C Cycle in the N Pacific Ocean"; January 13, 1984.

3440; W.F. Heiligenberg; DOHHS; "Differentiation of a Communicatory Signal"; January 6, 1984.

3441; R.E. Davis; UD; "Field Study of the Hydrographic and Current Fields of the Shelf/Slope Front"; January 6, 1984.

3442; J.R. Beers; NSF; "Ciliate Protozoan Distribution in the Pelagic Marine Environment"; January 19, 1984.

3443; J. Mammerrickx; NSF; "The Mathematician Seamounts and the Moctezuma Trough: A Morphologic and Paleomagnetic Investigation of a Long-Distance Spreading Center"; January 13, 1984.

3444; A.D. Chave; NSF; "Mantle Conductivity from Induction by Ocean Tides"; January 9, 1984.

3445; G.N. Somero; NSF; "Upgrading of the Seawater Aquarium Facilities of SIO"; January 7, 1984.

3446; R.W. Austin; NSSC; "The Development of a Nighttime 'K' Measuring System"; January 12, 1984.

3447; J.F. Gilbert, J.A. Orcutt; NSF; "Constrained Optimal Solutions in Seismic Imaging: Application to Global Data"; January 25, 1984.

3448; R. Davis, R. Knox, D. Luther, D. Roemmich; NSF; "Observations and Analyses of Equatorial Pacific Upper Ocean Currents and Temperatures and of Surface Meteorological Fields in TROPIC HEAT"; January 18, 1984.

3449; R.E. Lange; NSF; "Physics and Biology of the Upper Ocean"; January 12, 1984.

3450; J. Berger; NSF; "The Application of Spread Spectrum Communications Technology to Real Time Seismic Data Telemetry: A Pilot Experiment"; January 10, 1984.

3450; G. Backus; NSF; "The EM Properties of the Lower Mantle and Upper Core"; January 12, 1984.

3452; F. Gilbert; NSF; "The Application of Multiply- Windowed Spectral Techniques"; January 12, 1984.

3453; D.J. Faulkner; NSF; "Chemical Ecology of Marine Organisms"; January 12, 1984.

3454; F.N. Spiess, E.L. Winterer; NSF; "Origin and Drowning of Guyots in the Mid-Pacific Mountains"; January 26, 1984.

3457; E.D. Goldberg; NSF; "Vertical Transport Processes Recorded through 240Pu/239Pu Ratios"; January 17, 1984.

3458; J.G. Anderson; NSF; "The High Frequency Acceleration Spectrum and Seismic Wave Attenuation"; January 19, 1984.

3459; W.B. White; NSF; "Large-Scale Variation in Subsurface Temperature of the Tropical Pacific Ocean"; January 15, 1984.

3460; W.B. White; NSF; "H₂O Mass Formation in the Equatorial and Subtropical NW Pacific"; January 20, 1984.

3461; G. Arrhenius; NASC; "Molecular Electronic Materials"; April 24, 1984.

3461R1; G. Arrhenius; NASC; "Molecular Electronic Materials"; October 26, 1984.

3462; H. Craig; NSF; "Rare Gases from the Sub-Continental Mantle"; January 17, 1984.

3463; J.S. McClain, J.A. Orcutt; NSF; "EPR Study: Marine Seismology"; February 1, 1984.

3464; R.E. Davis; NSF; "Support of Satellite Oceanography Experiments"; January 18, 1984.

3466; R.E. Davis; NASA; "Support of Satellite Oceanography Experiments"; January 18, 1984.

3467; W.B. White; DOD; "Dynamics of the Upper N Pacific Ocean"; December 12, 1983.

Active Contracts and Grants; December 31, 1983.

3468; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; January 18, 1984.

3469; J.L. Bada; NSF; "Kinetically Coupled Organic Diagenetic Reaction: A Potential New Tool in Petroleum Geochemistry"; January 19, 1984.

3470; B.B. Ward; NSF; "The Relationship Between CH₄ Oxidation and Nitrification in the Marine Environment"; January 19, 1984.

3471; V.C. Anderson, K.M. Watson; NSSC; "VIM"; January 19, 1984.

3472; L. Armi, L. Washburn; NSF; "Observation of Mixing Processes in Mediterranean Salt Lenses"; January 19, 1984.

3473; R.W. Austin; ONR; "Environmental Data Support for SLCAIR-84 Field Test"; January 20, 1984.

3474; C.S. Cox, J.A. Orcutt; NSF; "Long Period Measurements with SIO OBS"; January 23, 1984.

3475; K.L. Smith; NSF; "Role of Pelagic and Demersal Animals in Particulate Organic Matter Transport at Abyssal and Bathyal Depths"; January 23, 1984.

3476; F.N. Spiess; NSF; "Deep-Sea Instrument Positioning and Recovery System"; n.d.

3478; B.B. Ward; NSF; "Component IV of Microbial N₂ Transformations in the OMZ off Peru: Nitrification and Nitrifying Bacteria in the Peruvian OMZ"; January 30, 1984.

3479; J.G. Anderson, J.N. Brune, J.E. Luco; NSF; "Strong Motion Array along the MX Subduction Thrust"; January 25, 1984.

3480; L. Cheng, R.A. Lewin; STC; "Improvement of Algal Strains, Methods of Production, and Storage of Algae as Soil, Amendments"; January 25, 1984.

3481; D.E. Andrews; NSF; "Development and Evaluation of a VLF VIM to Protect Cable-Supported Undersea Systems from Shipboard Motion"; January 26, 1984.

3482; R.N. Hey; NSF; "Tectonic Evolution of the Easter Microplate/Propagating Rift System"; January 18, 1984.

3483; W.R. Riedel, A. Sanfilippo; NSF; "The Late Eocene Microtektites and Their Relation to Radiolarian Stratigraphy"; January 27, 1984.

3484; J.H. Filloux; NSF; "Continuation of a Program of Broadband Observations of Pressure Fluctuations on the Deep-Sea Floor"; January 25, 1984.

3485; Y. Chung, H. Craig; NSF; "Geochemical Studies of Stable and Radioactive Isotopes in Crustal Fluids in Relation to Geology and Tectonics: Collaborative Studies with the SSB, PRC, in Peking (Zhojiazhuang Deep Well), S.W. Yunnan, Salton Trough (Hot Mineral Well), and Long Valley"; February 10, 1984.

3486; M. Hendershott, D. Luther; NSF; "Normal Modes of the Pacific: Observations and Theory"; January 31, 1984.

3487; Y. Chung, H. Craig; NSF; "Joint Chinese-US Investigations of Fluid-Phase Geochemical Characteristics and Their Applications to Tectonics and Earthquake Studies: Equipment Request"; January 27, 1984.

3488; J.W. Hawkins, P.F. Lonsdale; NSF; "Spreading- Center Processes and Products in the Mariana Trough Back-Arc Basin"; January 30, 1984.

3489; M.H. Salisbury; NSF; "Collaborative Research on the Geophysical Nature of the Continental Crust Based on Crustal Cross-Sections"; January 31, 1984.

3490; T.P. Barnett; NOAA; "Studies of Potential Predictability, Seasonality, and Persistence in the Surface Air Temperature Field of the US"; February 13, 1984.

3491; D.J. Faulkner, W.H. Fenical; NSF; "Replacement Instrumentation for Marine Natural Products Chemistry"; April 12, 1984.

3492; D.C. Agnew, M. A. Zumberge; USGS; "Absolute Gravity Measurements in Long Valley, CA"; February 1, 1984.

3493; D.C. Agnew, J. Berger, F. Wyatt; USGS; "CDO Program and Related Studies at PFGO"; February 6, 1984.

3494; D.C. Agnew; USGS; "CDO: Part J: Askania Borehole Tiltmeter"; February 3, 1984.

3495; D.C. Agnew, J. Berger, F. Wyatt; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; February 3, 1984.

3495R1; D.C. Agnew, J. Berger, F. Wyatt; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; September 13, 1984.

3496; J.N. Brune, M.S. Reichle; USGS; "Study of Excitation and Attenuation of Strong Ground Motion in the SD Region of S CA"; February 2, 1984.

3497; Y. Chung, USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; February 6, 1984.

3498; D.L. Cutchin, W.B. White; NOAA; "A Proposal for the Continuation of XBT Sampling from VOS in the Pacific Ocean 1984-86"; February 8, 1984.

3499; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; February 3, 1984.

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3503; B.J. Javor; NSF; "Physiological Regulation of Genes in Halobacteria"; February 7, 1984.

3504; H. Craig; NSF; "CH₄, He, and Trace Gases in Polar Ice Cores"; February 21, 1984.

3506; P.P. Niiler; ONR; "3rd Year of Direct Measurements of the Circulation in NE Pacific Thermocline"; February 10, 1984.

3507; P.P. Niiler; NSF; "3rd Year of Direct Measurements of the Circulation in NE Pacific Thermocline"; February 10, 1984.

3508; R.E. Davis, C.D. Winant; NSF; "Analysis and Interpretation of Observations Acquired during CODE"; February 10, 1984.

3509; C.H. Gautier; NSF; "The Acquisition of a VAX 11/750 Computer System"; February 8, 1984.

3511; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological System"; February 14, 1984.

3512; R.T. Guza; NSF; "Analysis of Longshore Current Data from the Surf Zone"; February 9, 1984.

3513; C.H. Gautier; NSF; "Heat and Momentum Fluxes at the Atmosphere-Ocean Interface in the Tropics from Combined Satellite and In Situ Measurements"; February 10, 1984.

3514; J. Berger, J.N. Brune; USGS; "Seismic Source Mechanism Studies in the Anza-Coyote Seismic Gap"; February 10, 1984.

3515; W.A. Nierenberg; AWMF; "Postdoctoral Training Program"; March 24, 1981.

3516; D.W. Wilkie; IMS; "Request for General Operating Support"; February 10, 1984.

3517; E.L. Winterer; NSF; "Crucial Stages in Evolution of a Tropical Passive Margin in the S Alps"; February 17, 1984.

3518; F. Gilbert; DARPA; "Multiple Taper Spectral Analysis of High Frequency Seismic Phases and Wavetrains"; February 14, 1984.

3519; R.C.J. Somerville; NOAA; "Support for Workshop Entitled, 'Technical Review of the Experimental Climate Forecast Center'"; February 14, 1984.

3520; B.J. Javor; DOHHS; "Physiological Regulation of Genes in Halobacteria"; February 16, 1984.

3525; G.G. Shor; ONR; "Ship Operations and Marine Technical Support"; February 29, 1984.

3527; J.R. Arnold, S. Nozette; NASA; "Workshop/Study Program on 'Technological Springboards into the 21st Century...' A Study of Space-Based Resources and Operations"; February 29, 1984.

3528; J.R. Arnold, S. Nozette; DOD; "A Proposal to Administer a Research Program on Applications of Near-Earth Resources"; February 29, 1984.

3530; A.J. Kalmijn; NSF; "Hydrodynamics of Lateral- Line Detection"; February 21, 1984.

3531; B.J. Javor; DOE; "Physiological Regulation of Genes in Halobacteria"; February 21, 1984.

3532; C.D. Keeling; NSF; "Continuance and Intercomparison of Atmospheric CO₂ Measurements at MLO"; February 24, 1984.

3533; C.H. Gautier; NASA; "The Investigation of the Feasibility to Use ISCCP Data Sets for Computing Global Insolation and Net SR at the Surface"; February 24, 1984.

3534; K.M. Watson; BI; "Deep Tow Cable Recovery Unit Construction Assistance"; March 8, 1984.

3537; M. Kastner; NSF; "Paleohydrothermal Sedimentation and Diagenesis in the S Pacific across the W Flank of the EPR at ~19°S, 116°-130°W"; March 14, 1984.

3538; K.M. Watson; LGO; "Crane Support"; March 19, 1984.

3539; R.C.J. Somerville; NOAA; "An Experimental Climate Forecast Center at SIO"; March 9, 1984.

3541; G.K. Vallis; CSI; "Stratocumulus off the CA Coast"; March 7, 1984.

3542; G.K. Vallis; NSF; "Investigation of Nonlinear Interactions and Large-Scale Turbulence Using Numerical Models"; March 7, 1984.

3546; R.R. Hessler, G.D.F. Wilson; NSF; "Systematics of a Deep-Sea Family (Eurycopidae, Isopoda, Crustacea)"; March 9, 1984.

3549; G.N. Somero; NSF; "The Transport and Detoxification of S2- by Animals from S2--Rich Marine Habitats"; March 13, 1984.

3550; G.D.F. Wilson; OSU; "Determining Effects of Mn Nodule Mining on Deep-Sea Benthic Communities: Planning and Evaluating a Controlled Impact Experiment"; n.d.

3551; R.J. Seymour; ACE; "Wave Data and Analysis"; March 20, 1984.

3552; J.O. Roads; CSI; "Finite Amplitude Conditional-Instability"; April 2, 1984.

3553; J.D. Horel; CSI; "Regional Studies of Cloudiness Using Albedo and Outgoing IR from Polar Orbiting Satellites"; April 2, 1984.

3554; D.E. Andrews; NSSC; "An Investigative Study and Analysis of the Contributions of NAVSEA-Funded Exploratory Development in Undersea Warfare Technology to On-Going System Development and Modernization during the 1968-83 Period"; March 20, 1984.

3555; W.A. Nierenberg; TF; "Amplification of Existing Program of Cooperation with and Assistance to LAMSI: Cycle II"; March 20, 1984.

3556; H. Craig, W. Rison; DOE; "Long Valley Caldera: Monitoring Studies of Gas Composition and He, Ar, and C Isotopes"; March 27, 1984.

3559; P.P. Niiler; NSF; "Direct Measurements of the Circulation in the NE Pacific Ocean"; n.d.

3560; R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "OAT: A Gyre-Scale Experiment"; March 19, 1984.

3562; J.G. Anderson; EPRI; "The High Frequency Acceleration Spectrum and Seismic Wave Attenuation"; March 29, 1984.

Active Contracts and Grants; March 31, 1984.

3563; M.M. Mullin; CSI; "Use of CZCS Images to Extend a Ship-Based Study of Planktonic Vertical Distributions"; n.d.

3564; S. Nozette; CSI; "Supplemental Support of a Workshop/Study Program on 'Technological Springboards into the 21st Century...' A Study of Space-Based Resources and Operations"; April 6, 1984.

3565; J.R. Curray; SEPC; "Geophysical Atlas and Synthesis of the S Andaman Sea"; n.d.

3566; R.W. Johnson; DOAF; "A System for Real Time Detection and Assessment of Cloud Free Fields of View"; May 23, 1984.

3567; G.G. Shor; SNL; "Project ISHTE"; April 4, 1984.

3568; B.D. Zetler; NOAA; "Investigation of Use of Constituent-Amplifying Factors in Tide Predictions"; April 9, 1984.

3569; R.E. Davis; NASA; "Development of a Self- Contained ADVP"; April 9, 1984.

3570; D.S. Luther; NASA; "Analysis of Satellite- Tracked Drifting Buoys in the N Pacific"; April 5, 1984.

3572; C.H. Gautier; CSI; "Image Processing Software for Oceanography, Meteorology, and Climate Research"; April 6, 1984.

3573; R. Frouin, C. Gautier; CSI; "Adequacy of the SMMR Experiment to Remotely Sense the Latent Heat Flux across the Ocean Surface"; April 6, 1984.

3574; A. Cutler; CSI; "Enhanced Performance of Space-Based Transportation System from Propellant Use of Locally Derived Al"; April 6, 1984.

3575; A. Cutler; CSI; "An Alkali Hydroxide-Based Scheme for Production of Lunar O2 and Selective Metals"; April 6, 1984.

3576; A. Cutler; CSI; "An Electrodynamics Tether- Based Orbital Maneuvering Vehicle Capable of Carrying Significant Payload to any Arbitrary Low Earth Orbit from a 28.5° Orbit within 6 Months"; April 6, 1984.

3577; J.L. Bada; CSI; "Extraterrestrial Amino Acids at the Cretaceous-Tertiary Boundary"; April 5, 1984.

3578; R.C.J. Somerville; CSI; "Climate Stability: A Search for Cloud Optical Thickness Feedbacks in Satellite Data"; April 6, 1984.

3579; R.C.J. Somerville; CSI; "Numerical Modeling of Thermal Convection Embedded in Rotating Shear Flows"; April 6, 1984.

3580; P.P. Niiler; NSF; "Measurement of Air-Sea Fluxes and Local Heat Storage in the Tropical Pacific"; April 11, 1984.

3581; R.T. Williams, D. Wirth; NSF; "Upgrading of Data Processing Capability at the Physical and Chemical ODF"; April 1984.

3582; M.M. Mullin; NSF; "Use of Lipofuscin Assay to Determine Metabolic Age and Growth Efficiency of Marine Zooplankters"; April 13, 1984.

3583; J.R. Arnold; NASA; "Proposal for a Research Program on Space Station Automation"; May 14, 1984.

3584; L.D. Talley; OSU; "OSU Support for N Pacific Section at 152°W Project"; April 13, 1984.

3585; P.K. Dayton, G.L. Kooyman; NSF; "The Ecology of Marine Communities under Antarctic Ice Shelves"; April 19, 1984.

3586; J.O. Roads; NOAA; "Supplement to an Experimental Climate Forecast Center at SIO"; April 19, 1984.

3588; A.G. Dickson; NSF; "Acid Base Chemistry in Seawater"; April 18, 1984.

3589; R.C.J. Somerville; NSF; "Cloud Optical Thickness Feedbacks in Climate Modeling"; April 20, 1984.

3590; J.R. Arnold; LANL; "Condensation Processes in the Early Solar System"; March 30, 1984.

3592; J.O. Roads; NSF; "Damped Persistence of US Surface Temperature: A New Approach for Statistical Prediction of Time Averages"; April 25, 1984.

3593; R.W. Eppley; NSF; "Phytoplankton Studies: NO₃- Transport, New Production, and the Sinking Flux of Biogenic Particles"; May 15, 1984.

3594; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; April 30, 1984.

3596; H.D.I. Abarbanel, C. Van Atta; ONR; "Nonlinear Dynamics of Transition to Turbulence in Shear Flows over Axisymmetric Objects and in Stratified Fluids; Theory and Experiment"; May 10, 1984.

3597; R.A. Jahnke; NSF; "Solubility of Substituted Forms of Fluorapatite"; May 1, 1984.

3598; J. Berger, J.F. Scheimer; LLNL; "IGPP UCSD- LLNL Collaborative Study of Seismic Data Telemetry via Satellite Using Spread Spectrum Technology"; April 30, 1984.

3599; R.R. Hessler, F.N. Spiess; NOAA; "A Study of Benthic Impacts of Test Mining at DOMES Site 'C'"; n.d.

3600; J. Namias; NOAA; "An Atlas of Monthly and Seasonal Temperature Anomalies over the Coterminous US"; April 30, 1984.

3601; W.F. Heiligenberg; DOHHS; "Sexual Differentiation of a Communicatory Signal"; May 2, 1984.

3602; M.E. Huntley; NSF; "The Effect of Dinoflagellates on Feeding, Growth and Survival of Larval N Anchovy, *Engraulis mordax*"; May 15, 1984.

3603; R.J. Seymour; DBW; "CDIP: Collection, Analysis, Reporting, and Storage of Wave Data"; May 3, 1984.

3604; R.E. Lange; NSF; "Collaborative Research on Biology, Physics and Chemistry of Large Patches of Krill"; n.d.

3605; R.B. Bacastow; ORNL; "Development of a 3-D Model of the Natural C Cycle in the Ocean and its Perturbation by Anthropogenic CO₂"; June 12, 1984.

3606; R.R. Hessler; SNL; "Benthic Biological Studies"; May 8, 1984.

3607; A.D. Chave, S. Constable, C.S. Cox; SPC; "Offshore Controlled Source EM Surveying"; May 14, 1984.

3608; A.D. Chave, S. Constable, C.S. Cox; T; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3609; A.D. Chave, S. Constable, C.S. Cox; SDC; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3610; A.D. Chave, S. Constable, C.S. Cox; EPRC; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3611; A.D. Chave, S. Constable, C.S. Cox; GRDC; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3613; K. Becker; NSF; "Hydrogeology Experiments during the First 2 Years of ODP"; May 11, 1984.

3614; R.C.J. Somerville; NSF; "Computing Facility Augmentation at SIO"; May 8, 1984.

3615; J.L. Bada; NASA; "Amino Acids in Ice Cores: Sources and Rates of Racemization"; May 9, 1984.

3616; A.D. Chave, S. Constable, C.S. Cox; CI; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3617; A.D. Chave, S. Constable, C.S. Cox; BPAE; "Offshore Controlled Source EM Surveying"; May 16, 1984.

[Box 26]

3621; C.E. Reimers; NSF; "Collaborative Project: CaCO₃ Preservation in the Deep-Sea"; June 5, 1984.

3623; W.F. Heiligenberg; DOHHS; "Info Processing in Laminated Neuronal Networks"; May 10, 1984.

3624; H.D.I. Abarbanel; ONR; "Theoretical Investigation of Turbulence and Turbulence Modification"; May 11, 1984.

3625; A.D. Chave, S. Constable, C.S. Cox; PPC; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3626; A.D. Chave, S. Constable, C.S. Cox; SEPC; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3627; A.D. Chave, S. Constable, C.S. Cox; M; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3628; L. Tauxe; NSF; "Magnetostratigraphy of European Neogene Stratotype Sections"; May 29, 1984.

3629; J.G. Stewart; NSF; "An Attempt to Understand Plant Distributions in a 2-Part Intertidal System in Terms of a Theory Proposed for Vegetation Structure in Non-Marine Environments"; May 18, 1984.

3630; W.S. Hodgkiss; ONR; "Applications of Adaptive Least-Squares Lattice Structures to Problems in Underwater Acoustics"; May 15, 1984.

3633; A.D. Chave, S. Constable, C.S. Cox; COFRC; "Offshore Controlled Source EM Surveying"; May 16, 1984.

3634; L.E. Tway; NSF; "Biogeography of Miocene and Quaternary Ichthyoliths from the Pacific"; May 29, 1984.

3635; R.E. Flick, R.T. Guza, D.L. Inman, S.A. Jenkins; ONR; "Fluid-Sediment Interactions on Beaches and Shelves"; n.d.

3636; R.F. Weiss; NSF; "Tropical Atlantic Study: CIFIC4 Measurements"; June 13, 1984.

3637; L. Haury, T. Hayward, E. Venrick; NSF; "Biological Observations in a Trans-Pacific Section along 24°N Latitude"; May 23, 1984.

3639; M.H. Salisbury; NSF; "Collaborative Research: Geophysical Logging in the Troodos Ophiolite Complex"; May 18, 1984.

3640; G.G. Shor; NSF; "Ship Operations Support: Incremental Funding for OCE 83-17741"; May 21, 1984.

3641; G.G. Shor; NSF; "NMF Repair and Dredging"; May 21, 1984.

3642; G.G. Shor; ONR; "NMF Repair and Dredging"; May 21, 1984.

3644; J. Namias; DWR; "CA Precipitation Forecast Research"; May 24, 1984.

3647; R.A. Knox, W.H. Munk, P.F. Worcester; NSF/ONR; "OAT: A Gyre-Scale Reciprocal Transmission Experiment"; May 24, 1984.

3648; C.H. Gautier; CNES; "Travel Related to the TOPEX/POSEIDON Experiment"; May 28, 1984.

3649; J.W. Hawkins; NSF; "Petrology and Geochemistry of Mariana Trough Basalts; DSRV Alvin Field Program"; June 8, 1984.

3650; J.W. Hawkins; NSF; "Petrology and Geochemistry of Lau Basin Basalts: Evolution of Back-Arc Basin Crust and Upper Mantle"; June 7, 1984.

3651; A. Sanfilippo; NSF; "Stratigraphy, Taxonomy and Paleoecology of Cenozoic Radiolaria"; June 5, 1984.

3652; F.H. Fisher, R.B. Williams; ONR; "Fixed Vertical Array"; n.d.

3653; D.E. Andrews; WOD; "MIM for an Anchored Buoy System"; May 24, 1984.

3655; A.D. Chave, J.H. Filloux, J.C. Larsen, D.S. Luther; NSF; "EM and Pressure Field Measurements on the Seafloor of the NE Pacific Ocean: Oceanographic and Geophysical Objectives"; May 25, 1984.

3656; R.W. Austin; WB; "A Test and Evaluation Program Using Satellite Observations for the Somali Fishery"; May 30, 1984.

3657; B.E. Volcani; DOHHS; "Biochemical Studies of Siliceous Skeletal Formation: Role of Si"; May 30, 1984.

3659; A.C. Vastano; WB; "Sea Surface Flow Observations from Satellite Imagery"; June 11, 1984.

3660; R.J. Seymour; ACE; "Wave Data Collection and Analysis"; n.d.

3661; H.D.I. Abarbanel, W.R. Young; NSF; "Topics in Large Scale Circulation Theory"; June 6, 1984.

3663; F.H. Fisher; ONR; "Chemical Sound Absorption in the Ocean"; n.d.

3664; L.M. Dorman; NSF; "Seamount Tomography Using OBS"; June 12, 1984.

3665; C.D. Keeling; NSF; "Absolute Abundance and $^{13}\text{C}/^{12}\text{C}$ Ratio of Dissolved Inorganic C in Ocean H₂O Collected at Historic Hydrographic Stations"; June 6, 1984.

3666; C.D. Keeling; ORNL; "Continuation of Precise Measurement of Atmospheric CO₂ at MLO"; July 3, 1984.

3667; A.G. Dickson; NSF; "Lab Studies to Improve the Analysis of Total Inorganic C in Seawater"; June 6, 1984.

3668; V.C. Anderson, K.M. Watson; ONR; "Program in Marine Physics Applied to USN Undersea Missions"; n.d.

3669; J.A. Orcutt; NSF; "Acquisition of Danford 300 Mbyte Winchester Mass Storage System"; June 8, 1984.

3669R1; J.A. Orcutt; NSF; "Equipment Grant: Array Processor and Mass Storage for Marine Geophysics"; October 2, 1984.

3670; F.N. Spiess, E.L. Winterer; NSF; "Origin and Drowning of Guyots in the Mid-Pacific Mountains"; n.d.

3672; M. Tsuchiya; NSF; "Hydrographic Observations for a W EPOCS"; June 4, 1984.

3673; J.D. Macdougall; NSF; "Subcontinental Mantle Characteristics: Isotopic Studies of Continental Flood Basalts, Ultramafic Xenoliths, and Archean Crust"; June 28, 1984.

3674R1; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Studies of EPR and Marginal Basin Basalts"; October 3, 1984.

3675; M. Abbott, F.F. Haxo; NSF; "The Dynamics of Phytoplankton Accessory Pigments and Their Relationship to Light Attenuation in the H₂O Column"; June 13, 1984.

3676; M.R. Abbott; DOE; "Patterns of Phytoplankton Biomass and Production in the S CA Bight: Observations from the CZCS"; n.d.

3676R; M.R. Abbott; DOE; "Patterns of Phytoplankton Biomass and Production in the S CA Bight: Observations from the CZCS"; August 24, 1984.

3678; H. Staudigel; NSF; "Diagenesis and ⁸⁷Sr/⁸⁶Sr and ¹⁴³Nd/¹⁴⁴Nd in Ancient Seawater: Are Fish Teeth the Solution?"; June 18, 1984.

3679; R.L. Fisher; NSF; "Petrological Study of Plutonic and Extrusive Rocks from Rapidly-Spreading Mid-Oceanic Ridges"; June 18, 1984.

3680; K. Takahashi; NSF; "Pelagic Opal: Seasonal and Vertical Flux Variabilities in N High Latitude Oceans"; June 13, 1984.

3681; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean (ABR)"; June 11, 1984.

3682; K. Becker; NSF; "Heat Flow Studies during 1985 DSRV Alvin Operations in the Guaymas Basin, Gulf of CA"; June 13, 1984.

3685; G.G. Shor; NSF; "Ship Operations (2nd Year of OCE 83-17741)"; June 18, 1984.

3686; G.G. Shor; NSF; "Technician Support for SIO Ships"; June 27, 1984.

3687; H.T. Hammel; DOHHS; "Mammalian Thermoregulatory Threshold and Sensitivity"; May 7, 1984.

3688; W.F. Perrin; NSF; "Inter-Relationships of Dephinoid Cetaceans as Revealed by Analysis of mDNA"; June 8, 1984.

3689; L.D. Talley, J.H. Swift; NSF; "A Trans- Pacific Section in the Subpolar Gyre"; June 13, 1984.

3690; H. Craig, W. Rison; NSF; "Oceanic Basalts: Rare Gas, H and C Concentrations, and Isotope Ratios"; June 30, 1984.

3691; H. Craig; R.J. Poreda; NSF; "Continental and Convergent-Margin Volcanism: Isotopic Studies of Fluids and Rocks"; July 19, 1985.

3692; E.L. Winterer; UH; "DSRV Alvin Dives, Johnston Island"; June 11, 1984.

3694; A.G. Dickson, K.H. Nealson, NSF; "The Kinetics of Bacterially Mediated Redox Transformations"; June 15, 1984.

3695; W. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing"; June 12, 1984.

3696; J.N. Brune, A.H. Olson; NSF; "Inversion of Earthquake Ground Motion for Fault Slip"; June 22, 1984.

3698; D.C. Agnew, J. Berger, F. Gilbert; NSF; "Project IDA: A Global Research Network for Very Long Period Seismology"; June 19, 1984.

3699; J. Berger, F. Gilbert; NSF; "Seismograph Station on Easter Island"; June 19, 1984.

3700; D.C. Agnew, J. Berger, M.A. Zumberge; NSF; "Precision Measurements of Crustal Deformation"; June 20, 1984.

3701; J.H. Natland; OSU; "The Temporal and Petrochemical Evolution of the Island of Tahiti (Society Islands)"; June 13, 1984.

[Box 27]

3702; A.D. Chave; NSF; "Mantle Conductivity from Induction by Ocean Tides"; June 15, 1984.

3702R1; A.D. Chave; NSF; "Mantle Conductivity from Induction by Ocean Tides"; October 31, 1984.

3703; B.E. Volcani; NSF; "Role of Si in the Control of Gene Expression and Replication in the Diatom"; June 12, 1984.

3704; P.K. Dayton, M.J. Tegner; NSF; "Scales of Disturbance and Catastrophe: The Effects of an ENSO on Kelp Forest Communities"; June 12, 1984.

3705; M.E. Huntley; NSF; "Copepod Food Selection: Antifeedant Compounds of Dinoflagellates"; June 12, 1984.

3706; P.F. Lonsdale; NSF; "A Transform Margin with Hydrocarbon Seeps and Shallow Clathrates: Submersible and Heat Flow Study"; June 15, 1984.

3707; R.N. Hey; NSF; "Detailed Tectonic Evolution of the Seafloor off W NA, Part 2: S of Juan de Fuca"; June 19, 1984.

3708; A.A. Yayanos; NSF; "Characterization and Ecology of Deep-Sea Barophilic Bacteria"; June 13, 1984.

3709; E.D. Goldberg; NSF; "Marine Chemistries of the Platinum Metals"; June 25, 1984.

3711; J.R. Beers; NSF; "Ciliate Protozoan Distribution in the Pelagic Marine Environment"; June 22, 1984.

3713; P.F. Lonsdale; NSF; "Spreading Center Processes in the Mariana Trough Back-Arc Basin"; June 20, 1984.

3714; J.W. Hawkins, J.H. Natland; NSF; "Petrology of Seamounts off S CA"; June 22, 1984.

3715; M.M. Mullin; CDFG; "Biochemical Measures of Growth and Metabolism in Larval and Juvenile White Sea Bass and CA Halibut"; June 12, 1984.

3716; B.W. de Lappe; NOAA; "Development of a Passive Sampling Apparatus for Marine Pollutants"; June 21, 1984.

3717; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; June 20, 1984.

3718; M. Tsuchiya; NSF; "Tropical and Subtropical Circulation of the Atlantic Ocean"; June 21, 1984.

3719; A.A. Benson; DOHHS; "Arsenic Metabolism"; June 19, 1984.

3720; A.C. Vastano; NSF; "Satellite Surface Flow Analyses for Warm Core Ring 82-B"; June 19, 1984.

3721; G.A. Jackson; CIT; "A Model of Kelp Photosynthesis and Growth"; June 21, 1984.

3722; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; September 7, 1984.

3723; R.W. Johnson; AFGL; "Analysis of Electro-Optical Imagery for the Prediction of Cloud-Free Paths of Sight"; June 25, 1984.

3724; B.B. Ward; NSF; "The Relationship between Nitrification and CH₄ Oxidation in the Marine Environment"; June 25, 1984.

3725; J.B. Graham; NSF; "Function of the Pericardium and the Pericardioperitoneal Canal in Elasmobranch Fishes"; June 15, 1984.

3726; D.L. Inman, S.A. Jenkins; ACE; "Submarine Canyon Sedimentation Study"; June 22, 1984.

3727; H. Felbeck, G.N. Somero; NSF; "Biochemical and Physiological Characteristics of the Hydrothermal Vent Community Animals"; June 24, 1984.

3728; A.P. Klimley; NSF; "Orientation/Navigation Mechanisms in Pelagic Sharks"; July 30, 1984.

3731; L. Tauxe; NSF; "Magneto- and Lithostratigraphy of Baringo Basin Sediments, E African Rift, Kenya"; n.d.

3732; G.G. Shor; NSF; "Technician Support for Pool Equipment"; June 29, 1984.

3733; P.M. Williams; NSF; "Investigations of the Marine Organic C Cycle in the N Pacific Ocean"; June 15, 1984.

3734; O. Holm-Hansen; BII; "Biological Studies in Support of MOS"; June 27, 1984.

3735; R.H. Rosenblatt; CDFG; "A Biochemical Genetic Survey of the CA Halibut, *Paralichthys californicus*, and the White Sea Bass, *Atractoscion nobilis*"; June 28, 1984.

3736; J.H. Natland; NSF; "Influence of an Undepleted Upper-Mantle Lava Source beneath the Samoan Linear Volcanic Chain"; June 29, 1984.

Active Contracts and Grants; June 30, 1984.

3737; W.H. Berger; R.S. Keir; EPRI; "Ocean-Atmosphere Interaction in the Context of the CO₂ Problem. II"; July 20, 1984.

3738; E. Brinton; NOAA; "Analysis, Sorting and Measurement of Plankton Samples"; July 2, 1984.

3739; E. Brinton; NOAA; "Analysis of Otoliths of Fish"; n.d.

3740; R.A. Lewin; NSF; "Abscission of Algal Flagella: Its Induction and Control"; June 15, 1984.

3741; D.E. Andrew; WOD; "Parametric Study of the Performance Characteristics of a MIM for an Anchored Buoy System"; July 2, 1984.

3742; E. Brinton, M. Huntley; NSF; "AMERIEZ: Growth, Feeding, and Early Development of Krill"; August 6, 1984.

3744; R.C.J. Somerville; NASA; "Theoretical Models for Numerical Weather Prediction"; June 22, 1984.

3745; B.E. Volcani; NSF; "Si Regulation of cAMP Metabolism: Are Si's Effects on Cellular Metabolism Mediated by cAMP in the Diatom?"; July 5, 1984.

3746; J.H. Swift; NSF; "High Quality Hydrographic Sampling in the Greenland-Spitsbergen Passage and the Arctic Ocean"; July 5, 1984.

3747; C.S. Cox; NORDA; "Deep Controlled Source EM Soundings to Detect Low Electrical Conductivity Zones in the Lithosphere"; July 10, 1984.

3748; F. Gilbert, T.G. Masters; NSF; "Low Frequency Constraints on Spherical Earth Structure and Earthquake Mechanisms"; July 18, 1984.

3749; A.A. Yayanos; SNL; "SNL Contract 47-5720"; July 10, 1984.

3750; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; July 10, 1984.

3751; R.R. Hessler; SNL; "Benthic Biological Studies"; July 10, 1984.

3753; J.F. Gilbert, A. Olson, J.A. Orcutt; NSF; "Constrained Optimal Solutions in Seismic Imaging"; July 10, 1984.

3754; O. Holm-Hansen; KLI; "Food Web Dynamics in Peard Bay, AK"; July 12, 1984.

3755; R.F. Weiss; NSF; "Measurements of the Dissolved Atmospheric ClFICH4 (Freons) F-11 and F-12 in the Weddell Sea"; July 13, 1984.

3756; C.S. Cox; NORDA; "Deep Controlled Source EM Soundings to Detect Low Electrical Conductivity Zones in the Lithosphere"; July 13, 1984.

3759; K.M. Watson; NSSC; "Technical Support for USN DSVs"; August 27, 1984.

3760; R.W. Austin; NOO; "Transmissometer: Repair, Modification, and Calibration"; March 15, 1984.

3761; A. Soutar; SAI; "Deployment of Floating Trap System and Sediment Resuspension Traps"; July 25, 1984.

3762; F.N. Spiess; NOAA; "Carry Out an Equipment Recovery Operation"; July 13, 1984.

3763; R.W. Austin; NSSC; "ASSAS Calibration and Analysis Support"; October 9, 1984.

3765; J.W. Miles; NSF; "Geophysical Fluid Dynamics"; July 27, 1984.

3766; D.J. Faulkner; LRL; "Chemical Modification of Marine Natural Products"; July 31, 1984.

3768; G.W. Lugmair; NASA; "Isotopic, Chemical, and Mineralogical Investigations of Extraterrestrial Materials"; August 17, 1984.

3769; P.S. Doyle, W.R. Riedel; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic Pelagic Sediments"; August 17, 1984.

3770; M.E. Heath; DOHHS; "Temperature Regulation in Small Mammals"; October 12, 1984.

3771; R. Revelle; NSF; "Continuing Support for the Scientific Secretary for CCCO of the SCOR"; July 13, 1984.

3772; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 12, 1984.

3774; S.M. Smith; DMA; "Bathymetric Data Collection and Processing for Atlas Expedition Leg 3"; August 8, 1984.

3775; R.J. Seymour; DOA; "Nearshore Bathymetric Survey Report"; August 1, 1984.

3776; J.D. Horel; NSF; "A Diagnostic Study of the ENSO Episode during 1982/83"; August 6, 1984.

3777; J. Namias; NOAA; "Investigation of Some Aspects of Short Term Climate Variability over NA"; August 6, 1984.

3779; W.R. Riedel, L.E. Tway; ONR; "Eocene-Oligocene Hiatus(es) in Pacific Pelagic Clay Sequences, Using Ichthyoliths"; August 8, 1984.

3780; A.P. Klimley; NPS; "The Movement Patterns and Behavior of the White Shark, *Carcharodon carcharias*, in the Pt. Reyes/Farallon National Marine Sanctuary"; August 8, 1984.

3782; R.W. Austin; FAOUN; "Analysis of Satellite Data to Supplement an Oceanographic Survey of the N Somali Coast"; August 8, 1984.

3783; R.W. Austin; FAOUN; "Processing of Satellite Data to Supplement an Oceanographic Survey of the N Somali Coast"; August 8, 1984.

3784; K.M. Watson; NSSC; "Applications of Dynamic Beamforming to Towed Line Arrays"; August 13, 1984.

3785; K.M. Watson; NSSC; "Technical Support for USN DSVs"; August 13, 1984.

3786; K.M. Watson; NSSC; "Active Acoustic Cancellation"; August 13, 1984.

3787; M. Huntley; NSF; "Trophodynamics of Zooplankton at the Antarctic Ice-Edge Zone"; August 22, 1984.

3788; M.E. Huntley; NSF; "Feeding, Growth and Development of Larval Euphausia superba Dana in the Antarctic Peninsula Coastal Marine Ecosystem"; August 21, 1984.

3789; G.L. Kooyman; NSF; "Interesting Behavior and Physiology of Leatherback Sea Turtles"; n.d.

3790; A.C. Vastano; ONR; "Mesoscale Oceanic Phenomena"; August 16, 1984.

3791; G.G. Shor; NSF; "Oceanographic Instrumentation"; September 6, 1984.

3792; G.G. Shor; NSF; "Shipboard Scientific Support"; August 31, 1984.

3793; G.G. Shor; NSF; "Scientific Outfitting R/V Robert Gordon Sproul"; September 6, 1984.

3794; D.C. Agnew, J. Berger, F. Wyatt; USGS; "Supplement to: Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; August 14, 1984.

3794S; D.C. Agnew, F. Wyatt; USGS; "Studies of the Seismic and Crustal Deformation Patterns of an Active Fault: PFGO"; August 14, 1984.

3796; D.C. Agnew, J. Berger; NASA; "Towards a Statistical Understanding of Tectonic Motions Analysis of Crustal Dynamics Observations"; August 23, 1984.

3797; R.A. Jahnke; DOE; "The Flux and Recycling of Bioactive Substances in the Surface Sediments of the Deep Basins off S CA"; September 5, 1984.

3799; F.N. Spiess; NSF; "Deep-Sea Instrument Positioning and Recovery System"; August 28, 1984.

3800; T.P. Barnett; NSF; "Studies of Climate Predictability and Dynamics"; n.d.

[Box 28]

3802S; R. Davis, R. Knox, D. Luther, D. Roemmich; NSF; "Observations and Analyses of Equatorial Pacific Upper Ocean Currents and Temperatures of Surface Meteorological Fields in TROPIC HEAT"; August 14, 1984.

3803; K.L. Smith; NGS; "Seasonal Studies of Dominant W Coast Continental Slope Dwelling Megafauna"; August 22, 1984.

3805; W.F. Heiligenberg; ONR; "The Detection and Evaluation of Biologically Relevant Signals"; August 29, 1984.

3806; A.C. Bucklin; NSF; "Fine and Mesoscale Genetic Structure of Planktonic Copepod Populations"; September 24, 1984.

3807; S. Nozette; NASA; "Technological Springboards into the 21st Century, a Study of Space Based Resources and Operation"; August 23, 1984.

3808; R.R. Hessler; NSF; "Spatial and Temporal Distribution of Megafauna at the Galapagos and Mariana Hydrothermal Vent"; August 24, 1984.

3809; E.D. Goldberg; DOE; "The Fluxes of Organic Materials to the Sediments of the CA Coastal Region. In Response to PRPA Program of Mineralization and Cycling in Marine Systems DE-RA05-84 ER60240"; August 27, 1984.

3810; J.D. Macdougall; NSF; "U and Th Decay Series Disequilibrium in Volcanic Rocks as Indicators of Mantle Composition and Magmatic Processes"; August 30, 1984.

3811; R.R. Hessler; SNL; "Benthic Biological Studies"; September 7, 1984.

3812; J.D. Macdougall; NASA; "The Earth's Early Mantle and Crust: Isotopic and Chemical Studies"; September 1, 1984.

3813; Y. Chung; NSF; "Particulate Matter and 210Pb/226Ra Disequilibrium in the Continental Slope Area off CA"; August 30, 1984.

3814; D. Lal; NSF; "Nuclear and Geochemical Studies of Mantle Rocks and Diamonds"; August 29, 1984.

3815; A.D. Chave; NSF; "Supplement to: A Detailed Evaluation of EM Induction Fields in the Deep Ocean"; August 31, 1984.

3816; R.C.J. Somerville; LLNL; "Cloud Optical Thickness Feedbacks on Climate: Evidence from SRS"; July 19, 1984.

3817; W.R. Riedel; NSF; "Marine Geological Sample Collections: SIO"; September 27, 1984.

3818; R.R. Hessler, L.S. Mullineaux; NSF; "Colonization of Organisms on Mn Nodules: A Deep-Sea In Situ Experiment"; September 4, 1984.

3820; M. Huntley, V. Marin; NSF; "Interannual Variability of Antarctic Zooplankton in the Scotia Sea Region, 1964-84"; September 4, 1984.

3821; H. Felbeck; NSF; "Ecophysiology of Animals from Shallow H₂O S₂-Springs"; September 5, 1984.

3823; J.R. Arnold, S.D. Nozette; DOD; "Innovative Concepts in Space Logistics"; November 1, 1984.

3824; H.D.I. Abarbanel; MIT; "Topics in Large Scale Circulation Theory"; September 13, 1984.

3826; F. Azam, A.F. Carlucci; DOE; "Role of Bacteria in Organic Matter Fluxes in the SCCZ"; September 13, 1984.

3826R1; F. Azam, A.F. Carlucci; DOE; "Role of Bacteria in Organic Matter Fluxes in the SCCZ"; May 6, 1985.

3827; J.R. Beers; DOE; "The Nature of the Seston in S CA Coastal H2O, with Emphasis on the Microphagotrophs: Implications for Mineralization and Recycling Activities"; September 19, 1984.

3828; R.W. Eppley; DOE; "Primary Production, Nutrients and O2 in the S CA Bight: Contribution to the C, N, and O2 Budgets"; September 7, 1984.

3829; G.A Jackson; DOE; "A Proposal to Measure the Density and Nutrient Fields at Openings to a Marine Basin and to Model the Fluxes within the Basin"; September 13, 1984.

3830; P.M. Williams; DOE; "Sources and Composition of Organic Materials in H2O and Sediments of the SCCZ"; September 13, 1984.

3831; K.M. Watson; NOAA; "Ocean Service Center Liaison Officer Support"; September 13, 1984.

3832; J. Berger; USGS; "Event Detection and Recording System. Supplement to: Seismic Source Mechanism Studies in the Anza-Coyote Seismic Gap"; September 12, 1984.

3833; H. Craig; GGC; "Detection/Differentiation System Development for Deep Source Gas"; September 21, 1984.

3834; C.D. Keeling; DOC; "Calibration of CO2 Standard Reference Materials"; October 3, 1984.

3835; C.G. Gautier; NASA; "Pilot Study for ISCCP: Calibration of GOES-5 and GOES-6 VISSR/VAS SR Detections"; September 10, 1984.

3836; M.A. Zumberge; NSF; "Acquisition of a Relative Gravimeter"; n.d.

3837; M. Tsuchiya; NSF; "Atlantic Intermediate-H2O Circulation"; September 19, 1984.

3838; W.H. Thomas; NSF; "Simulated Upwelling in the Lab: Effects of Initial Seed-Stock and Small-Scale Turbulence on Marine Phytoplankton Species Selection in Natural Assemblages"; September 26, 1984.

3839; V.C. Anderson, K.M. Watson; ONR; "Continuation of the Interdisciplinary Research Program at MPL"; September 27, 1984.

3840; K.L. Smith; NSF; "Role of Planktotrophic Development in Particulate Organic Matter Transport at Slope Depths"; October 4, 1984.

3842; R.R. Hessler; DOE; "Foraging of Deep-Sea Deposit Feeders: Effects on Particulate Fluxes"; n.d.

3843; W.B. White; NSF; "Short-Term Climatic Variability in the Upper Ocean Thermal Structure of the Tropical Pacific Ocean during the 1982-83 ENSO Event"; September 22, 1984.

3844; J.B. Graham; NSF; "A Recirculating H2O-Tunnel Respirometer for the Study of Pelagic Marine Fishes"; September 15, 1984.

3845; M.J. Tegner; NSF; "Nutrient Flux through a Kelp Ecosystem: The Role of Nutrient Limitation in the Productivity of Herbivores"; September 25, 1984.

3846; A.F. Carlucci; NSF; "Microbially-Mediated Cycling and Flux of Dissolved Organic C within the Benthic Boundary Layer"; September 26, 1984.

3847; S.M. Smith; NOAA; "Extraction of Single Beam Bathymetry from SeaBeam Data and Conventional Bathymetry Collection and Processing R/V Melville June-July 1985"; September 24, 1984.

3849; T.P. Barnett; NOAA; "Letter Proposal Addressing Areas of Prediction and Diagnosis of ENSO Events"; September 25, 1984.

3851; W.B. White; NOAA; "Short-Term Climatic Variability in the Upper Ocean Thermal Structure of the Tropical Pacific Ocean during the 1982-83 ENSO Event"; September 21, 1984.

3853; F. Azam; NSF; "Role of Bacteria in Detrital Marine Foodwebs: Mechanisms in Bacterioplankton- Organic Matter Interactions"; October 16, 1984.

3854; S.A. Jenkins; PSF; "Sediment Management Study at the PSF (I)"; n.d.

3855; S.A. Jenkins; PSF; "Sediment Management Study at the PSF"; n.d.

3856; W.S. Hodgkiss; NSSC; "Random Array Beamforming"; n.d.

3857; M.E. Huntley; DOE; "Critical Factors Influencing Fecal Production by Particle-Feeding Zooplankton in the S CA Bight"; September 26, 1984.

3858; W.B. White; NOAA; "TOGA Thermal Data Base Management Program"; September 27, 1984.

3859; C.D. Winant; ONR; "Pressure Observations in the Gibraltar Experiment"; September 26, 1984.

3860; W.H. Thomas; UERG; "Acquisition of Equipment for Characterizing the Composition of High-Energy Biomass of Saline Desert Microalgae"; September 26, 1984.

3861; C.D. Keeling; NSF; "A Study of the Abundance of CO₂ in the Atmosphere and its Exchange with the Oceans"; October 4, 1984.

3862; W.R. Riedel, A. Sanfilippo; NSF; "The Late Eocene Microtektites and Their Relation to Radiolarian Stratigraphy"; September 28, 1984.

3863; G.G. Shor; DOE; "Research Ship Support for Studies in the SCCZ"; September 27, 1984.

3865; P.F. Lonsdale; NSF; "A Transform Margin with Hydrocarbon Seeps and Shallow Clathrates: Submersible and Heat Flow Study"; October 2, 1984.

3867; R.W. Austin; NELO; "Ocean Natural Resources Assessment"; October 19, 1984.

3868; H.D.I. Abarbanel, V.C. Anderson, D.E. Andrews; ONR; "ACSAS Active Cancellation"; n.d.

3870; J.R. Curray; NSF; "The Continental Margins and Present Tectonics of Sri Lanka"; October 17, 1984.

3871; O. Holm-Hansen; NSF; "Grazing by Microbial Cells Upon Pico- and Nannoplankton, and its Significance upon the Food Web in Antarctic H₂O"; October 8, 1984.

3872; M.M. Mullin; NSF; "Use of Lipofuscin Assay to Determine Metabolic Age and Growth Efficiency of Marine Zooplankters-A Feasibility Study"; October 8, 1984.

3873; W.H. Berger, R.S. Keir; NSF; "Deep-Sea CO₂-: Accumulation, Dissolution, and CO₂ Flux"; September 28, 1984.

Active Contracts and Grants; September 30, 1984.

3874; M.E. Huntley; NSF; "Particle Rejection Behavior by Marine Copepods: Dinoflagellate Chemical Defense Mechanisms"; October 8, 1984.

3875; G.J. Rose; DOHHS; "Electrosensory Processing in Laminated Midbrain Structures"; October 22, 1984.

3876; J.L. Bada; DOHHS; "Aspartame Racemization"; October 18, 1984.

3877; M. Kastner; ONR; "Sedimentology, Geochemistry, and Early Diagenesis of SE Atlantic Ocean Calcareous Sediments"; October 10, 1984.

3878; O. Holm-Hansen; NSF; "Food Web Studies in the Barents Sea"; October 15, 1984.

3880; W.S. Hodgkiss; NSSC; "Adaptive Array Processing"; n.d.

3881; D.E. Andrews; NSSC; "VIM"; n.d.

3882; R.J. Seymour; UERG; "Waves as an Alternate Energy Source for Pumping Seawater"; October 15, 1984.

3883; K.L. Smith; NSF; "Role of Pelagic and Demersal Animals in Particulate Organic Matter Transport at Abyssal and Bathyal Depths"; October 12, 1984.

3884; H. Craig, W. Rison; NSF; "Oceanic Basalts: Rare Gas, H and C Concentrations, and Isotope Ratios"; October 11, 1984.

3886; R.W. Austin; CIT; "Fisheries Demonstration Project"; October 16, 1984.

3887; N.A. Bray; ONR; "Transport of Heat and Salt through the Strait of Gibraltar"; October 16, 1984.

3889; R.J. Seymour; WES; "Wave Data and Analysis"; n.d.

3890; G.W. Lugmair; NASA; "Acquisition of MSSMS"; October 19, 1984.

3891; R.H. Stewart; CIT; "Radar Studies of the Sea Surface"; October 23, 1984.

3892; M.M. Mullin; NSF; "Epipelagic Patterns and Processes: The Vertical Position of Particle- Grazing Copepods Relative to Their Food and the Consequences"; October 24, 1984.

3893; H.T. Hammel; NSF; "Osmoregulatory Responses to Altered Plasma and Interstitial Fluid in Duck"; October 24, 1984.

3894; D.J. Faulkner; NSF; "Chemical Ecology of Marine Organisms"; October 31, 1984.

3896; W.H. Thomas; SERI; "Collection of High Energy Yielding Strains of Saline Microalgae"; October 30, 1984.

3898; R.W. Austin; JHU; "The Development of an Underwater Sensor"; November 6, 1984.

3899; D.J. Faulkner; DOHHS; "Antibiotics from Marine Organisms"; November 7, 1984.

3900; J.R. Arnold; NASA; "Development of an Orbital Gamma Ray Experiment for Lunar and Planetary Geochemistry"; n.d.

3901; J.A. Orcutt; DARPA; "Analysis of MSS and OBS Data Collected during the Ngendei Seismic Experiment"; October 31, 1984.

3902; N.A. Bray; ONR; "Moored Observations of Thermohaline Circulation in the N Gulf of CA"; n.d.

3903; N.A. Bray; NSF; "Thermohaline Circulation in the Gulf of CA"; November 30, 1984.

3904; G.G. Shor; ONR; "SeaBeam Improvements"; November 12, 1984.

3906; G.A. Jackson; ONR; "A Theoretical Study of Small-Scale Phytoplanktonic Dynamics and Interactions"; February 5, 1985.

3908; L. Tauxe; NSF; "Rock Magnetism and SEM of the Siwalik Group Red Beds: An Investigation into the Processes of Remanence Acquisition"; November 8, 1984.

[Box 29]

3909; J.L. Bada; NSF; "Amino Acid Racemization Dating of Fossil Bones"; November 16, 1984.

3910; R.J. Seymour; PGEC; "Wave Data Analysis off Diablo Canyon"; November 6, 1984.

3911; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; November 12, 1984.

3912; W.H. Berger; NSF; "Workshop on Abrupt Climatic Changes"; November 9, 1984.

3913; F.C. Knowles; DOASE; "Enzymology of the 3,4- anhydro-Ru5P Pathway from Ru5P to Phosphoglycolate"; November 13, 1984.

3914; R.F. Weiss; NSF; "Wintertime ClFICH4 and Surface H2O Trace Gas Measurements in the Weddell Gyre"; November 9, 1984.

3915; K.L. Smith; NSF; "Ecological Energetics of the Deep-Sea Benthic Boundary Layer"; November 16, 1984.

3916; H. Craig; NSF; "The SEABEAM-PASCUA and the 13°N VENTS Grants"; December 12, 1984.

3918; L. Armi; NSF; "Ocean Mixing Processes: A Study of Mediterranean Salt Lenses"; November 19, 1984.

3919; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; November 15, 1984.

3921; J.O. Roads; NSF; "Temporal Variations in Predictability"; November 26, 1984.

3922; J.D. Horel; NSF; "An Analysis of the Persistence of the Planetary Circulation"; November 21, 1984.

3923; R.F. Weiss; NSF; "Bottom Lander Operations"; December 19, 1984.

3924; J.G. Stewart; NSF; "Establishment and Maintenance of Algal Turf/Phyllospadix Beds as Contiguous Intertidal Vegetation"; December 4, 1984.

3925; L.M. Dorman; NORDA; "Progress Report and Request for Extension of Contract N00014-84-C-0127"; November 30, 1984.

3926; D.J. Faulkner; AP; "Sponge Resource Assessment in Palau"; December 3, 1984.

3928; A.D. Chave, S. Constable, C.S. Cox; NORDA; "Deep Controlled Source EM Soundings to Detect Low Electrical Conductivity Zones in the Lithosphere"; December 7, 1984.

3929; P.M. Masters; DOHHS; "Nonenzymatic Reactions in Human Dentin Proteins"; December 4, 1984.

3930; K.M. Watson; NSSC; "Technical Support for USN DSVs"; December 6, 1984.

3931; J.H. Natland; NSF; "Influence of an Undepleted Upper-Mantle Lava Source beneath the Samoan Linear Volcanic Chain"; December 10, 1984.

3933; R.J. Seymour; DBW; "Computer Acquisition"; December 7, 1984.

3934; D.J. Faulkner; AP; "Large-Scale Isolation of Manoalide"; November 12, 1984.

3935; R.W. Austin; NOSC; "Environmental Data and Modeling Support for SRS-85 Field Test"; December 12, 1984.

3936; R.W. Austin; ONR; "Assessment and Modeling of Ocean Optical Properties"; December 17, 1984.

3937; R.W. Eppley; NSF; "Coordination and Logistics for the PRPOO's Program"; December 17, 1984.

3938; G.N. Somero; NSF; "Upgrading of Ultracentrifuge Facilities at SIO"; December 13, 1984.

3939; W.R. Riedel, L.E. Tway; NSF; "Biogeography of Miocene and Quaternary Ichthyoliths from the Pacific"; December 18, 1984.

3940; D.L. Cutchin, W.B. White; NO; "Operation of a Ship-of-Opportunity XBT Deployment Program in the Pacific Ocean"; December 19, 1984.

3943; W.R. Riedel, A. Sanfilippo; NSF; "Stratigraphy and Taxonomy of Cenozoic Radiolaria"; n.d.

3944; G. Backus; NSF; "Some Inverse Aspects of Geomagnetic Field Modeling"; December 20, 1984.

3945; A. Bucklin; NSF; "Genetic Divergence in Calanus Populations in the N Pacific"; January 4, 1985.

3946; R.A. Lewin; NSF; "Abscission of Algal Flagella: Its Induction and Control"; January 3, 1985.

3948; R.W. Johnson; ONR; "Accelerated Data Processing for the Assessment and Modeling of Ocean Optical Properties"; January 7, 1985.

3949; L. Tauxe, H.R. Thierstein; NSF; "Mesozoic Bio- and Magnetostratigraphy"; January 9, 1985.

3950; V.C. Anderson; ONR; "High Resolution Forward Scattering Velocity Sensing Program and a Saltwater Hydraulic Thruster"; January 8, 1985

3951; L.M. Dorman; NORDA; "Participation in and Provision of Instrument Support for Cruise of June 7-30, 1985 off the NC Coast"; January 8, 1985.

3952; J.D. Powell; AEDP; "Engineering Test to Improve the Hydraulic Performance of Hopper Dredge Dragheads in Sand Materials"; January 10, 1985.

3953; D.C. Agnew, M.A. Zumberge; NSF; "Absolute Gravity Measurements in CA"; January 9, 1985.

3954; L.M. Dorman, J.A. Hildebrand; NSF; "Seismic Tomography of the Tonga Trench, Island Arc, and Back-Arc Basin: Delineating the Internal Structure of Subduction Zone Using OBS"; January 30, 1985.

3955; H. Staudigel; NSF; "Diagenesis and Hydrothermal Alteration in the La Palma Seamount"; January 14, 1985.

3956; F.N. Spiess; NASA; "Development of a Method for Accurately Tying Sea Surface Positions to a Deep-Sea Floor Reference Point"; January 18, 1985.

3957; M.E. Heath; NSF; "Temperature Regulation in Small Mammals"; January 10, 1985.

3958; R.N. Hey, H.W. Menard; NSF; "Crenulate Ridges and Large Transforms"; December 20, 1984.

Active Contracts and Grants; December 31, 1984.

3959; R.L. Fisher; DU; "Shipboard Participation and Data Reduction in Bathymetric Exploration and Rock Sampling (by Dredge) in the Tonga Trench"; January 14, 1985.

3960; H.W. Menard, J.A. Orcutt; NSF; "Tectonics of the SW Pacific and Evolution of Mesozoic Fracture Zones"; January 23, 1985.

3961; L. Tauxe; NSF; "Correlation of Magneto- and Biostratigraphy of the Middle and Upper Miocene in Marine CO₂- Sequences of Italy and Spain"; January 16, 1985.

3963; R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "OAT: A Gyre-Scale Reciprocal Transmission Experiment"; January 18, 1985.

3965; D.W. Wilkie; IMS; "General Operating Support"; January 11, 1985.

3966; C. Paul, F.N. Spiess; NSF; "Deep-Sea CO₂- Escarpments; Genesis, Geology, and Geochemistry"; January 18, 1985.

3967; B.E. Volcani; NSF; "Mechanism of Silicate Transport in Diatoms: Mode of Action and Chemical Structure of Silicate Ionophore-Like Compounds"; n.d.

3968; R.L. Fisher, J.H. Natland; NSF; "Tectonic Framework and Petrology of Plutonic and Extrusive Rocks from Rapidly-Spreading Mid-Oceanic Ridges: The Antarctic Plate Boundary at the Juncture of the Pacific-Antarctic Ridge and the EPR"; January 24, 1985.

3969; J.H. Natland; OSU; "The Temporal and Petrochemical Evolution of the Island of Tahiti (Society Islands)"; January 16, 1985.

3970; R.L. Salmon; NSF; "Hamiltonian Methods Applied to Ocean Circulation Problems"; January 25, 1985.

3971; L. Armi; NSF; "Lab Experiments on Salt Lenses"; January 25, 1985.

3973; M.M. Mullin; NSF; "N₂ Isotope Fractionation and Recycling in Marine, Planktonic Ecosystems"; February 4, 1985.

3974; F. Azam; NSF; "The Microbial Loop in Marine Temperate Plankton A Sink or a Link?"; January 16, 1985.

3975; W.F. Perrin; NSF; "Inter-Relationships of Delphinoid Cetaceans as Revealed by Protein Electrophoresis and Restriction Endonuclease Analysis of MDNA"; January 15, 1985.

3976; J.M. Gieskes; NSF; "Mn-Geochemistry in the Guaymas Basin: Hydrothermal and Diagenetic Influences"; January 29, 1985.

3977; J.H. Natland; NSF; "Fine-Scale Investigations of Overlapping Rifts, 2: Petrologic Studies"; January 24, 1985.

3977R1; J.H. Natland; NSF; "Fine-Scale Investigations of Overlapping Rifts, 2: Petrologic Studies"; August 27, 1985.

3978; D.H. Roemmich NSF; "Time Variability of the Hydrography and Circulation of a Subtropical Gyre"; January 25, 1985.

3979; P. Dayton; NSF; "Studies in Seamount Ecology"; January 25, 1985.

3981; J. Mammerrickx; NSF; "Rifting Old Oceanic Lithosphere: Remnants of the Rift (Moctezuma Tr.) and the Abandoned Spreading Center (Mathematician Seamounts)"; January 29, 1985.

3982; J. Gieskes, M. Kastner; NSF; "Effects of Convective Heat Flow on Marine Sediment Diagenesis: A Section across the W Flank of the EPR at ~19°S, 116°-130°W, as an Example"; January 31, 1985.

3983; T.L. Hayward; NSF; "Saturation of Ar and Ne in the Shallow O₂ Maximum of the N Pacific: An Indicator of Physical Causal Mechanisms"; January 25, 1985.

3984; H. Staudigel; NSF; "143Nd/144Nd in Fossil Fish Teeth: Diagenesis and Use in Paleooceanography"; January 31, 1985.

3985; W.H. Fenical; NSF; "Chemical Defense in Marine Organisms"; February 7, 1985.

3986; L. Cheng, R.A. Lewin; STC; "Improvement of Algal Strains as Soil Amendments: Selection, Production, Genetic Improvements and Storage Methods"; January 29, 1985.

3987; F.T. Haxo, O. Holm-Hansen; NSF; "Estimation of In Situ Quantum Yields by Fractionation of Absorption Spectra"; January 28, 1985.

3988; D.C. Agnew, M.A. Zumberge; USGS; "Absolute Gravity Measurements in Long Valley, CA"; February 25, 1985.

3989; J. Berger, J.N. Brune; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; February 25, 1985.

3990; D.C. Agnew, J. Berger; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; February 25, 1985.

3991; D.C. Agnew; USGS; "PFGO: Cooperative Studies with Outside Investigators (Including CDO Program)"; February 25, 1985.

3992; D.C. Agnew; USGS; "CDO: Part J Askania Borehole Tiltmeter"; February 25, 1985.

3993; D.C. Agnew, M.A. Zumberge; USGS; "Towards a Widely-Deployable Long-Base Tiltmeter: Sensors and Anchors"; February 27, 1985.

3994; T.H. Dixon, R.C. Tyee; NSF; "Development and Testing of a Range Gated, Scanning Laser Imaging System for Deep Ocean Use"; January 30, 1985.

3996; H. Craig; NSF; "Ocean-Atmosphere Investigations"; May 1, 1985.

3997; J.R. Curry; NSF; "Sri Lanka Continental Margins"; February 13, 1985.

3999; R.F. Weiss; NSF; "Measurement of Dissolved Freons along the Entire 24°N Long Lines Trans-Pacific Section"; January 31, 1985.

[Box 30]

4000; M.E. Huntley; NSF; "Particle Rejection Behavior by Marine Copepods: A Chemical Definition of Food Quality"; January 31, 1985.

4001; G.G. Shor; NSF; "Ship Operations (2nd Increment of 2nd Year of OCE 83-17741)"; n.d.

4003; J.H. Swift; NSF; "N Hemisphere Deep Circulation"; February 6, 1985.

4004; A.J. Arp, G.N. Somero, R.D. Vetter; NSF; "The Transport, Metabolism, and Detoxification of S₂- by Animals from S₂-Rich Habitats"; February 5, 1985.

4005; E.L. Winterer; NSF; "Acquisition of a Cathode Luminescence System"; February 19, 1985.

4006; Y. Chung; DOE; "Continuous Ra Monitoring in Long Valley Caldera"; February 14, 1985.

4007; J.W. Hawkins; JOII; "Planning Conference for ODP in W Pacific Arc-Backarc Systems"; February 11, 1985.

4008; R.E. Davis; NSF; "Collection of Satellite Images of the E Pacific Ocean"; March 4, 1985.

4009; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; February 6, 1985.

4010; E. Brinton; SI; "Distribution and Age-Structure of the Larvae of Euphausia superba in the Scotia Sea and Bransfield Strait"; February 14, 1985.

4011; A.G. Dickson, F.H. Fisher; NSF; "Ion-Pairing in Seawater at 0° at Elevated Pressures"; February 14, 1985.

4012; J.N. Brune, T.G. Masters; NSF; "Long Period Seismograph Array for Crust and Mantle Studies in MX"; March 6, 1985.

4013; J.N. Brune, J.G. Anderson; NSF; "Strong Motion Array along the MX Subduction Thrust"; March 13, 1985.

4014; H. Felbeck; EVHF; "Acquisition of a Microscope to Study Endosymbiosis between Autotrophic Bacteria and Invertebrates"; February 15, 1985.

4015; D.L. Cutchin, W.B. White; NOAA; "Proposal for the Continuation of XBT Sampling from VOS in the Pacific Ocean 1985-86"; February 19, 1985.

4016; J. Orcutt; USGS; "Scattering and Q within the Anza Array"; February 20, 1985.

4017; Y. Chung; USGS; "Investigation of Ra and He as Possible Fluid-Phase Precursors to Earthquakes"; February 27, 1985.

4018; R.E. Flick; SCEC; "Bathymetric Surveys Offshore of San Onofre Nuclear Generating Station"; February 21, 1985.

4019; R.R. Hessler, G.D.F. Wilson; NSF; "Systematics of a Deep-Sea Family (Eurycopidae, Isopoda, Crustacea)"; February 22, 1985.

4020; R.W. Austin; JHU; "Studies of Factors Affecting Visibility in a Marine Environment"; March 7, 1985.

4021; C.E. Reimers; ACS; "Organic Matter-Metal Associations in the Interstitial H₂O of Recent Marine Sediments"; March 18, 1985.

4023; A.A. Benson; NSF; "Oceanic Asenic Detoxication"; n.d.

4024; D.L. Cutchin, W.B. White; NOAA; "A Proposal for the Expansion of XBT Sampling from VOS in the Pacific Ocean"; February 28, 1985.

4025; M. Abbott; CIT; "Studies of Ocean Productivity"; March 4, 1985.

4027; W.B. White; NOAA; "Short-Term Climatic Variability in the Upper Ocean Thermal Structure of the Tropical Pacific Ocean during the 1982-83 ENSO Event"; March 20, 1985.

4029; G.G. Shor; NSF; "Wire Purchase"; n.d.

4030; R.J. Seymour; WES; "Wave Data and Analysis"; March 11, 1985.

4032; T.E. DeLaca; NSF; "Ecology of Antarctic Benthic Foraminifera"; n.d.

4033; W.A. Nierenberg; ONR; "SON Research Chair in Oceanography at SIO"; March 19, 1985.

4034; D. Wirth; NSF; "Facility Support for the Physical and Chemical ODF at SIO"; March 1985.

4035; C.H. Gautier; NSF; "Heat and Momentum Fluxes at the Atmosphere-Ocean Interface In Situ Measurements"; March 14, 1985.

4036; E.D. Goldberg; NSF; "The Marine Chemistry of Rhenium"; March 20, 1985.

4036R1; E.D. Goldberg; NSF; "The Marine Chemistry of Rhenium"; September 6, 1985.

4037; L.R. Haury, J.J. Simpson; NASA; "Estimating the Air-Sea C Flux in the CA Current from Remotely- Sensed and In Situ Observations"; March 20, 1985.

4038; H.R. Thierstien; NSF; "Stable Isotopes of Quaternary Calcareous Nannofossils"; March 20, 1985.

4039; R.J. Seymour; T; "Doppler Current Meter Collection and Analysis"; March 13, 1985.

4040; A.A. Yayanos; EVHF; "Experiments Using Photography in the Abyssal Parts of the Mediterranean, Sulu, and Celebes Seas"; March 20, 1985.

4041; T.P. Barnett; NSF; "Studies of Climate Dynamics and Predictability"; March 22, 1985.

4043; J.A. Orcutt; NSF; "High Resolution, Joint Processing of SeaBeam and Digital Profiler Data"; March 22, 1985.

4044; K.M. Watson; NOAA; "Sea Crane Support aboard the R/V Surveyor"; April 2, 1985.

4046; J.D. Horel; NSF; "A Diagnostic Study of the ENSO Episode during 1982/83"; March 27, 1985.

4047; R.C.J. Somerville; NOAA; "An Experimental Climate Forecast Center at SIO"; March 27, 1985.

4048; R.E. Garrison, M. Kastner; "Phosphatization in Organic-Rich Petroleum Source Beds of the Monterey Formation, CA"; n.d.

4049; F.N. Spiess; NOAA; "Recovery of a String of Moored Instruments Belonging to NOAA"; March 28, 1985.

4051; D. Lal; NSF; "Study of Continental Weathering Processes and Their Rates Using Cosmic Ray Produced Radioisotopes"; April 8, 1985.

4052; E.L. Winterer; NSF; "Crucial Stages in Evolution of a Typical Passive Margin in the S Alps"; April 3, 1985.

4053; J.D. Horel; CSI; "A Diagnostic Study of the Variability of Sub-Tropical Stratus"; April 1, 1985.

4054; S.D. Nozette; CSI; "Development of a Computer Based Methodology to Model Non-Terrestrial Materials Utilization"; April 2, 1985.

4055; R.A. Knox; NSF; "Observations and Analyses of Upper Ocean Currents and Temperatures and of Surface Meteorological Fields in TROPIC HEAT"; March 29, 1985.

4056; K.M. Watson; NSSC; "Technical Support for USN DSVs"; April 2, 1985.

4057; P.P. Niiler; NOAA; "Measurement of Large-Scale Upper Ocean Thermal Fields and Heat Budget in the Tropical Pacific"; April 25, 1985.

4059; C. Gautier; NASA; "A Multi-Sensor Remote Sensing Approach for Measuring Primary Production from Space"; March 28, 1985.

Active Contracts and Grants; March 31, 1985.

4060; J.A. Orcutt; LLNL; "An SIO/IGPP, LLNL/IGPP Digital Data Exchange Experiment"; April 3, 1985.

4061; G.K. Vallis; CSI; "Stability of Flow Structures in Planetary Atmosphere"; April 4, 1985.

4062; R.C.J. Somerville; CSI; "Analysis of Nimbus-7 THIR Cloud Estimates"; April 4, 1985.

4063; A.H. Cutler; CSI; "Titaniferous Anodes for Lunar Electrorefining"; April 5, 1985.

4064; A.H. Cutler; CSI; "Tripropellant AI Engines"; April 5, 1985.

4065; J. Berger, N. Burr; LLNL; "IGPP UCSD-LLNL Collaborative Study of Seismic Data Telemetry Via Satellite Using Spread Spectrum Technology"; April 4, 1985.

4066; J.A. Orcutt; DARPA; "Regional Phases: Oceanic and Continental Propagation"; April 5, 1985.

4067; G.N. Somero; NSF; "The Transport and Detoxification of S2- by Animals from S2--Rich Marine Habitats"; April 22, 1985.

4068; A.R. Wolff; CSI; "Synthesis and Rocket Propulsion Performance of Silane"; April 5, 1985.

4069; W.S. Hodgkiss; NSSC; "Detection and Estimation in the Presence of Surface Reverberation"; April 9, 1985.

4070; C.H. Gautier, J. Tournadre; CSI; "Automatic Satellite Cloud Field Morphology Analysis Intercomparison of New Analysis Techniques for Air Mass Classification"; April 5, 1985.

4071; C.H. Gautier, A.R. Wolff; CSI; "Detection and Availability of Volatiles in the Inner Solar System"; April 5, 1985.

4073; B.B. Ward; NSF; "Component IV of Microbial N2 Transformation in the OMZ off Peru: Nitrification and Nitrifying Bacteria in the Peruvian OMZ"; April 8, 1985.

4074; G.L. Kooyman; NSF; "Emperor and King Penguins Brooding and Foraging Energetics"; n.d.

4075; M.A. Zumberge; NASA; "Absolute Gravity Measurements at SLR Stations"; April 10, 1985.

4076; J.R. Arnold, W.M. Thompson; NASA; "Investigation of Roles for Tethers on an Evolving Space Station"; April 22, 1985.

4078; B.B. Ward; NASA; "CH4 Oxidation in the Open Ocean"; April 17, 1985.

4079; K.L. Smith; NSF; "Role of Pelagic and Demersal Animals in Particulate Organic Matter Transport at Abyssal and Bathyal Depths"; April 16, 1985.

4080; J.R. Arnold; NASA; "A Research Program on Space Station Automation"; April 16, 1985.

4081; H. Craig; LLNL; "Ion Chromatographic Analysis of Ice Core Samples from Central Greenland"; April 15, 1985.

4082; M.R. Abbott, R.W. Eppley; NASA; "Assessing Ocean Productivity from Satellite Measurements"; April 30, 1985.

4084; R.J. Seymour; WES; "Wave Data and Analysis"; n.d.

4085; H. Felbeck; NSF; "Cooperative Research on Hydrothermal Vents"; April 23, 1985.

4086; D.C. Agnew, J. Berger; USGS; "Supplement to: PFGO: A Facility for Studies of Crustal Deformation"; April 23, 1985.

4087; J. Horel; NSF; "An Analysis of the Space/Time Evolution of Intraseasonal and Interannual Climate Variability"; April 24, 1985.

4088; R.S. Keir; NSF; "CO2- Dissolution Experiment Lab Control"; May 23, 1985.

4089; D.C. Agnew, J. Berger; NSF; "PFGO: A Facility for Studies of Crustal Deformation"; April 23, 1985.

4090; J.G. Anderson, J.N. Brune; EPRI; "The High Frequency Acceleration Spectrum and Seismic Wave Attenuation, and Development of a Modeling Facility for Studying Seismic Site Effect and Seismic Engineering Problems"; May 6, 1985.

4091; J.M. Gieskes; SAC; "Followup on Bore Hole Fluid Chemistry Leg 102"; April 29, 1985.

4092; D. Luther; NASA; "Study to Compare Satellite- Tracked Drifting Buoy and Current Meter Observations of the Near Surface Flow"; April 26, 1985.

4093; F. Azam; NSF; "Role of Bacteria in Detrital Marine Foodwebs: Mechanisms in Bacterioplankton- Organic Matter Interactions in Coastal Marine Ecosystems"; May 2, 1985.

4095; P.P. Niiler; NSF; "Direct Measurements of the Circulation in the NE Pacific Ocean"; May 13, 1985.

4096; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; n.d.

4099; G.G. Shor; NSF; "Gravimeter for R/V Thomas Washington"; June 3, 1985.

4100; W.B. White; NOAA; "The Forecast of the ENSO Events Based upon the Redistribution of Model Heat Content in the W Tropical Pacific"; April 30, 1985.

4101; R.J. Seymour; DBW; "CDIP Collection, Analysis, Reporting and Storage of Wave Data"; May 22, 1985.

4104; C. Gautier; NASA; "Analysis of NSCAT Surface Wind Fields in the Tropical Atlantic for Ocean Climate Diagnostic Studies"; May 14, 1985.

[Box 31]

4105; R.R. Hessler; SNL; "Benthic Biological Studies"; n.d.

4106; D. Agnew, J. Berger, M. Zumberge; NSF; "Absolute Gravity Measurements in CA"; May 10, 1985.

4107; E.D. Goldberg; NSF; "The History of Acid, Metal, and Elemental C Deposition in CA Lakes"; n.d.

4108; R.L. Parker, L. Tauxe; NSF; "Core-Field Statistics and Secular Variation"; May 23, 1985.

4109; H. Staudigel; NSF; "The Structural Interpretation of a Seismic Tomography Study of Jasper Seamount"; May 23, 1985.

4110; H. Staudigel; NSF; "Pore Space, Pore Filling, and Permeability in the Troodos Ophiolite Trough Time (Collaborative Project with C. Peterson and D. Abbott, OSU)"; June 19, 1985.

4111; D. Lal; NSF; "Study of Continental Weathering Processes and Their Rates, Using Cosmic Ray Produced Radioisotopes"; May 20, 1985.

4112; P.P. Niiler; NOAA; "Measurement of Air-Sea Fluxes and Local Heat Storage in TROPIC HEAT"; May 8, 1985.

4113; V.C. Anderson, K.M. Watson; ONR; "Program in Marine Physics Applied to USN Undersea Missions"; June 6, 1985.

4114; W.G. Van Dorn; NSF; "Tsunami Recorder Installation at Wake Island"; May 15, 1985.

4116; T.J. Chow; NSF; "The Marine Isotopic Chemistry of Pu"; n.d.

4117; G.G. Shor; WHOI; "Conceptual Design of a General Purpose Oceanographic Research Ship"; May 17, 1985.

4118; G.G. Shor; ONR; "Re-Engineering of Propulsion Systems for R/V Melville and R/V Knorr"; n.d.

4119; M. Tsuchiya; NSF; "Atlantic Intermediate-H2O Circulation"; May 16, 1985.

4121; J. Namias; DWR; "CA Precipitation Forecast Research"; May 17, 1985.

4122; J. Namias; NSF; "Large-Scale Air/Sea Interaction over the N Hemisphere and Associated Impact on Short-Term Climate of the Ocean Atmosphere"; May 17, 1985.

4123; J.M. Gieskes; NSF; "Hydrogeochemical Studies during the Next 2 Years of ODP"; May 19, 1985.

4124; M. Kastner; NSF; "Effects of Convective Heat Flow on Marine Sediment Diagenesis: A Section across the W Flank of the EPR at ~19°S, 116°-130°W, as an Example"; May 31, 1985.

4125; C. Paul, F.N. Spiess; NSF; "Deep-Sea CO₂- Escarpments: Genesis, Geomorphology, and Basal Processes"; May 30, 1985.

4126; A.F. Carlucci; NSF; "Microbiology of the Benthic Boundary Layer: The Role of Microbial Populations in Dissolved Organic Matter Fluxes"; May 24, 1985.

4127; R.A. Jahnke; NSF; "The Bottom Lander CO₂- Dissolution Experiment"; May 24, 1985.

4128; W.R. Riedel; NSF; "Radiolarians and Diatoms in the CA Current System: Yearly Patterns in the Plankton and Comparison with the Recent Sedimentary Record"; May 22, 1985.

4129; J.D. Macdougall; NSF; "U and Th Decay Series Disequilibrium in Volcanic Rocks as Indicators of Mantle Composition and Magmatic Processes"; July 22, 1985.

4130; C.H. Gibson, W.H. Thomas; NSF; "Effects of Small-Scale Turbulence on Marine Phytoplankton"; May 30, 1985.

4131; E.D. Goldberg; NSF; "Platinum Metals: Redox Conditions and Complexative Chemistry in the Marine Environment"; May 29, 1985.

4132; C.D. Keeling; NSF; "Absolute Abundance and Variability of Dissolved Inorganic C Species in Ocean H₂O"; May 28, 1985.

4133; A.D. Chave, S. Constable, C.S. Cox; NSF; "Controlled Source EM Sounding of the Oceanic Lithosphere"; May 28, 1985.

4135; C.D. Keeling; NSF; "A Study of the Abundance and ¹³C/¹²C Ratio of Atmospheric CO₂ in Relation to the Global C Cycle"; June 6, 1985.

4136; F.N. Spiess; NSF; "Blanco Trough-Hydrothermal and Tectonic Processes"; May 29, 1985.

4137; R.N. Hey; NSF; "Detailed Tectonic Evolution of the Seafloor off W NA, Part 2: S of Juan de Fuca"; June 4, 1985.

4138; R.N. Hey; NSF; "Acquisition of Apollo Computer Node"; June 4, 1985.

4139; J.R. Curray; NSF; "Geological/Geochemical Studies at the S2- Seep Sites at the Base of the W FL Escarpment, Gulf of MX"; May 31, 1985.

4140; R.N. Hey; NSF; "Collaborative Project: SeaMARC II Investigation of the Easter Microplate"; June 7, 1985.

4141; M.J. Tegner; NSF; "The Role of Nutrient Limitation in the Kelp Forest on the Productivity of Herbivores"; May 29, 1985.

4142; H. Craig, R.J. Poreda; NSF; "Oceanic Basalt: Rare Gas, H and C Concentrations and Isotope Ratios"; October 1, 1985.

4144; W.B. White; NSF; "An Investigation into the Propagation of the Thermocline Depth Variability Associated with the 1982-83 ENSO Event in the Tropical Pacific"; June 6, 1985.

4145; E.D. Goldberg; UERG; "Tributyltins in the CA Coastal Environment"; June 7, 1985.

4146; D. Wirth; NSF; "Hydrographic Support to the NE Pacific Abyssal Experiment"; May 1986.

4147; G.J. Rose; DOHHS; "Electrosensory Processing in Laminated Midbrain Structures"; n.d.

4148; R.W. Austin; NASA; "Investigation of the N Adriatic Sea: CZCS Imagery and Modeling (CZCS Imagery Analysis)"; June 4, 1985.

4149; J.N. Brune, J.R. Curray, L.M. Dorman; NSF; "Refraction Study of Anomalous Crust and Mantle Structure in the Bay of Bengal Geosyncline"; June 5, 1985.

4150; D. Wirth; NSF; "Hydrographic Support to W Boundary Exchange Project"; December 1985.

4151; P.F. Lonsdale; NSF; "Collaborative Study: Newborn Spreading Centers at the Galapagos Triple Junction"; June 4, 1985.

4152; W.R. Riedel; NSF; "Evolution of Radiolaria across the Eocene-Oligocene Boundary"; June 12, 1985.

4153; M.J. Tegner; CDFG; "Experimental Abalone Enhancement Studies: Data Analysis of the Green Abalone Brood Stock Transplants at Palos Verdes and Red Abalone Population Studies at Santa Rosa Island"; June 6, 1985.

4154; J.T. Enright; NSF; "Ocular Translation: Renewal"; June 11, 1985.

4155; R.E. Davis, C.D. Winant; NSF; "Analysis and Interpretation of Observations Acquired during CODE"; June 7, 1985.

4156; H.T. Hammel; NSF; "Osmoregulatory Responses to Altered Plasma and Interstitial Fluid in Duck"; June 6, 1985.

4157; G.G. Shor; NSF; "Ship Operations (3rd Year of OCE 83-17741)"; June 24, 1985.

4158; D. Wirth; NSF; "Technician Support for SIO Ships"; June 26, 1985.

4160; R.B. Bacastow; ORNL; "Development of a 3-D Model of the Natural C Cycle in the Ocean and its Perturbation by Anthropogenic CO₂"; August 21, 1985.

4161; W.H. Berger; NSF; "Acquisition of a New Stable Isotope Spectrometer for Studies in Paleooceanography, Sedimentary, Organic, and Igneous Geochemistry and Biological Oceanography"; June 12, 1985.

4162; R. Knox, W. Munk, P. Worcester; NSF; "OAT: A Gyre Scale Reciprocal Transmission Experiment"; June 20, 1985.

4163; A.P. Klimley; NOAA; "The Movement Patterns and Behavior of the White Shark, *Carcharodon carcharias*, in the Pt. Reyes/Farallon National Marine Sanctuary"; June 14, 1985.

4164; C.D. Keeling; EPRI; "Interdisciplinary Research on CO₂ and Climate"; June 25, 1985.

4165; R.N. Hey; NSF; "Galapagos Rift System: Tectonic and Geophysical Studies Using DSRV Alvin"; June 14, 1985.

4166; J.G. Anderson; NSF; "The High Frequency Spectrum of Strong and Weak Ground Motions and Seismic Wave Attenuation"; July 2, 1985.

4167; J.R. Curray; NSF; "Reconnaissance Studies and Drilling Site Surveys of Ninetyeast and Broken Ridges"; July 24, 1985.

4168; H. Staudigel; NSF; "Diagenesis and Hydrothermal Alteration in the La Palma Seamount Series"; June 18, 1985.

4169; M.E. Huntley; NSF; "RACER: Feeding, Growth and Early Development of Antarctic Krill, *Euphausia superba* Dana"; June 14, 1985.

4170; C. Gautier, R.C.J. Somerville; NSF; "Air-Sea Interactions and the Indian Monsoon: Satellite and Modeling Studies"; June 14, 1985.

4171; J. Berger, W.E. Farrell; NSF; "A Digital Feedback Seismograph"; June 20, 1985.

4172; D.C. Agnew, M.A. Zumberge; NSF; "Precision Measurements of Crustal Deformation"; June 20, 1985.

4173; R.T. Guza; DBW; "Coastal Engineering Wave Data Application to Harbor and Beach Erosion Problems"; n.d.

4174; R.T. Guza; DBW; "Dynamics of Small Bays"; n.d.

4175; J.W. Miles; NSF; "Geophysical Fluid Dynamics"; June 20, 1985.

4176; F.N. Spiess; SWRCB; "Advisory Service to the CA SWRCB"; n.d.

4177; D.C. Agnew, J. Berger, F. Wyatt; USGS; "Supplement to: PFGO A Facility for Studies of Crustal Deformation"; June 18, 1985.

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4178; F. Gilbert, T.G. Masters; NSF; "Aspherical Structure"; June 21, 1985.

4179; R.E. Flick; DBW; "SD Regional Beach Profile Program"; July 2, 1985.

4180; R.E. Flick; SCEC; "San Onofre Beach Study"; July 2, 1985.

4181; H.T. Hammel; DOHHS; "Mammalian Thermoregulatory Threshold and Sensitivity"; June 25, 1985.

4182; P.P. Niiler; NSF; "Circulation in the Bransfield Strait as Part of RACER"; June 26, 1985.

4183; S.A. Jenkins; DBW; "A Study on the Effects and Mechanisms of Artificial Seaweed"; July 3, 1985.

4184; K.M. Watson; NSSC; "Shipping Container Construction for Cable Tensioning Device"; June 28, 1985.

Active Contracts and Grants; June 30, 1985.

4186; R. Knox, W. Munk, P. Worcester; NSF; "OAT in the Greenland Sea"; July 3, 1985.

4188; H. Craig; NSF; "CH₄, He, and Trace Gases in Polar Ice Cores"; July 1, 1985.

5725; R.L. Michel; NSF; "3H Distribution in the NW Pacific"; December 19, 1979.

7464; R.L. Michel; NSF; "3H Distribution in the NW Pacific"; July 30, 1981.

861001R1 (4186R1); P. Worcester; NSF; "OAT in the Greenland Sea"; June 6, 1986.

861002 (4187); H. Craig; UCSB; "Participation in the Joint US-Chinese Program on the Geochemistry of Natural Gases"; July 1, 1985.

861004 (4189); R.A. Lewin; SERI; "Improvement of Microalgae Strains for Energy Production"; July 8, 1985.

861005; F.H. Fisher; ONR; "Vertical Array Research Proposal, FY86"; August 6, 1985.

861006 (4191); D.C. Agnew; NASA; "Towards a Statistical Description of Tectonic Motions Analysis of CDO"; July 11, 1985.

861007 (4192); G.G. Shor; NSF; "Scientific Outfitting R/V Robert Gordon Sproul (2nd Year of OCE 84-20733)"; July 5, 1985.

861008; V.C. Anderson, C.D. Winant; ONR; "Real Time Telecommunication of Oceanographic Observation"; n.d.

861009; E.L. Winterer; NSF; "Science Support for Leg 103"; July 10, 1985.

861010; P.M. Williams; DOE; "Acquisition of Sediment Traps in Support of DOE Flux Program off S CA"; July 10, 1985.

861011; N.D. Holland; NSF; "Microevents of Particle Capture during Suspension Feeding by Feather Star (Echinodermata: Crinoidea)"; July 11, 1985.

861012; C. Tai; NASA; "Determination of Ocean Circulation and the Geoid Using Satellite Altimetry"; July 11, 1985.

861014; F.N. Spiess; NASA; "Deep Ocean Benchmarks for GPS"; July 17, 1985.

861015; M.A. Zumberge; AFGL; "AGM Research and Development"; July 18, 1985.

861016; R. Knox, W. Munk, P. Worcester; ONR; "OAT in the Greenland Sea"; July 19, 1985.

861018; M. Kastner; NSF; "Phosphatization and Phosphatic Facies in the Miocene Monterey Formation, CA"; July 15, 1985.

861019; D.L. Cutchin, W.B. White; NOAA; "Operation of a Ship-of-Opportunity XBT Deployment Program in the Pacific Ocean (Supplement to NA-84-AA-H-00030)"; July 17, 1985.

861020; Y. Chung, H. Craig; NSF; "Geochemical Studies of Stable and Radioactive Isotopes in Crustal Fluids in Relation to Geology and Tectonics: Collaborative Studies"; September 3, 1985.

861021; R.W. Johnson; NSSC; "NOSC Radiometric Calibration Facility"; September 3, 1985.

861022; J. Berger, J.N. Brune; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Seismic Gap"; July 24, 1985.

861023; H. Felbeck, G.N. Somero; NSF; "Biochemical and Physiological Characteristics of the Hydrothermal Vent Community Animals"; July 23, 1985.

861024; K.M. Watson; NSSC; "Support of R/P Flip and Orb"; August 6, 1985.

861025; H. Aref; ACS; "Numerical Experiments on Sharply Stratified Flow Obeying Darcy's Law"; October 18, 1983.

861026; J. Berger, J.N. Brune; USGS; "Supplement to: Seismic Source Mechanism Studies in the Anza-Coyote Canyon Seismic Gap"; July 24, 1985.

861027; J.O. Roads; NSF; "Predictions of Time Averages"; August 12, 1985.

861029; P.K. Dayton; NSF; "Scales of Disturbance and Catastrophe: The Effects of an ENSO on Kelp Forest Communities (Supplement)"; n.d.

861031; O. Holm-Hansen; NSF; "RACER: Photobiology and Primary Production"; July 29, 1985.

861032; G.G. Shor; NSF; "Oceanographic Instrumentation"; August 23, 1985.

861033; G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; August 26, 1985.

861034; W.A. Newman; NSF; "Revision of the Turtle and Whale Barnacles, Including a Catalogue of the Species by V.A. Zullo and W.A. Newman"; August 5, 1985.

861036; W.H. Fenical; AC; "Isolation and Structure Modification Program for the Pseudopterosin Anti- Inflammatory-Analgesics"; August 1, 1985.

861037; E. Brinton; NOAA; "Analysis, Sorting, and Measurement of Plankton Samples"; August 1, 1985.

861038; K.M. Watson; NSSC; "Technical Support for USN DSVs"; n.d.

861039; D.S. Luther; NASA; "Analysis of Satellite- Tracked Drifting Buoys in the N Pacific"; August 7, 1985.

861040; A.A. Benson; DOE; "Environmental Perturbations on Gill Molecular Structure"; August 9, 1985.

861041; R.A. Jahnke; NSF; "Solubility of Substituted Forms of Fluorapatite"; August 12, 1985.

861043; K.M. Watson; NSSC; "Pacific Bathymetry"; August 1, 1985.

861044; K.M. Watson; NSSC; "Fabrication of Sample Recovery Basket"; July 24, 1985.

861047; P.K. Dayton, M.J. Tegner; NSF; "Scale of Disturbance and Catastrophe: The Effects of ENSO on Kelp Forest Communities"; August 20, 1985.

861048; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; August 19, 1985.

861050; R.T. Guza; ONR; "Toward Directional Properties of Gravity Waves"; August 20, 1985.

861051; G.G. Shor; NSF; "Oceanographic Instrumentation Development Motion Compensator for CTD Winch"; August 27, 1985.

861052R2; V.C. Anderson, K.M. Watson; "Continuation of the MPL Multi-Disciplinary Ocean ST Program"; n.d.

861053; H. Craig, Y. Horibe; NSF; "CH₄, He, and Trace Gases in Polar Ice Cores"; September 11, 1985.

861054; C.E. Reimers; NSF; "Collaborative Project: CaCO₃ Preservation in the Deep-Sea"; August 29, 1985.

861055; G.K. Vallis; NSF; "Investigation of Nonlinear Interactions and Large-Scale Turbulence Using Numerical Models"; August 27, 1985.

861056; G.W. Lugmair; NASA; "Isotopic, Chemical and Mineralogical Investigations of Extraterrestrial Materials"; August 29, 1985.

861057; O. Holm-Hansen; NSF; "Photoecology of Phytoplankton in the Barents Sea"; August 15, 1985.

861058; W.A. Nierenberg; USA; "Data Processing and Instrumentation Development; Image Evaluation; Coating Characterization; Environmental Area Characterization"; September 12, 1985.

861059; P.M. Williams; NSF; "Investigations of the Marine Organic C Cycle in the N Pacific Ocean"; August 29, 1985.

861060; D. Roemmich; NSF; "A Trans-Pacific Section along 24°N"; September 3, 1985.

861062; A.D. Chave; NSF; "Mantle Conductivity from Induction by Ocean Tides"; August 28, 1985.

861063; G.E. Backus; NSF; "Contributions from Geomagnetic Inverse Theory to the Study of Hydromagnetic Conditions near the Core-Mantle Boundary"; September 13, 1985.

861064; R.E. Davis; NASA; "Support of Satellite Oceanography Experiments"; September 6, 1985.

861065; M. Hendershott, D.S. Luther; NSF; "Normal Modes of the Pacific Ocean"; September 17, 1985.

861066; A.A. Yayanos; NSF; "Characterization and Ecology of Deep-Sea Barophilic Bacteria"; September 10, 1985.

861067; K.L. Smith; SNL; "Activity Rates of Abyssal Communities"; September 11, 1985.

861068; L. Tauxe; NSF; "Magneto-, Litho-, and Chemostratigraphy of Baringo Basin Sediments, E African Rift, Kenya"; September 12, 1985.

861069; R.R. Hessler; SNL; "Benthic Biological Studies"; September 13, 1985.

861070; A.A. Yayanos; SNL; "Deep-Sea Biophysics"; September 13, 1985.

861071; R.R. Hessler; NSF; "Spatial and Temporal Distribution of Megafauna at the Galapagos and Mariana Hydrothermal Vent"; September 16, 1985.

861072; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; September 17, 1985.

861073; M.E. Heath; DOHHS; "Mammalian Thermoregulatory Threshold and Sensitivity"; September 23, 1985.

861074; F. Azam; UW; "The Microbial Loop in Temperate Plankton Sink or Link?"; September 24, 1985.

861075; H.T. Hammel; NSF; "Direct and Indirect Measurements of Heat Loss and Heat Production in an Armadillo during its Response to Acute Cold Exposure"; September 20, 1985.

861076; H. Craig; NSF; "Isotopic Studies: Atmospheric CH₄ and N₂O; 81Kr in Polar Ice Cores"; September 20, 1985.

861077; M.M. Mullin; NSF; "Spatial and Temporal Variation in Larval and Juvenile CA Halibut, Determined Biochemically"; September 27, 1985.

861078; G.E. Backus; NASA; "Contributions from Geomagnetic Inverse Theory to the Study of Hydromagnetic Conditions near the Core-Mantle Boundary"; September 18, 1985.

861079; J.A. Orcutt; NSF; "Upgrade of SIO OBS Electronics"; September 23, 1985.

861080; P.M. Williams; DOE; "Sources and Composition of Organic Materials in H₂O and Sediments of the SCCZ"; September 26, 1985.

861081; M.M. Mullin; NSF; "N₂ Isotope Fractionation and Recycling in Marine, Planktonic Ecosystems"; September 23, 1985.

861082; M. Tsuchiya; NSF; "Hydrographic Observations for a W EPOCS"; September 24, 1985.

861083; P.F. Worcester; DOD; "OAT"; September 18, 1985.

861084; G.F. Carnevale, G.K. Vallis; NSF; "Coherent Structures in Geophysical Flow"; September 23, 1985.

861085; M. Abbott; NSF; "Support of Satellite Oceanography Experiments"; September 23, 1985.

861087; J.H. Filloux; NSF; "Tasman Project of SFMT Exploration: Coordination of Research"; September 24, 1985.

861088; R.A. Jahnke; DOE; "The Flux and Recycling of Bioactive Substances in the Surface Sediments of the Deep Basins off S CA"; September 25, 1985.

861089; E. Venrick; NSF; "The Distribution and Abundance of Phytoplankton Species in a Frontal Region of the CA Current"; September 27, 1985.

861092; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean"; September 25, 1985.

861093; A.A. Benson; NSF; "Starvation Rates of Larval Anchovy in the Sea, and the Relationship with the Condition of Grazing Zooplankton"; September 27, 1985.

861094; R.N. Hey; NSF; "Detailed Tectonic Evolution of the Seafloor Offshore W NA"; October 3, 1985.

861095; P.F. Lonsdale; NSF; "Axial Volcanism in the Mariana Trough Back-Arc Basin"; October 2, 1985.

861096; S. Constable, C.S. Cox; NSF; "Design Criteria for Flat End Caps"; September 27, 1985.

861097; W.H. Thomas; NSF; "Effects of Acid and Metal Levels on the Physiological Ecology of Acid Tolerant and Intolerant Phytoplankton from the Sierra Nevada, CA, in Relation to Potential Acid Deposition Damage"; October 1, 1985.

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861098; C.H. Gibson, W.H. Thomas; NSF; "Effects of Small-Scale Turbulence on Marine Phytoplankton: A Preliminary Study of Effects on Dinoflagellates and Contingent Follow-On Studies"; October 4, 1985.

861099; M. Huntley; NSF; "Animal/Plant Interactions in Marine Plankton: Behavior, Chemistry, and Ecology"; September 27, 1985.

Active Contracts and Grants; September 30, 1985.

861100; R.W. Eppley; NSF; "Phytoplankton Studies: NO₃- Transport, New Production, and the Sinking Flux of Biogenic Particles"; October 3, 1985.

861101; L. Talley; NSF; "A Trans-Pacific Section in the Subpolar Gyre"; October 1, 1985.

861102; N.A. Bray, R.E. Davis; NSF; "Transport through the Indonesian Archipelago"; October 3, 1985.

861104; F. Gilbert; NSF; "Symposium on Mathematical Geophysics, Arnhem, the Netherlands"; October 16, 1985.

861105; F. Gilbert; NASA; "Symposium on Mathematical Geophysics, Arnhem, the Netherlands"; October 16, 1985.

861106; F. Gilbert; ONR; "Symposium on Mathematical Geophysics, Arnhem, the Netherlands"; October 16, 1985.

861107; F. Gilbert; DOE; "Symposium on Mathematical Geophysics, Arnhem, the Netherlands"; October 16, 1985.

861108; F. Gilbert; AFGL; "Symposium on Mathematical Geophysics, Arnhem, the Netherlands"; October 16, 1985.

861109; M.M. Mullin; CDFG; "Biochemical Measures of Growth and Metabolism in Larval and Juvenile White Sea Bass and CA Halibut"; October 4, 1985.

861111; R.H. Stewart; CIT; "Radar Studies of the Sea Surface"; October 25, 1985.

861112; V.C. Anderson, K.M. Watson; ONR; "Continuation of the Interdisciplinary Research Program at MPL"; October 14, 1985.

861113; J.G. Anderson, J.N. Brune; NSF; "Supplemental Funding for Strong Motion Array along the MX Subduction Thrust (CEE 82 19432)"; October 4, 1985.

861114; J.A. Orcutt; NSF; "A Multichannel Investigation of the EPR at 9°N and 13°N"; October 14, 1985.

861115; R.L. Salmon; NSF; "OGCM Based on Hamiltonian Methods"; October 8, 1985.

861116; A.G. Dickson, C.D. Keeling; NSF; "Lab Studies to Improve the Analysis of Total Inorganic C in Seawater"; October 9, 1985.

861117; R.A. Knox, D. Luther; NSF; "Observations and Analyses of Equatorial Pacific Upper Ocean Currents and Temperatures and of Surface Meteorological Fields in TROPIC HEAT"; October 10, 1985.

861119; T.P. Barnett; USSJCSSTC; "Principal Oscillation Patterns"; October 10, 1985.

861120; W. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing"; October 14, 1985.

861121; C.D. Keeling; DOC; "Calibration of CO2 Standard Reference Materials"; October 14, 1985.

861122; J.L. Bada; NSF; "Geochemistry of Amino Acids in Cretaceous-Tertiary Boundary Sediments"; October 16, 1985.

861123; J.L. Bada; NSF; "Amino Acids in Bones from Archaeological Sites in CA and Greece and Their Use in Age and Paleodietary Determinations"; October 22, 1985.

861124; P.F. Lonsdale, K.C. Macdonald, S.P. Miller, F.N. Spiess; NSF; "Fine Scale Investigations of Overlapping Rift Zones"; October 20, 1985.

861125; H.D.I. Abarbanel; DOE; "Studies in the Nonlinear Dynamics of Dissipative Systems"; October 21, 1985.

861126; F.N. Spiess; NSSC; "Seafloor Search and Survey"; n.d.

861126R1; F.N. Spiess; NSSC; "Seafloor Search and Survey"; n.d.

861127; W.R. Riedel; NSF; "Distortions of Planktonic Patterns in the Sedimentary Record: Radiolarians and Diatoms on the CA Borderland"; October 16, 1985.

861128; L.M. Dorman; NORDA; "Cape Fear Analyses"; October 16, 1985.

861130; W.H. Fenical; NSF; "Chemical Defense in Marine Organisms"; October 17, 1985.

861131; D.J. Faulkner; NSF; "Natural Products Chemistry of Marine Molluscs"; October 29, 1985.

861132; B.B. Ward; NSF; "The Relationship between Nitrification and CH4 Oxidation in the Marine Environment"; October 21, 1985.

861133; J.G. Anderson, J.N. Brune; NSF; "Cooperative US-MX Program to Operate N Baja California Strong Motion Array"; October 24, 1985.

861134; F.N. Spiess; HDCC; "Bottom Roughness Survey"; October 23, 1985.

861134; H.A. Panofsky; NSF; "The Effect of Averaging Time on Plume Spread"; October 25, 1985.

861135; N. Maynard; ONR; "Spectral Properties of Ocean H2O at the Marginal Ice Zone"; October 23, 1985.

861136; F. Azam, A. Carlucci; DOE; "Role of Bacteria in Organic Matter Fluxes in the SCCZ"; October 24, 1985.

861138; J.R. Curray, C.K. Paull; ACS; "Seabed S2- Seep Dissolution Experiments"; October 29, 1985.

861139; W.H. Fenical; DOHHS; "Antitumor-Antibiotics from Marine Microorganisms"; October 25, 1985.

861140; J.B. Graham; NSF; "Function of the Pericardium and the Pericardioperitoneal Canal in Elasmobranch Fishes"; October 25, 1985.

861141; G.A. Jackson; DOE; "A Proposal to Measure the Density and Nutrient Fields at Openings to a Marine Basin and to Model the Fluxes within the Basin"; October 29, 1985.

861142; G.G. Shor; DOD; "Conversion of Multipurpose Oceanographic Winch"; November 6, 1985.

861143; D.J. Faulkner; DOHHS; "Antibiotics from Marine Organisms"; November 6, 1985.

861144; G.G. Shor; DOD; "Current Measurements Underway"; November 6, 1985.

861145; R.J. Seymour; PGEC; "Wave Data Analysis off Diablo Canyon"; October 31, 1985.

861146; G.G. Shor; DOD; "Marine Magnetism"; November 6, 1985.

861147; G.G. Shor; DOD; "Sound Source"; November 6, 1985.

861148; R.E. Davis; DOD; "Upper Ocean Dynamics"; November 8, 1985.

861149; J. Berger, F. Gilbert; NSF; "Seismic Studies of Easter Island"; November 1, 1985.

861150; C.H. Gautier; DOD; "A Data Base and Archival Storage System for Oceanographic, Climate, and Remote Sensing Data"; November 13, 1985.

861151; B.B. Ward; DOD; "Image Analysis for Marine Microbiological Research"; n.d.

861152; G.K. Vallis; DOD; "Studies in Statistical Geophysical Fluid Dynamics"; November 8, 1985.

861153; M.A. Zumberge; DOD; "Measurements of the Earth's Gravity"; November 8, 1985.

861154; R.T. Guza; DOD; "Nearshore Current Meters"; November 13, 1985.

861155; J.A. Orcutt; DOD; "Development of a High-Speed CRAYSTATION Network"; November 11, 1985.

861156; A.D. Chave, S. Constable, C.S. Cox; SPC; "Offshore Controlled Source EM Surveying (The Development of Offshore EM Surveying Techniques)"; November 5, 1985.

861160; A.D. Chave, S. Constable, C.S. Cox; EPRC; "EM Surveying of the Continental Shelf and Slope"; November 5, 1985.

861163; C.S. Cox; DOD; "Controlled Source EM Soundings and EM Detection of Acoustic Waves"; November 8, 1985.

861164; T.E. DeLaca; NSF; "Ecology of Antarctic Benthic Foraminifera"; November 6, 1985.

861165; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; November 8, 1985.

861167; W.S. Hodgkiss; DOD; "Ocean Simulator"; November 12, 1985.

861168; F.N. Spiess; DOD; "Seafloor Gravimeter System"; November 12, 1985.

861169; D. Wirth; DOD; "ODF Calibration Lab Equipment"; n.d.

861170; G.G. Shor; DOD; "Multibeam Mapping of Seafloor Topography"; November 12, 1985.

861171; P.P. Niiler; DOD; "Satellite-Tracked Air-Sea Interaction Instrumentation"; November 8, 1985.

861172; W.A. Nierenberg; DOD; "Graphic Output Instrumentation for ASCP at SIO"; November 11, 1985.

861173; W.A. Nierenberg; DOD; "High Performance Array Processor Subsystem for ASCP at SIO"; November 11, 1985.

861174; W.A. Nierenberg; DOD; "Hyperchannel Communication Link to SDSC for ASCP at SIO"; November 11, 1985.

861175; W.S. Hodgkiss; DOD; "Digital Test Instrumentation"; November 12, 1985.

861176; R.W. Austin; JHU; "Standard Rampart, VisLab Radiometric and Optical Support"; November 12, 1985.

861178; M. Abbott; DOD; "Satellite Data Acquisition System for Oceanography"; November 12, 1985.

861179; C.S. Cox, J.A. Orcutt; NSF; "Long Period Measurements with SIO OBS"; December 16, 1985.

861180; D.W. Wilkie; IMS; "General Operating Support"; November 6, 1985.

861181; V.C. Anderson; DOD; "Stationarity of Spatial Coherence of VLF Acoustic Propagation in the Ocean"; November 14, 1985.

861183; R.A. Knox; "Acoustic Instrumentation for Measurement of Ocean Currents"; November 13, 1985.

861185; D.L. Cutchin; DOD; "XBT Data Recorders and Satellite Transmitters for Pacific Ships"; November 13, 1985.

861186; J.O. Roads; CAC; "Design, Implement and Analyze Important Meteorological Experiments"; November 8, 1985.

861187; C.D. Winant; DOD; "Oceanographic Instrument Test and Calibration Facility"; November 13, 1985.

861188R1; N.A. Bray; ARO; "A Self-Contained System for High Quality Coastal Hydrography"; n.d.

861189; F.N. Spiess; DOD; "Intermediate-Range Side Looking Sonar System"; November 14, 1985.

861191; W.H. Berger, R.S. Keir; EPRI; "Ocean- Atmosphere Interaction in the Context of the CO2 Problem. III"; November 19, 1985.

861192; A. Soutar; NSF; "Travel and Analytical Support for an Ecosystem Investigation off Guaymas, MX"; n.d.

861193; E.D. Goldberg; NGS; "History of Atmospheric Pollution in Beijing, PRC"; November 25, 1985.

861195; G.D.F. Wilson; NSF; "The Systematics of the Deep-Sea Asellote Isopods (Crustacea, Superfamily Janiroidea)"; November 22, 1985.

861196; W.S. Hodgkiss; PSU; "Adaptive Array Processing"; December 6, 1985.

861198; R.N. Hey; NSF; "Galapagos Rift System: Tectonic and Geophysical Studies Using DSRV Alvin"; November 25, 1985.

861199; P.M. Masters; DOHHS; "Nonenzymatic Reactions in Human Dentin Proteins"; December 4, 1985.

861200; J.J. Sullivan; NOAA; "UCSG: National Internship"; n.d.

861201; J.J. Sullivan; NOAA; "UCSG: National Internship"; n.d.

861203; W.H. Berger; NSF; "Deep-Sea CO₂-: Accumulation, Dissolution, and CO₂ Flux"; December 3, 1985.

861204; C.C. Trees; ONR; "Application of DOAS in Phytoplankton Absorption and Production Measurements"; December 2, 1985.

861205; R.W. Eppley; NSF; "Coordination and Logistics for the PRPOO's Program: Request for Workshop Supplement"; December 3, 1985.

861206; R.J. Seymour; WES; "Wave Measurement in the Fisherman's Wharf Area of SF"; December 2, 1985.

861207; M. Kastner; JOII; "Organization of the Planning Committee Meeting"; December 4, 1985.

861208; W.B. Thompson, W.G. Van Dorn; NSF; "Coastal Responses of Tsunamis"; December 5, 1985.

861209; B.B. Ward; NSF; "Request for Lab Instruments in Support of Biological Oceanography at the IMR, FCRG"; December 12, 1985.

861210; P.S. Doyle; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic Pelagic Sediments"; December 16, 1985.

861211; A. P. Klimley; NSF; "Orientation/Navigation Mechanisms in Pelagic Sharks"; December 6, 1985.

861212; F. Azam; NSF; "Role of Bacteria in Detrital Marine Foodwebs: Mechanisms in Bacterioplankton- Organic Matter Interactions"; December 16, 1985.

861213; S. Constable; LLNL; "Studies of the Electrical Conductivity of Upper Mantle Rocks in the Temperature Range 100°C to 600°C"; n.d.

861214; G.L. Kooyman, F.N. White; NSF; "Physiological Research Lab Ring Tank Safety Fence"; n.d.

861216; E. Brinton; NOAA; "Analysis of Otoliths of Fish"; December 13, 1985.

861218; L.M. Dorman; NSF; "Seamount Tomography Using OBS"; January 10, 1986.

861220; C. Tai, W.B. White; NSF; "Mapping the Surface Dynamic Topography of the Tropical Pacific by Combining Ship-Borne Measurements with GEOSAT Altimetry"; December 20, 1985.

861222; M.A. Zumberge; NSF; "Acquisition of a Relative Gravimeter"; December 31, 1985.

861223; R.W. Austin; NOSC; "Optical Modeling and Environmental Phenomenology Core Program, Plus Options (5 Tasks)"; January 8, 1986.

861224; J.N. Brune, A.H. Olson; NSF; "Inversion of Earthquake Ground Motion for Fault Slip (Continuation Proposal Year 2 of EAR 84 18331)"; December 20, 1985.

Active Contracts and Grants; December 31, 1985.

861228; M.A. Zumberge; NSF; "Absolute Gravity Measurements in CA and Canada"; January 8, 1986.

861229; B.B. Ward; NSF; "Bacterial Metabolism as a Key to the Origin of the Particle Maximum"; February 3, 1986.

[Box 34]

861231; R.N. Hey, J.A. Orcutt; NSF; "Seismicity and Structure of the Galapagos Propagating Rift"; January 15, 1986.

861232; G.E. Backus; NSF; "Whole Mantle Electrical Conductivity and the Velocity Field of the Upper Core: Constraints from Applied Mantle Filter Theory, GDS, and Improvements in the Global Geomagnetic Data Base (A Collaborative Research Project with Dr. A. Shultz, UW)"; January 8, 1986.

861234; D. Lal; NSF; "Dynamics of P in the Upper Ocean: Application of Cosmogenic ³²P and ³³P as Tracers"; January 31, 1986.

861236; J.N. Brune; NSF; "Surface Wave Studies of the Gulf of MX and Yucatan Peninsula"; January 16, 1986.

861237; C.E. Reimers; NSF; "O₂ Fluxes to the Deep- Sea Floor"; January 27, 1986.

861238; D. Lal; NSF; "Study of Continental Weathering Processes and Their Rates Using Cosmic Ray Produced Radioisotopes"; January 15, 1986.

861239; J.G. Stewart; NSF; "Classifying Variation in Gelidiaceae (Rhodophyta)"; January 10, 1986.

861240; P. Dayton, L. Dysher; NSF; "What Are Appropriate Scales for Kelp Forest Research?"; January 27, 1986.

861241; G. Carnevale, G.K. Vallis; AFOSR; "Coherent Structures in Geophysical Flow"; January 16, 1986.

861242; M.E. Heath; NSF; "Temperature Regulation in Small Mammals"; January 27, 1986.

861243; J.A. Orcutt; DARPA; "Regional Phases: Oceanic and Continental Propagation"; January 31, 1986.

861244; R.E. Flick; DED; "SD Regional Beach Profile Program"; January 15, 1986.

861245; W.H. Thomas; SCEC; "Microalgae and Bacteria in E Brook Lake, Sierra Nevada, CA: Seasonal Standing Crops and Rate Processes in Relation to Potential Acid Deposition"; February 3, 1986.

861247; R.S. Keir; NSF; "Radiocarbon Stratigraphy of Sub-Lysocline Sediments in the E Equatorial Pacific"; January 24, 1986.

861248; A.F. Carlucci; NSF; "The Role of Microbial Population in the Transformation and Flux of Organic Matter in CA Borderland Benthic Boundary Layer Environment"; January 23, 1986.

861249; F.N. White; NSF; "Cardiorespiratory Regulation in Vertebrates"; January 22, 1986.

861250; H. Felbeck; NSF; "Metabolic Interactions in Animals from Hydrothermal Vents"; n.d.

861251; D. Wirth; TAMU; "An Integrated Study...Sunda Arc, Indonesia"; January 22, 1986.

861252; E.D. Goldberg; NSF; "The Sorption of Inorganic and Organic Substances on Solids in Seawater"; January 28, 1986.

861253; J.R. Arnold, R.H. Lovberg; AFFTC; "Electric Plasma Propulsion Research"; January 22, 1986.

861254; C. Reimers; NSF; "Aragonite, Calcite, and Organic C Sedimentary Input in the W Equatorial Atlantic"; February 24, 1986.

861255; H. Staudigel; USSAC; "An Integrated Petrological, Geochemical, and Isotopic Study of Basalts and Hydrothermal Mineral Deposits Recovered during Legs 106 and 109; Sr, Nd, and Pb Isotopes"; January 23, 1986.

861256; J.M. Gieskes; NSF; "Mn Geochemistry in the Guaymas Basin: Hydrothermal and Diagenetic Influences"; January 24, 1986.

861257; F.N. Spiess; AS; "Acoustic Crust Surveyor System"; February 10, 1986.

861258; A. Chave, S. Constable, C.S. Cox; NSF; "Controlled Source EM Sounding of the Oceanic Lithosphere"; January 23, 1986.

861259; D.L. Cutchin, W.B. White; NOAA; "Proposal for the Continuation of XBT Sampling from VOS in the Pacific Ocean 1986-87 (SURTROPAC + TRANSPAC)"; January 20, 1986.

861260; N.D. Holland; NSF; "Lab and Field Studies of Feeding by Feather Stars (Echinodermata: Crinoidea)"; January 29, 1986.

861261; R.R. Hessler; NSF; "Temporal and Spatial Distribution of Megafauna at the Galapagos and Mariana Hydrothermal Vents"; January 27, 1986.

861262; H. Felbeck; NSF; "Facilities Support for Galapagos 87/88 Hydrothermal Vent Biology Program"; January 27, 1986.

861263; J.H. Natland; WHOI; "A Tectonic and Petrologic Study of a Very Slowly Slipping Transform on the SW Indian Ridge: Evaluation of Existing Dredge Hauls"; January 27, 1986.

861264; N.A. Bray; NSF; "Thermohaline Circulation in the Gulf of CA"; February 5, 1986.

861265; F.T. Haxo, O. Holm-Hansen; NSF; "Photoadaptation and Quantum Yields in Marine Phytoplankton"; January 27, 1986.

861266; W.B. White; NSF; "N HI Ridge Current Experiment"; January 27, 1986.

861267; H. Craig, R.J. Poreda; DOE; "Long Valley Caldera: Monitoring Studies of Gas Composition and He and C Isotopes"; February 1, 1986.

861268; H. Craig; NSF; "Ocean-Atmosphere Investigations"; February 1, 1986.

861269; K.M. Watson; NSSC; "Technical Support for Submarine Development Group Deep Submergence Systems"; March 13, 1986.

861270; G.N. Somero, R.D. Vetter; NSF; "Detoxification and Exploitation of S2- by Hydrothermal Vent Organisms"; January 24, 1986.

861271; R.N. Hey; NSF; "SeaMARC II Investigation of the Easter Microplate"; January 29, 1986.

861272; L. Tauxe; NSF; "Magnetization and Remanence Acquisition of the La Palma Seamount Series"; January 28, 1986.

861273; F.I. Tsuji; DOHHS; "Photogenic Organ Transcripts in Developing Porichthys"; January 27, 1986.

861274; J. Namias; NSF; "Funding to Print an Atlas of N Atlantic Seasonal SST Anomalies and Associated Statistics"; January 28, 1986.

861275; B. Cornuelle, D.S. Luther, P. Worcester; NSF; "CTD and Surface Drift Buoy Measurements with Data Assimilation/Model Validation Studies, in Support and Extension of BEMPEX and RTE86"; n.d.

861276; F.N. Spiess; DGMII; "Development of Data from the USN Submarine Development Group I's Side-Looking Sonar Survey of the Gorda Ridge"; January 31, 1986.

861277; W.H. Fenical; NSF; "Travel Grant Support- Research in China"; January 31, 1986.

861278; L.M. Dorman; NSF; "Seismic Tomography of the Tonga Trench, Island Arc, and Back Arc Basin: Delineating the Internal Structure of a Subduction Zone Using OBS"; February 7, 1986.

861279; J.H. Natland; NSF; "A Geophysical and Petrological Survey of the Marquesas Island Swell"; February 7, 1986.

861280; H. Staudigel; NSF; "The La Palma Seamount Hydrothermal System: A Feasibility Study"; February 4, 1986.

861281; L. Tauxe; NSF; "Oligocene Paleooceanography: The Details of the DSDP Site 522 Record"; February 6, 1986.

861282; L.D. Talley; NSF; "Analysis of N Pacific General Circulation"; January 31, 1986.

861282R1; L.D. Talley; NSF; "A Trans-Pacific Section in the Subpolar Gyre"; September 24, 1986.

861284; J.R. Arnold; NASA; "Orbital Gamma Ray Experiment for Composition of the Surface of Mars"; January 31, 1986.

861285; P.R. Guenther; SSC; "Intercalibration of Ocean Chemistry Manometer against the SIO Manometer"; February 4, 1986.

861286; J. Mammerickx; NSF; "Ridge Crest Reorientation Along the N EPR"; February 4, 1986.

861287; K.M. Watson; NSSC; "Technical Support for SUBDEVGRP ONE Unmanned Vehicles Detachment"; n.d.

861288; D. Cayan, J. Roads; UERG; "Analysis and Prediction of the Santa Ana: An Extreme Energy Loading Weather Event"; February 13, 1986.

861289; J.G. Anderson, J.N. Brune, J.E. Luco; NSF; "Numerical and Experimental Studies of Earthquakes and Earthquake Strong Motion (Earthquake Engineering)"; April 28, 1986.

861291; J. Orcutt; USGS; "Scattering and Q within the Anza Array"; February 25, 1986.

861292; C.C. Trees; NSF; "Application of DOAS in Phytoplankton Absorption and Production Measurements"; February 12, 1986.

861293; J.G. Anderson, J.N. Brune; DOE; "Determination of Spectra of P-Waves and S-Waves from Earthquakes in the Frequency Range 15-45 Hz"; February 14, 1986.

861294; J.N. Brune, R. Lovberg; NSF; "A Foam Rubber Analog Model of Clay-Layer Resonance and Soil- Structure Interaction for the Valley of MX"; March 4, 1986.

861296; J. Berger, J.N. Brune; USGS; "Earthquake Prediction Research in the Anza-Coyote Canyon Seismic Gap"; February 26, 1986.

861297; D.C. Agnew; USGS; "CDO: Part J Askania Borehole Tiltmeter"; February 25, 1986.

861298; D.C. Agnew, M.A. Zumberge; USGS; "Towards a Widely-Deployable Long-Base Tiltmeter: Sensors and Anchors"; February 25, 1986.

861299; D.S. Luther; NASA; "Satellite-Tracked Drifting Buoy Observations of Near-Surface Flow"; February 20, 1986.

861300; W.A. Nierenberg; TF; "Cooperation and Assistance to LAMSI"; March 3, 1986.

861301; A.D. Chave, S. Constable; DOE; "2-D Modeling and Inversion of EM Data"; April 10, 1986.

[Box 35]

861302; R.D. Zelick; DOHHS; "Multimodal Object Motion Detection in the Optic Tectum"; February 21, 1986.

861303; D. Cayan, J. Horel, J. Namias, J. Roads; USGS; "Large-Scale Ocean Atmospheric Variability Associated with Hydrological Extremes in W NA"; February 1986.

861304; R.C.J. Somerville; NASA; "Theoretical Models for Numerical Weather Prediction"; February 24, 1986.

861305; R.W. Austin; NOO; "Transmissometer Modification Completion"; February 26, 1986.

861306; W.R. Riedel; NSF; "Stratigraphy and Taxonomy of Cenozoic Radiolaria"; March 12, 1986.

861307; B.E. Volcani; DOHHS; "Biochemical Studies of Siliceous Skeletal Formation: RO"; n.d.

861308; V.C. Anderson, K.M. Watson; ONR; "A Model Study of Transient EM Systems for the Seafloor"; March 7, 1986.

861310; M.E. Huntley; UCD; "Bioconcentration of Se by Microorganisms from Kesterson Reservoir, CA: Studies in Biological Detoxification"; February 25, 1986.

861311; T.J. Chow; UCD; "Pb Isotopes in CA Coastal Sediments"; February 27, 1986.

861312; R.L. Fisher; NSF; "A Compilation and Tectonic Interpretation of Geophysical and Geological Data from the Indian Ocean and Contiguous S Ocean: I. Topography"; March 3, 1986.

861313; R. Revelle; NSF; "Continuing Support for the Scientific Secretary for the CCCO of the SCOR"; January 10, 1986.

861314; J.W. Hawkins; NSF; "Petrology and Geochemistry of Lau Basin Basalts: Evolution of Back-Arc Basin Crust and Upper Mantle"; March 4, 1986.

861315; A.D. Chave, J.H. Filloux, D.S. Luther; NSF; "EM and Pressure Field Measurements on the Seafloor of the NE Pacific Ocean: Oceanographic and Geophysical Objectives"; February 21, 1986.

861318; J.G. Anderson, J.N. Brune; NSF; "Augmentation of the Guerrero Accelerograph Array and Data Analysis for the September 19, 1985, MX Earthquake"; March 11, 1986.

861319; J.D. Horel; NSF; "An Analysis of the Persistence of the Planetary Circulation"; March 6, 1986.

861320; G.G. Shor; NRL; "A Proposal for Sale of a GPS Navigation Receiver"; March 7, 1986.

861321R1; V.C. Anderson, K.M. Watson; ONR; "Continuation of the MPL Multi-Disciplinary Ocean ST Program"; October 20, 1986.

861323; K.M. Watson; NSSC; "Analysis of Range- Extended Sonar Targets"; n.d.

861324; K.M. Watson; NSSC; "SEA SNAKE Surveillance System"; n.d.

861325; K.M. Watson; NSSC; "Intelligent Beamformer Concepts"; March 11, 1986.

861326; R.C.J. Somerville; NOAA; "An Experimental Climate Forecast Center at SIO"; February 28, 1986.

861327; D.C. Agnew, J. Berger, F. Gilbert; NSF; "Supplement to: Project IDA: A Global Research Network for Very Long Period Seismology"; March 12, 1986.

861328; G.K. Vallis; CSI; "Theoretical and Observational Studies of the ENSO Phenomenon"; March 11, 1986.

861329; R.H. Stewart; NASA; "Application of Satellite Data for Studies of the Variability of the Adriatic Sea"; March 14, 1986.

861330; C.C. Trees; CSI; "Modeling Optical Properties in the Ocean Using HPLC Measured Pigment Distributions: Applications to Algorithms for Remotely Sensing Ocean Color"; March 19, 1986.

861331; W.H. Thomas; DOASE; "Continuous High-Density Culture Systems for Increased Production of Microalgae"; March 18, 1986.

861334; M. Tegner; CDFG; "Abalone Larval Transplants as an Approach to Stock Enhancement"; March 17, 1986.

861335; J.M. Gieskes; UERG; "Hydrothermal Interactions of Sediments (Guaymas Basin/Salton Trough) with Aqueous Solutions: An Experimental Study"; March 19, 1986.

861336; N.D. Holland; NSF; "Suspension Feeding in Sea Lilies"; n.d.

861344; J.R. Arnold; LANL; "Condensation Processes in the Early Solar System"; n.d.

861345; M. Anderson, C.H. Gautier; NASA; "Pilot Study of Long-Term Monitoring of Precipitation Estimates from Multisensor-Multisatellite Data"; March 21, 1986.

861346; J.J. Simpson; CSI; "CA Current Mean Flow- Eddy Interactions"; March 21, 1986.

861347; R.C. Smith; NSF; "A Proposal for Study of Spatial and Temporal Variability of Pigment Biomass and Phytoplankton Production in near Surface Layers during Winter/Spring Transformation"; March 25, 1986.

861349; J.O. Roads; CSI; "Determination of N Pacific Storm Tracks from Nimbus-7 SMMR Data"; March 26, 1986.

861350; J.L. Bada; CSI; "Extraterrestrial Amino Acids on the Earth"; March 26, 1986.

861351; M.M. Mullin; NSF; "Further Developments in the Analysis of Biomass Spectra in Pelagic Ecology"; March 25, 1986.

861352; D. Lal; CSI; "Measurements of Cosmogenic and Radiogenic Nuclear Reaction Rates in Rocks"; n.d.

861354; W.G. Van Dorn; CSI; "Estimate the Total Mass of Asteroid Debris in the Primordial Solar System"; March 21, 1986.

861355; J.J. Bates, C. Gautier; CSI; "SST along the CA Coast: Complimentary Use of Multispectral Observations from the Polar-Orbiting and Geostationary Satellites"; March 31, 1986.

861356; C.H. Gautier; CSI; "Expert System for Automatic Normalization of GOES VISSR Detectors"; March 31, 1986.

861358; R.W. Austin; NSSC; "Multi-Spectral Ocean Optical Probe"; April 4, 1986.

861359; M. Kastner; LLNL; "The Relationship of Heat Flow to Hydrothermal Alteration of Sediments Overlying the Salton Sea Geothermal Reservoir"; April 1, 1986.

861360; G.A. Jackson, P.M. Williams; DOE; "Research Ship Support for the W Coast DOE Program"; March 26, 1986.

Active Contracts and Grants; March 31, 1986.

861362; F. Gilbert, T.G. Masters; NSF; "Low Frequency Constraints on Spherical Earth Structure and Earthquake Mechanisms"; April 9, 1986.

861363; T.P. Barnett; NSF; "Studies of Climate Dynamics and Predictability"; April 8, 1986.

861364; J. Berger, J. Orcutt; DARPA; "Excitation, Propagation, and Attenuation of Elastic Waves in Inhomogeneous Media"; April 2, 1986.

861365; A.J. Kalmijn; ONR; "Biological Sensors for the Detection of Electric, Magnetic, and Low- Frequency Acoustic Fields"; April 1, 1986.

861366; R.T. Guza; DBW; "Coastal Engineering Wave Data Application to Harbor and Beach Erosion Problems"; April 7, 1986.

861367; K.L. Smith; NSF; "Role of Pelagic and Demersal Animals in Particulate Organic Matter Transport at Abyssal and Bathyal Depths"; April 2, 1986.

861368; V.C. Anderson, L.M. Dorman, F.H. Fisher, J.A. Hildebrand, W.S. Hodgkiss; ONR; "Low Frequency Ambient Noise Measurements with High Resolution High Gain Arrays"; n.d.

861369; B.D. Cornuelle, R.E. Davis, R.A. Knox, W.H. Munk, P.F. Worcester; ONR/DARPA; "OAT with Moving Sources and Receivers"; April 4, 1986.

861370; E.D. Goldberg; NSF; "Group Travel to Scope Metals Cycling Workshop"; April 8, 1986.

861371; B.B. Ward; NASA; "CH4 Oxidation in the Open Ocean"; April 9, 1986.

861372; R.T. Guza; DBW; "Dynamics of Small Bays"; April 7, 1986.

861373; G.N. Somero; ONR; "Marine Molecular Biology and Biotechnology Program"; April 1986.

861374; R.C.J. Somerville; CSI; "Numerical Modeling of Planetary Boundary Layer Convection"; April 3, 1986.

861375; R.J. Seymour; ONR; "Advanced Ports Engineering Program URI Proposal, Submitted under: H. Environmental Science and Engineering, 3. Ocean Engineering"; April 7, 1986.

861376; D. Wirth; NSF; "Hydrographic Support to SAVE"; April 1986.

861377; R. Pinkel; ONR; "The Surface of the Sea"; April 13, 1986.

861378; V.C. Anderson, F.N. Spiess; ONR; "Engineering Development for Deep-Sea Floor Work"; April 11, 1986.

861379; H. Craig; NSF; "Hydrothermal Vent Studies on Loihi Seamount: DSRV Alvin Sampling"; April 7, 1986.

861380; H. Craig; NSF; "Submersible Studies in the Mariana Trough: Hydrothermal Vents and Basalts"; April 7, 1986.

861381; H. Craig, Y. Horibe; NSF; "Central Pacific Transect, 25°N to 35°S"; April 7, 1986.

861382; J. Berger; IRIS; "Seismic Vault on Easter Island"; April 8, 1986.

861383; R.T. Guza; ONR; "Nearshore Fluid Dynamics"; n.d.

861384; R.F. Weiss; NSF; "Dissolved Gaseous Tracers in SAVE: ClFICH4"; April 8, 1986.

861385; R.T. Guza; NSF; "Development and Testing of Shoaling Region and Surf Zone Nonlinear Wave Models"; April 8, 1986.

861386; C. Gautier, J.J. Simpson, R.C.J. Somerville, G.K. Vallis; ONR; "An Integrated Program for Ocean Modeling and Remote Sensing: Development of a Nowcasting Capability for the CA Current"; n.d.

861386R2; J. Simpson, G.K. Vallis, W. White; ONR; "An Integrated Program for Ocean Modeling and Remote Sensing: Development of a Nowcasting Capability for the CA Current"; February 15, 1989.

861387; R.J. Seymour; WES; "Wave, Tide, and Wind Measurement in the Monterey Bay Area"; April 9, 1986.

861388; J.A. Orcutt; LLNL; "An SIO/IGPP, LLNL/IGPP Digital Data Exchange Experiment"; April 10, 1986.

861389; R.F. Weiss; NSF; "Wintertime ClFICH4 and Surface H2O Trace Gas Measurements in the Weddell Gyre"; April 10, 1986.

861390; J. Berger, N. Burr; LLNL; "IGPP UCSD-LLNL Collaborative Study of Seismic Data Telemetry Via Satellite Using Spread Spectrum Technology"; April 9, 1986.

861391; J.D. Macdougall; LLNL; "Non-Destructive Gamma Ray Analysis of U Series Nuclides in Volcanic Rocks"; April 11, 1986.

861392; R.E. Flick; ONR; "Nearshore Turbulence"; n.d.

861393; D.L. Inman, S.A. Jenkins; ONR; "Bedform Response on Beaches and Shelves"; n.d.

861394; D. Wirth; LGO; "Technical Support for Research in S China Sea"; n.d.

861395; C.D. Keeling; EPRI; "Interdisciplinary Research on CO2 and Climate"; April 16, 1986.

861397; J.R. Arnold; NASA; "Advanced Propulsion Method for Transport of Lunar Material"; April 11, 1986.

861398; J. Namias; NSF; "Large-Scale Air-Sea Interaction over the N Hemisphere and Associated Impact on Short-Term Climate of the Ocean- Atmosphere"; April 24, 1986.

861399; R.J. Seymour; DBW; "Computer Acquisition"; April 21, 1986.

861400; E.D. Goldberg; SWRCB; "A Study of Tributyltins in CA Coastal H2O"; April 29, 1986.

861401; J. Brune; LLNL; "Investigation into Seismic Wave Propagation and Seismic Structure in the N Basin and Range"; n.d.

861403; A.F. Carlucci; ONR; "Microbiological Alteration of Marine Surface Microlayers: Possible Effects on Remote Sensing Measurements"; April 25, 1986.

861404; R.C.J. Somerville; NSF; "Cloud-Radiation Feedbacks in Climate Modeling"; April 29, 1986.

861405; W. Heiligenberg; NSF; "Structure and Function of a Neuronal Pacemaker"; April 28, 1986.

861406; F.I. Tsuji; DOHHS; "Structure-Function Relationships in Aequorin"; April 28, 1986.

861407; F.I. Tsuji; NSF; "Development of Photogenic Organs in Porichthys"; April 30, 1986.

861408; M.A. Zumberge; NASA; "Absolute Gravity Measurements at SLR Stations"; May 2, 1986.

861409; R.T. Guza; NFEC; "Bathymetric Control of the Nearshore Wave Climate: Field Measurements"; n.d.

861410; R.L. Fisher; DU; "Shipboard Participation and Data Reduction in Bathymetric Exploration and Rock Sampling (By Dredge) in the Tonga Trench"; May 5, 1986.

861411; R.L. Parker; NSF; "Resistivity Inversion: Regularization and Inference"; May 9, 1986.

[Box 36]

861412; R.F. Weiss; LGO; "Indonesian Seas ClFICH4 Measurements"; May 8, 1986.

861413; D.L. Cutchin, W.B. White; NOAA; "Proposal for the Continuation of XBT Sampling from VOS in the Pacific Ocean 1986-87 (SURTROPAC + TRANSPAC): ADCP from EXXON Jamestown"; May 14, 1986.

861415; J.G. Anderson, J.N. Brune; EPRI; "The High Frequency Acceleration Spectrum and Seismic Wave Attenuation, and Development of a Modeling Facility for Studying Seismic Site Effect and Seismic Engineering Problems"; May 19, 1986.

861416; R.C. Smith; NASA; "Bio-Optics, Photoecology, and Remote Sensing"; May 12, 1986.

861417; J.D. Macdougall; NSF; "Field Studies in India: Mafic Rocks and Mantle Xenoliths"; May 21, 1986.

861418; G.J. Rose; DOHHS; "Electrosensory Processing in Laminated Midbrain Structure"; May 27, 1986.

861419; H.T. Hammel; DOHHS; "Enhanced Osmoregulatory Responses to Severe Salt Stress"; March 9, 1986.

861420; J.D. Macdougall; NSF; "U and Th Decay Series Disequilibrium in Volcanic Rocks as Indicators of Mantle Composition and Magmatic Processes"; August 8, 1986.

861421; J.D. Macdougall; NSF; "Isotopic and Geochemical Investigations of Oceanic Volcanic Rock: The EPR, Pacific Marginal Basins, and Seamount Island Chains"; June 3, 1986.

861422; R.C. Smith; NSF; "The Optical Biology of Phytoplankton Photophysiology and Growth Rates across a Coastal Front"; May 15, 1986.

861423; R.W. Eppley; NSF; "Phytoplankton Studies: NO₃- Transport, New Production and the Sinking Flux of Biogenic Particles"; May 19, 1986.

861424; L.L. Cheng, R.A. Lewin; NSF; "Isolation, Characterization, and Identification of Marine Picoplankton"; May 14, 1986.

861425; J.M. Gieskes; NSF; "Hydrogeochemical Studies in the Barbados Subduction Zone: Influence of Volcanic Matter Alteration and of Crustal Dewatering on the Interstitial H₂O Chemistry"; May 21, 1986.

861426; H. Staudigel; NSF; "¹⁴³Nd/¹⁴⁴Nd in Ancient Seawater: Are Fish Teeth the Solution?"; May 29, 1986.

861427; F.M.H. Reid; NSF; "Phytoplankton Species: Response to Ocean Climate"; May 29, 1986.

861428; E. Brinton; NOAA; "Analysis, Sorting, and Measurement of Plankton Samples"; May 22, 1986.

861429; R.S. Keir; NSF; "Radiocarbon Stratigraphy of Sub-Lysocline Sediments in the E Equatorial Pacific"; May 27, 1986.

861430; J.R. Beers; NSF; "Small-Scale Spatial Relationships of Microsestonic Components of the Marine Pelagic Food Web"; May 27, 1986.

861431; E.D. Goldberg; NSF; "The Marine Geochemistry of Au"; May 2, 1986.

861432; R.R. Hessler; DOI; "Megafaunal Survey of the Gorda Ridge"; May 20, 1986.

861433; G.L. Kooyman; NSF; "Physiology of Diving of Emperor Penguins and Weddell Seals"; May 22, 1986.

861434; P.P. Niiler; NSF; "Measurement of Air-Sea Fluxes and Local Heat Storage in TROPIC HEAT"; May 22, 1986.

861435; R.A. Jahnke; NSF; "Mineralization at the Seafloor of Deep Continental Slope and Rise Regions"; May 23, 1986.

861436; R.A. Jahnke; NSF; "Present-Day Apatite Formation in Marine Sediments"; May 28, 1986.

861438; M. Tsuchiya; NSF; "Hydrographic Observations for a W EPOCS"; May 21, 1986.

861439; F.N. Spiess; UW; "Fine Scale Investigation of the Blanco Trough"; May 28, 1986.

861440; J. Mammerrickx; NSF; "The Sala-y-Gomez Ridge, a Precursor Rifting Site?"; May 28, 1986.

861441; C.S. Cox; NSF; "Stable Pressure Gauge"; May 24, 1986.

861442; S. Constable; NSF; "Analysis of Seafloor Controlled Source Electrical Sounding Data"; May 27, 1986.

861443; R.A. Knox; NSF; "Southward Squirts from the Equatorial Pacific Cold Tongue: Synoptic Mapping by AXBTs as a Pilot Study for the Next Phase of TROPIC HEAT"; May 23, 1986.

861444; J.A. Orcutt; NSF; "Menard Symposium on Geodynamics and Tectonophysics"; May 23, 1986.

861445; J.J. Sullivan; NOAA; "USN Concept Study of an Autonomous Vehicle"; n.d.

861446; O. Holm-Hansen; SDSU; "Photolytic Degradation of Algal Pigments in Oceanic Surface H₂O and a Steady State Model for H₂O₂ Formation"; May 22, 1986.

861447; F. Azam; NSF; "The Trophic Fate of Marine Chroococoid Cyanobacteria"; June 9, 1986.

861448; L. Tauxe; SAC; "Preliminary Paleomagnetic Investigations of Sediments Recovered during Leg 108"; May 27, 1986.

861449; L.D. Talley, M. Tsuchiya; NSF; "Atlantic Ocean Circulation Studies"; n.d.

861450; J.W. Hawkins, P.F. Lonsdale; NSF; "Fine Scale Geologic Studies in Lau Basin"; June 4, 1986.

861451; B.B. Ward; NSF; "CH₄ Oxidation by Marine Nitrifying Bacteria"; May 30, 1986.

861452; P. Dayton; NSF; "Effects of Currents on Patterns of Biological Activity in McMurdo Sound, Antarctica"; May 30, 1986.

861453; Y. Chung; NSF; "Dynamics of P in the Upper Ocean: Application of Cosmogenic ³²P and ³³P as Tracers"; May 29, 1986.

861454; J.S. McClain, J.A. Orcutt; NSF; "An Examination of Medium-Scale Along-Strike Variability on an Ultrafast Spreading Center"; June 2, 1986.

861455; S. Pazan, W.B. White; NOAA; "The Forecast of ENSO Events Based Upon the Redistribution of Model Heat Content in the W Tropical Pacific"; May 28, 1986.

861456; J.R. Arnold; NSF; "ARS Facility: Management of Operation"; June 9, 1986.

861457; J.A. McGowan; NSF; "Time-Series Measurements of Chlorophyll and Nutrients at SIO Pier"; n.d.

861458; A.D. Chave, S. Constable; NSF; "2-D Modeling and Inversion of EM Data"; June 6, 1986.

861459; P.M. Masters; DOHHS; "Nonenzymatic Reactions in Human Dentin Proteins"; May 30, 1986.

861460; R.N. Hey, J.A. Orcutt; NSF; "Seismicity and Structure of the Galapagos Propagating Rift"; May 30, 1986.

861461; P.F. Lonsdale; NSF; "Geology of the Galapagos Triple Junction"; June 2, 1986.

861462; M. Abbott; CIT; "Studies of Ocean Productivity"; June 2, 1986.

861463; L.M. Dorman; NSF; "Seismic Tomography of the Tonga Trench, Island Arc, and Back Arc Basin: Delineating the Internal Structure of a Subduction Zone Using OBS"; June 3, 1986.

861464; N.A. Bray, C.D. Winant; EGGOS; "EG&G Subcontract: N CA Coastal Circulation Study"; June 3, 1986.

861465; W.H. Fenical; NSF; "Intermicrobial Interactions: A Molecular Basis of Competitor Exclusion in Symbiotic Marine Bacteria"; June 13, 1986.

861466; O. Holm-Hansen; NSF; "Pilot Investigation for RACER: Photobiology and Primary Production"; June 4, 1986.

861467; G.G. Shor; NSF; "Ship Operations"; June 24, 1986.

861468; D. Wirth; NSF; "Technician Support for SIO Ships"; June 26, 1986.

861469; M.R. Anderson; NASA; "Synoptic Analysis of Ice Melt from Nimbus-7 SMMR"; June 5, 1986.

861470; P.M. Williams; DOE; "Sources and Composition of Organic Materials in H2O and Sediments of the SCCZ"; June 16, 1986.

861471; L. Tauxe; NSF; "The Magnetization of Seamounts"; June 10, 1986.

861472; P.M. Williams; ONR; "Studies of the Physical and Chemical Stability of Natural Sea-Surface Films"; June 11, 1986.

861473; J. Berger, J.N. Brune; UCD; "Seismic Studies of Nuclear Test Sites: Part I-Semipalatinsk"; June 10, 1986.

861475; M.M. Mullin; NOAA; "Lipofuscin Assay as a Measure of Chronic, Sublethal Pollutant Stress in Fish"; June 13, 1986.

861476; K.M. Watson; NSSC; "Support for R/P Flip and Orb, FY87"; June 26, 1986.

861477; E.D. Goldberg; NSF; "The Marine Chemistry of Rhenium"; June 18, 1986.

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861478; P. Dayton; NSF; "Toward an Understanding of Larger Scale Spatial Patterns in Kelp Forest Research"; June 23, 1986.

861479; J.L. Mueller; JHU; "Studies of Factors Affecting Visibility in a Marine Environment"; June 18, 1986.

861480; P.F. Lonsdale, K.C. Macdonald, S.P. Miller, F.N. Spiess; NSF; "Fine Scale Investigations of Overlapping Rift Zones"; June 15, 1986.

861481; F. Azam, A.F. Carlucci; DOE; "Role of Bacteria in Organic Matter Fluxes in the SCCZ"; June 19, 1986.

861482; M. Tegner; DFG; "Towards Better Management of S CA Abalone Fisheries: Application of Recent Yield Models to Red, Pink, and Green Abalone Stocks"; July 2, 1986.

861483; F.N. Spiess; SWRCB; "Advisory Services to the CA SWRCB"; June 23, 1986.

861485; G.A. Jackson; DOE; "Measurement of the Density of Nutrient Fields at Opening to a Marine Basin and to Model the Fluxes within the Basin"; June 20, 1986.

861486; K.M. Watson; NSSC; "Technical Support for US NOSC"; June 23, 1986.

861487; J.D. Macdougall; NSF; "Isotopic Studies of Volcanic Rocks and Xenoliths as Probes of the Earth's Mantle"; August 11, 1986.

861488; R.A. Jahnke; DOE; "The Flux and Recycling of Bioactive Substances in the Surface Sediments of the Deep Basins off S CA"; June 14, 1986.

861489; R.W. Johnson; NOSC; "A System for the Determination of Sea Ice Optical Properties"; June 25, 1986.

861490; R.E. Davis; NSF; "Transport through the Indonesian Archipelago: A Pilot Study"; June 26, 1986.

861491; R. Knox, W. Munk, P. Worcester; NSF; "OAT: A Gyre-Scale Reciprocal Transmission Experiment"; July 7, 1986.

861493; C.D. Keeling; ORNL; "Interdisciplinary Research on CO2 and Climate"; June 30, 1986.

Active Contracts and Grants; June 30, 1986.

870002; W.H. Thomas; EPA; "Effects of pH on Growth and Species Selection in Natural Assemblages on Sierra Nevada (CA) Lake Phytoplankton"; August 5, 1986.

870004; E.D. Goldberg; ISD; "Butyltin Analyses of River, Bay H2O, and Bottom Sediments near Pascagoula, MS"; July 3, 1986.

870005; J. Namias; DWR; "CA Precipitation Forecast Research"; July 3, 1986.

870006: J.R. Arnold; NASA "Orbital Gamma Ray Experiment for Composition of the Surface of Mars"; July 2, 1986.

870007: J. Powell; ACE; "Construct Model of Hopper Dredge to Conduct Studies on Distribution of Crabs Entrained in Hopper and Overflow"; July 7, 1986.

870008: R.E. Davis, C.D. Winant; NSF; "CODE: Analysis and Interpretation of Observations Acquired during CODE"; July 8, 1986.

870010: J.W. Miles; ONR; "Nonlinear Wave Motion"; July 8, 1986.

870011: R.W. Austin; NOSC; "Optical Properties of High-Latitude Ocean H₂O SLC Cruise on the USNS Lynch, August 1986"; July 15, 1986.

870013: N.G. Maynard; ONR; "Development of a Prototype Portable Aircraft Ocean Color Remote Sensing System and Acquisition of Ocean Bio-Optical Distributions during Arctic Oceanographic Experiments"; n.d.

870014: L. Armi; NSF; "Ocean Mixing Processes: A Study of Mediterranean Salt Lenses"; July 9, 1986.

870015: K.M. Watson; LGO; "Collaboration on SeaBeam Acoustic Data Acquisition and Processing as Part of the Joint French-American Expedition HYDROFAST"; n.d.

870016: C. Tai; NASA; "Determination of Ocean Circulation and the Geoid Using Satellite Altimetry"; July 10, 1986.

870019: H. Craig, Y. Horibe; NASA; "C Isotopes in Polar Ice Core CH₄"; July 10, 1986.

870020: G.N. Somero; UTOR; "Joint Program on the Molecular Biology of Marine Organisms"; July 10, 1986.

870021: R.F. Weiss; NSF; "Antarctic Bottom H₂O Formation"; July 14, 1986.

870022: D.C. Agnew; USGS; "PFGO: Cooperative Studies with Outside Investigators (Including CDO Program)"; July 11, 1986.

870023: D.C. Agnew, J. Berger, NSF; "PFGO: A Facility for Studies of Crustal Deformation"; July 14, 1986.

870024: P.F. Lonsdale, J. Mammereckx; JOII; "Regional Synthesis of the S and W Pacific in Support of ODP"; July 22, 1986.

870025: W.L. Stockton; NSF; "Growth, Predation and Mortality in Antarctic Foraminifera: Effects on Community Structure"; n.d.

870025R1: W.L. Stockton; NSF; "Growth, Predation and Mortality in Antarctic Foraminifera: Effects on Community Structure"; January 5, 1987.

870025R2: W.L. Stockton; NSF; "Growth, Predation and Mortality in Antarctic Foraminifera: Effects on Community Structure"; February 24, 1987.

870026: R.W. Johnson; AFGL; "Rooftop Validation Tests for Blue/Red Ratio Techniques"; July 14, 1986.

870027: J.H. Filloux; UW; "Electric Study of Litho- and Asthenosphere beneath the Juan de Fuca Plate: SIO's Participation (Analysis and Interpretation of Data from Offshore EMSLAB Experiment)"; July 15, 1986.

870028: G.W. Lugmair; NASA; "Isotopic, Chemical, and Mineralogical Investigations of Extraterrestrial Materials"; August 1, 1986.

870029: J.G. Anderson, J.N. Brune; NSF; "Data Analysis for the September 19, 1985, Michoacan, MX Earthquake"; August 6, 1986.

870030: R.L. Parker; NSF; "Statistical Behavior of the Geomagnetic Dipole"; July 15, 1986.

870031: F. Gilbert, T.G. Masters; NSF; "Aspherical Structure"; July 28, 1986.

870033: K.M. Watson; NSSC; "Evaluation of Acoustic and Optical Sensor Systems"; July 21, 1986.

870034: O. Holm-Hansen; NSF; "Coastal Monitoring of Physical, Optical, and Biological Parameters"; July 22, 1986.

870035: D.C. Agnew; NSF; "Measurements in the CA Borderlands"; August 4, 1986.

870036: R.R. Hessler; NSF; "Temporal and Spatial Distribution of Megafauna at the Galapagos and Mariana Hydrothermal Vents"; July 23, 1986.

870037: J. Berger, J.N. Brune; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; July 31, 1986.

871038: G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; August 29, 1986.

871039: G.G. Shor, D. Wirth; NSF; "Oceanographic Instrumentation"; August 26, 1986.

871043: D. Lal; NSF; "Nuclear Studies of Continental Erosion Processes and Rates"; July 31, 1986.

871044: M. Kastner; NSF; "Observations and Experiments on Hydrothermal Reactions between Hemipelagic Sediments and Seawater"; September 24, 1986.

871045: G.E. Backus, R.L. Parker, P.B. Stark; NASA; "Constructing Core Fields Consistent with Geomagnetic Data and Geophysical Constraints"; August 5, 1986.

871046; M. Abbott; NASA; "Data Display Equipment for Satellite Oceanography Facility"; August 1, 1986.

871047; R.C. Smith; UCSB; "Bio-Optics of the Upper Ocean"; July 1986.

871048; R.J. Seymour; DBW; "CDIP: Collection, Analysis, Reporting Storage of Wave Data"; August 1, 1986.

871049; J.G. Anderson, J.N. Brune; NSF; "Data Analysis for the September 19, 1985, Michoacan, MX Earthquake"; August 8, 1986.

871050; J. Berger, J.N. Brune; NSF; "Analysis of Broadband Data from a Seismic Array near the USSR Test Site in Kazakstan"; August 6, 1986.

871051; A.H. Olson; NSF; "Boundary Integral Calculation of 3-D Elastic Scattering"; August 7, 1986.

871053; M. Abbott; ONR; "Photosynthesis and Community Structure of Phytoplankton in Filaments off CA"; August 1, 1986.

871054; D. Wirth; UW; "Hydrographic Support for the Greenland Sea Project"; August 1986.

871055; H. Staudigel; NSF; "The Hydrothermal System of the La Palma Seamount Series"; August 6, 1986.

871056; T.G. Masters; NSF; "Measuring Long Period Travel Times"; August 11, 1986.

871057; F. Gilbert, C. Lindberg; NSF; "Multiple Taper Analysis of Spatial and Temporal Datasets"; August 11, 1986.

871059; G.E. Backus; NASA; "Contributions from Geomagnetic Inverse Theory to the Study of Hydromagnetic Conditions near the Core-Mantle Boundary"; August 7, 1986.

871060; D.C. Agnew, M.A. Zumberge; NSF; "Precision Measurements of Crustal Deformation"; August 4, 1986.

871061; H. Craig, K. Marti; NSF; "Development of a Dedicated MS for Terrestrial Ne and N2 Isotopic Studies"; August 10, 1986.

871062; M.M. Mullin, P.E. Smith; NSF; "A Search for CA Shirasu"; August 20, 1986.

871063; M.M. Mullin; CDFG; "Biochemical Measures of Growth and Metabolism in Larval and Juvenile White Sea Bass and CA Halibut"; August 7, 1986.

871064; G.W. Lugmair; NASA; "Isotopic, Chemical and Mineralogical Investigations of Extraterrestrial Materials"; August 8, 1986.

871066; H. Craig, R.J. Poreda; UU; "Investigation of Bedload Transport of Contaminated Gravel in the White Oak Creek Drainage"; August 13, 1986.

871068; F.N. Spiess; NASA; "Deep Ocean Benchmarks for GPS"; n.d.

871069; C.H. Gautier; NASA; "Studies of the Variations of the Net Surface Radiation Flux from Satellite Radiances during FIFE"; August 14, 1986.

871069AF; C. Gautier; NASA; "Studies of the Variation of the Net Radiation Flux from Satellite Radiances during FIFE"; May 25, 1988.

871070; J.W. Miles; ONR; "Selection Process and Long Term Evolution of Ripples (Supplement to 'Nonlinear Wave Motion')"; August 29, 1986.

871072; G.G. Shor; HA; "Sampling on the Continental Shelf about 40 Miles W of Drake's Bay, CA"; August 19, 1986.

871073; R.B. Bacastow; ORNL "Development of a 3-D Model of the Natural C Cycle in the Oceans and its Perturbation by Anthropogenic CO2"; August 19, 1986.

871074; J.L. Mueller; NORDA; "Ocean Optical Transmission Maps of the Gulf of AK and NE Pacific"; September 4, 1986.

871076; R.W. Austin; NOSC; "SRS Model and Technical Report"; August 21, 1986.

871077; M.A. Zumberge; NSF; "A Determination of the Newtonian Gravitational Constant"; August 22, 1986.

871078; J.L. Mueller; JHU; "Task P3, 'CZCS Evaluation and Optical Measurement for the Calendar Year 1987'"; August 21, 1986.

871079; M. Kastner; ACS; "Isotopic, Chemical, and Mineralogical Evidence for Early Dysaerobic Diagenesis"; August 18, 1986.

871080; W.H. Fenical; NSF; "Chemical Defense in Marine Organisms"; September 5, 1986.

871081; T. Nogami; WES; "Calibration of Saul's Method for Seismic Response Analysis in Pile Groups"; September 2, 1986.

871082; D. Lal; NSF; "Ice Accumulation and Ablation Rates in Greenland Based on In Situ Cosmogenic 14C"; August 28, 1986.

871083; D. Wirth; UW; "Hydrographic Support to the UW"; August 1986.

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871084; J. Berger, J.N. Brune; NRDC; "Seismic Studies of Nuclear Test Sites: Part II NTS"; September 1, 1986.

871085; C. Gautier, R. Somerville; NASA; "Air-Sea Interactions and the Indian Monsoon: Satellite and Modeling Studies"; October 3, 1986.

871087; H. Craig, R.J. Poreda; NSF; "Continental and Convergent-Margin Volcanism: Isotopic Studies of Fluids and Rocks"; n.d.

871088; H. Craig, Y. Horibe; NSF; "Deep Ocean Tracers and Hydrothermal Vents"; October 31, 1986.

871089; R.W. Austin; CIT; "Fisheries Demonstration Project"; n.d.

871090; J.L. Bada; NSF; "Archaeological and Biochemical Applications of AMS Based Radiocarbon Measurements"; September 3, 1986.

871091; D.L. Inman; ONR; "Bedform Response on Beaches and Shelves"; August 28, 1986.

871092; R.E. Flick; ONR; "Nearshore Turbulence"; August 28, 1986.

971093; R.T. Guza; ONR; "Nearshore Fluid Dynamics"; n.d.

871095; K.L. Smith; NSF; "Scavenging Deep-Sea Amphipods in the Bering Sea: Lab and In Situ Nutritional Studies"; August 31, 1986.

871096; G.D.F. Wilson; NSF; "The Comparative Morphology of Copulatory Organs in Isopod Crustaceans"; September 10, 1986.

871097; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean"; September 4, 1986.

871098; T. Hayward; ONR; "Filaments in the CA Current: Effects upon Primary Production"; September 9, 1986.

871100; B.B. Ward; BLOS; "Microbial N₂ Transformation in the OMZ off Peru: Request for Supplementary Funds"; September 4, 1986.

871101; J.M. Gieskes; SAC; "Followup Studies on Pore H₂O in Barbados Accretionary Complex ODP Leg 110"; October 4, 1986.

871103; A.G. Dickson, C.D. Keeling; NSF; "The Preparation and Distribution of Standards for Alkalinity, Dissolved Inorganic C, and Nutrients in Seawater"; September 12, 1986.

871105; C.C. Trees; NSF; "Application of DOAS in Phytoplankton Absorption and Production Measurements"; September 12, 1986.

871106; D.J. Faulkner; AP; "Field Research in Palau"; October 9, 1986.

871108; A. Kalmijn; WMKF; "EM Research Facility"; September 11, 1986.

871109; V.C. Anderson, K.M. Watson; ONR; "Continuation of the Interdisciplinary Research Program at MPL"; n.d.

871110; B.B. Ward; NSF; "NO₂- Reduction and Denitrification: Sites of Gaseous N₂ Transformations"; September 17, 1986.

871111; G.G. Shor; NSF; "Support Services for US/UK Cooperative Program"; n.d.

871112; R.R. Hessler; NSF; "Temporal and Spatial Distribution of Megafauna at the Galapagos Hydrothermal Vents"; September 15, 1986.

871113; C. Gautier; NASA; "A Multi-Sensor Remote Sensing Approach for Measuring Primary Production from Space"; n.d.

871114; D.C. Agnew, J. Berger; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; September 15, 1986.

871116; R.A. Knox, D.S. Luther; NSF; "Observations and Analyses of Equatorial Pacific Upper Ocean Currents and Temperatures and of Surface Meteorological Fields in TROPIC HEAT"; September 16, 1986.

871117; K.M. Watson; ONR; "USN Symposium to Honor R. Raitt and V. Vacquier"; September 17, 1986.

871118; P.M. Masters; UERG; "Marine Adaptation in S CA 8000-4000 B.P."; September 16, 1986.

871119; J.A. Orcutt; NSF; "Geophysical Investigation of an Axial Magma Chamber on the EPR: Crustal Structure Analyses"; October 3, 1986.

871120; N.D. Ohman; NSF; "Predation on Marine Microzooplankton"; n.d.

871121; G.G. Shor; NSSC; "Use of the R/V Robert Gordon Sproul to Set and Recover Instrument Moorings off Half Moon Bay"; September 17, 1986.

871123; A.A. Yayanos; NSF; "Characterization and Ecology of Deep-Sea Barophilic Bacteria"; September 10, 1986.

871124; J.R. Arnold; NASA; "Continuation of a Research Program on Space Station Automation"; September 26, 1986.

871125; J.A. Orcutt; NSF; "The Frequency Dependence of Q of Oceanic Lithosphere"; September 25, 1986.

871126; W.R. Riedel; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic Pelagic Sediments"; September 22, 1986.

871127; W.B. Thompson, W.G. Van Dorn; NSF; "Coastal Responses to Tsunamis II: Transient Case"; November 10, 1986.

871128; J.A. Hildebrand, F.N. Spiess; ONR; "Seafloor and Mid-H2O Gravimetry"; September 23, 1986.

871129; B.M. Tebo; NSF; "Oxidation of Mn (II) by Marine Bacteria"; September 19, 1986.

871130; F.N. Spiess; NSF; "Deep-Sea Instrument Positioning and Recovery System"; September 23, 1986.

871131; K.L. Smith; NSF; "Ecology of Suspension Feeders on a Deep-Sea Hard-Bottom Seamount"; September 22, 1986.

871132; R.A. Jahnke; NSF; "Seasonality of Fluxes at the Seafloor"; September 27, 1986.

871133; J.A. Orcutt; NSF; "Implementation of an Advanced Seismic Processing System on the SDSC CRAY XMP/48"; September 29, 1986.

871134; J.D. Macdougall; NSF; "Isotopic and Geochemical Investigations of Oceanic Volcanic Rocks: The EPR, Pacific Marginal Basins, and Seamount Island Chains"; September 29, 1986.

871135; W.H. Berger, R.S. Keir; NSF; "Ocean C Cycle: Integration of Modeling and Signals in Deep-Sea CO₂"; September 25, 1986.

871136; C.C. Trees; NSF; "Analysis of Bio-Optical Properties in the Greenland Sea"; September 26, 1986.

871137; J. Yen; NSF; "Lipid Metabolism of the Carnivorous Marine Copepod Euchaeta"; September 26, 1986.

871138; P.M. Williams; NSF; "Investigations of the Marine Organic C Cycle in the N Pacific Ocean"; September 26, 1986.

871139; O. Holm-Hansen; NASA; "Analysis of Data from a 6-Month Bio-Optical Mooring"; September 24, 1986.

871140; R.H. Stewart; NASA; "Assessment of Altimeter Satellite Accuracy"; September 29, 1986.

871141; P.P. Niiler; NSF; "Analysis of Circulation Measurements in NE Pacific"; September 29, 1986.

Active Contracts and Grants; September 30, 1986.

871142; P.K. Dayton, M.J. Tegner; NSF; "Patterns of Disturbance, Reproductive Effort, and Succession across a Depth Gradient in a CA Kelp Forest Community"; October 6, 1986.

871144; J.J. Sullivan; NOAA; "UCSG: National Internship"; October 1, 1986.

871145; J.J. Sullivan; NOAA; "UCSG: National Internship"; October 1, 1986.

871146; J.J. Sullivan; NOAA; "UCSG: National Internship"; October 1, 1986.

871147; J.J. Sullivan; NOAA; "UCSG: National Internship"; October 1, 1986.

871148; J.R. Curry; NSF; "Variations Around the Sunda Arc"; January 30, 1987.

871150; H. Felbeck; NSF; "Metabolism and Regulatory Role of D-Amino Acids in Marine Invertebrates"; October 8, 1986.

871151; K.M. Watson; NSSC; "Vertical Correlation Measurement of Ambient Noise as a Function of Depth and Sea State"; December 1, 1986.

871152; K.M. Watson; NSSC; "Studies of Ambient Noise Vertical Directionality"; December 16, 1986.

871153; K.M. Watson; NSSC; "Development of a Small, Light-Weight, Low-Frequency Transducer for Use as a Portable Underwater Acoustic Source at 200Hz"; December 2, 1986.

871154; K.M. Watson; NSSC; "Technical Support for the USS Dolphin"; December 2, 1986.

871155; F. Azam, R. Iturriaga; NSF; "The Trophic Fate of Marine Chroococcoid Cyanobacteria"; October 9, 1986.

871157; H. Craig, R.J. Poreda; NSF; "Oceanic Basalts: Rare Gas, H and C Concentrations and Isotope Ratios"; October 17, 1986.

871158; D.C. Agnew; USGS; "PFGO: Cooperative Studies with Outside Investigators (Including CDO Program)"; October 14, 1986.

871159; D.W. Wilkie; IMS; "General Operating Support"; November 1, 1986.

871160; D.J. Faulkner; DOHHS; "Antibiotics from Marine Organisms"; October 26, 1986.

871161; G.G. Shor; ONR; "Improvements, R/V Melville"; October 20, 1986.

871162; G.G. Shor; ONR; "Improvements, R/V Thomas Washington"; October 21, 1986.

871163; G.G. Shor; NSF; "Gravimeter Purchase (2nd Year of OCE 85-16231)"; October 21, 1986.

871164; M. Kastner; NSF; "Effects of Convective Heat Flow on Marine Sediment Diagenesis: A Section across the W Flank of the EPR at ~19°S, 116°-130°W, as an Example"; October 20, 1986.

871165; M. Kastner; NSF; "Phosphatization and Phosphatic Facies in the Miocene Monterey Formation, CA"; October 20, 1986.

871166; J.G. Anderson; NSF; "The High Frequency Acceleration Spectrum and Seismic Wave Attenuation"; November 21, 1986.

871167; P.P. Niiler; NSF; "Measurement of Large- Scale Upper Ocean Thermal Fields and Heat Budget in the Tropical Pacific"; November 10, 1986.

871169; B.D. Cornuelle, R.E. Davis, R.A. Knox, W.H. Munk, P.F. Worcester; ONR; "OAT with Moving Sources and Receivers"; October 31, 1986.

871174; T.P. Barnett; ESA; "Measuring Ocean Surface Current Shear with SAR"; November 5, 1986.

[Box 39]

871175; J.R. Arnold; NASA; "Continuation of a Research Program on Space Station Automation Addendum: Advanced User and AR Expert Support to the Task Force for Space Station Operations"; October 1, 1986.

871176; R.H. Stewart; NASA; "Satellite and Ship Studies of the CA Current during and after the 1982 ENSO"; November 5, 1986.

871179; M.E. Huntley; NSF; "RACER: Feeding, Growth and Early Development of Antarctic Krill, Euphausia superba Dana"; November 11, 1986.

871180; C.D. Keeling; NSF; "A Study of the Abundance and $^{13}\text{C}/^{12}\text{C}$ Ratio of C in the Atmosphere and Oceans in Relation to the Global C Cycle"; November 11, 1986.

871183; D. Lal; NSF; "An Experimental Attempt to Determine History of ^3He , ^4He , and Isotopes of Ne and Ar in the Mantle"; January 8, 1987.

871184; C. Gautier; ESA "Modeling and Remote Sensing of the Mesoscale Variability of the Pacific Ocean"; November 25, 1986.

871187; F.N. Spiess; JHU; "Development and Testing of a Drill Hole Instrument Placement System"; November 26, 1986.

871189; N.G. Maynard; NASA; "Remote Sensing of Ocean Color in the Arctic"; December 2, 1986.

871190; L.D. Talley; NSF; "Hydrography of the NW Pacific: R/V Korolev, 27 April-7 June 1987 "; December 1, 1986.

871190R1; S. Riser, J.H. Swift, L.D. Talley; NSF; "Hydrography of the NW Pacific Ocean: R/V Korolev, 27 April-7 June 1987. Supplement to: A Trans- Pacific Section in the Subpolar Gyre"; March 10, 1987.

871191; S. Riser, J.H. Swift, L.D. Talley; NOAA; "Hydrography of the NW Pacific Ocean: R/V Korolev 27 April-7 June 1987 "; December 1, 1986.

871192; K.M. Watson; NSSC; "Technical Support for USN DSVs;" December 2, 1986.

871193; J.B. Graham; NSF; "Function of the Pericardium and Pericardioperitoneal Canal in Elasmobranch Fishes"; December 1, 1986.

871194; C. Tai, W.B. White; NASA; "An Integrated Research Program for TOPEX/POSEIDON with Emphasis on the Pacific Ocean"; December 2, 1986.

871197R1; L.D. Talley, M. Tsuchiya; WHOI; "Atlantic Ocean Circulation Studies"; March 6, 1987.

871198; W.B. White; NSF; "Collection, Maintenance, Quality Control Network Design for WOCE Subsurface Thermal Data"; January 16, 1987.

871199; P.M. Masters; NSF; "Marine Adaptation in S CA, 8000-4000 B.P."; December 8, 1986.

871199R1; P.M. Masters; NSF; "Marine Adaptation in S CA, 8000-4000 B.P."; January 26, 1987.

871200; J.F. Gilbert, A.H. Olsen, J.A. Orcutt; NSF; "Constrained Optimal Solutions in Seismic Imaging"; December 15, 1986.

871201; J.W. Miles; NSF; "Geophysical Fluid Dynamics"; December 19, 1986.

871202; J.W. Miles; ONR; "Nonlinear Wave Motion"; March 26, 1987.

871204; R.H. Stewart; CIT; "Radar Studies of the Sea Surface"; December 10, 1986.

871205; F.H. Fisher; ONR; "Participation in Fixed- Fixed Experiments"; n.d.

871206; V.C. Anderson, R.J. Seymour; OSU; "NOAA-RUM III Mud Experiment for the Controlled Impact Experiment"; December 17, 1986.

871207; C. Gautier; NASA; "Application of TOPEX/POSEIDON Altimetry Measurements to Observational and Modeling Studies of the Low- Frequency Upper Ocean Mass and Heat Circulation in the Tropical Pacific"; December 12, 1986.

871208; G.J. Rose; MEFN; "Neural Mechanisms of Temporal Processing in the Anuran Auditory System"; December 16, 1986.

871209; B.M. Tebo; NSF; " O_2 Isotope Tracers of Bacterial Mn Oxidation"; December 16, 1986.

871212; M. Abbott; ONR; "Supplement to: Filaments in the CA Current System: Satellite, Ship, and Drifter Observations"; December 17, 1986.

871213; R.L. Parker; NSF; "Statistical Behavior of the Geomagnetic Dipole"; December 22, 1986.

871214; W.H. Fenical; NSF; "A Chemosystematic Revision of the Gorgonian Genus Pseudopterogorgia"; January 7, 1987.

871215; W.R. Riedel; NSF; "Software Tools for Biostratigraphy and Paleoenvironment"; January 9, 1987.

871216; W.F. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing"; December 22, 1986.

871217; W.R. Riedel, A. Sanfilippo; NSF; "Stratigraphy and Taxonomy of Cenozoic Radiolaria"; January 8, 1987.

871218; P.P. Niiler; ONR; "Satellite-Tracked Air-Sea Interaction Instrumentation"; December 22, 1986.

Active Contracts and Grants; December 31, 1986.

871220; J. Berger, W.E. Farrell; NSF; "Advanced Development of the Digital Feedback Seismometer"; January 10, 1987.

871221; D.H. Roemmich; NSF; "Time Variability of the Hydrography and Circulation of a Subtropical Gyre"; January 12, 1987.

871222; H. Craig; UU; "³He as an Indicator of the Terrestrial Exposure Age of Minerals"; January 6, 1987.

871223; H. Craig, K. Marti; NSF; "Acquisition of a Dedicated MS for Terrestrial Ne and N2 Isotopic Studies"; January 13, 1987.

871223R1; H. Craig, K. Marti; NSF; "Acquisition of a Dedicated MS for Terrestrial Ne and N2 Isotopic Studies"; July 22, 1987.

871224; S.C. Webb; NSF; "A Transient EM System for Seafloor Geologic Mapping"; January 26, 1987.

871226; J. Berger, H.K. Eissler; NSF; "Analysis of Broadband Data from a Seismic Array near the E Kazakh Test Site"; January 11, 1987.

871227; D. Cayan, J. Namias, J. Roads; USGS; "Large- Scale Ocean Atmospheric Variability Associated with Hydrological Extremes in W NA"; January 12, 1987.

871228; T.G. Masters; NSF; "Large Scale Aspherical Earth Structure"; January 13, 1987.

871230; S.C. Webb; ONR; "VLF Coherency Studies"; January 13, 1987.

871231; F.N. Spiess; NSF; "W FL CO32- Escarpment: Genesis, Geomorphology and Basal Processes"; January 26, 1987.

871232; J.H. Swift; NSF; "Facility Support"; January 9, 1987.

871233; J.A. Nichols; DBW; "Uses of Organotin Bottom Paint by Recreational Boats in S CA"; January 9, 1987.

871234; D.C. Agnew; NSF; "PFGO: A Facility for Studies of Crustal Deformation"; January 12, 1987.

871235; L. Tauxe; NSF; "Chemical Remanent Magnetization: A Study of Natural and Synthetic Fe Oxides"; January 12, 1987.

871236; M. Kastner; SSP; "Geochemistry, Mineralogy and Diagenesis of Dolomites, Phosphorites and Cherts, and Chemistry of Interstitial H₂O, Peru Continental Margin"; January 14, 1987.

871237; E.D. Goldberg; NSF; "Dynamic Chemistries of Marine Surface Films"; January 16, 1987.

871238; S. Chave, S. Constable, C.S. Cox; NSF; "Controlled Source EM Sounding of the Oceanic Lithosphere"; January 22, 1987.

871239; R.L. Fisher; NSF; "A Compilation and Tectonic Interpretation of Geophysical and Geological Data from the Indian Ocean and Contiguous S Ocean: I. Topography"; January 15, 1987.

871240; J.R. Curray; NSF; "Geophysical Studies and Flexure of the Lithosphere in the Vicinity of the Ninetyeast Ridge, NE Indian Ocean"; January 28, 1987.

871241; J.H. Swift; NSF; "N Pacific Intermediate and Deep Circulation"; January 20, 1987.

871242; J. Mammerickx; NSF; "Tectonic History of the SW Pacific: A Synthesis of Bathymetric and Magnetic Data"; January 21, 1987.

871243; M. Tsuchiya; NSF; "Atlantic Intermediate-H₂O Circulation"; January 14, 1987.

871246; F.N. Spiess; NSF; "The Blake-Bahama Escarpment: Genesis, Geomorphology, and Basal Processes"; January 26, 1987.

871247; V.C. Anderson; CEC; "Seafloor Geothermal Energy Technology"; January 20, 1987.

871248; J.H. Swift; NSF; "A New Integrated Profiling System for Data and H₂O Sample Acquisition"; January 23, 1987.

871249; J.H. Swift; NSF; "An Automated O₂ Titrator for High Volume Sampling at Sea"; January 23, 1987.

871250; J.R. Arnold; SS; "ARC Equipment Request"; January 16, 1987.

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871251; R.E. Davis; NSF; "Development of Autonomous Lagrangian Circulation Explorers"; January 16, 1987.

871252; J.H. Swift; NSF; "Seasonal and Interannual Variability in the Greenland Sea"; January 20, 1987.

871253; R.C. Smith; UCSB; "Relationship between Quantum Yield Particle Absorption and Primary Production in CA Coastal H₂O"; January 16, 1987.

871254; J.N. Brune; EPRI; "Development of a Modeling Facility for Studying Seismic Site Effect and Seismic Engineering Problems"; January 22, 1987.

871256; J. Mammerickx; NSF; "The Life and Times of the Chinook Plate"; January 28, 1987.

871257; R.J. Seymour; WES; "Wave Measurement in the Fisherman's Wharf Area of SF Harbor"; January 21, 1987.

871258; W.H. Berger; NSF; "Ocean C Cycle: Long-Term Changes in Productivity, CO₂- Dissolution, and CO₂ Flux"; January 29, 1987.

871259; E.L. Winterer; NSF; "High-Resolution Digital Seismic Reflection Depth Transect, Ontong Java Plateau to Nauru Basin"; January 27, 1987.

871260; P.F. Lonsdale; NSF; "A Regional Study: The Origin of the HI Hotspot Trail"; January 29, 1987.

871261S; J. Namias; NOAA; "Support for Ms. Y. Xiaojun"; January 21, 1987.

871262; B. Cornuelle, D. Roemmich; NSF; "Zonal Advection of Mass, Heat, and Salt Across the Central Pacific Ocean"; January 28, 1987.

871264; P. Dayton; NSF; "Toward an Understanding of Larger Scale Spatial Patterns in Kelp Forest Research"; January 27, 1987.

871267; P.F. Lonsdale; J.G. Natland; NSF; "Geology of Galapagos Microplate"; January 29, 1987.

871268; B.D. Cornuelle, D.H. Roemmich; NOAA; "Zonal Advection of Mass, Heat, and Salt Across the Central Pacific Ocean"; January 27, 1987.

871270; J.R. Curray; NSF; "The Continental Margins and Present Tectonic of Sri Lanka"; January 19, 1987.

871271; L.M. Dorman; NSF; "Seamount Tomography Using OBS"; February 3, 1987.

871273; H.D.I. Abarbanel; DOE; "Studies in the Nonlinear Dynamics of Dissipative Systems"; January 1987.

871274; R. Pinkel; NSF; "A Census of Small-Scale Overturns in the Upper Ocean and at Depth"; n.d.

871275; R. Austin; NOSC; "H₂O Properties Variability"; n.d.

871276; F. Azam; NSF; "Role of Bacteria in Detrital Marine Foodwebs: Mechanisms in Bacteria-Organic Matter Interactions"; May 28, 1987.

871278; H. Felbeck; ONR; "Biology of Symbioses between Marine Invertebrates and Intracellular Bacteria"; January 28, 1987.

871279; M.M. Mullin, P.E. Smith; NSF; "The Impact of first-Schooling Larval Anchovy on the Coastal Planktonic Ecosystem of the S CA Bight"; February 9, 1987.

871280; J.G. Anderson, A.H. Olson; DOI; "Evaluation of Existing Strong Motion Arrays for Resolving Detailed Faulting Models"; February 11, 1987.

871282; K.L. Smith; NSF; "Role of Pelagic Animals in Particulate Organic Matter Transport at Abyssal and Bathyal Depths"; January 28, 1987.

871283; J.D. Macdougall; NSF; "Isotopic Studies of EPR and W Pacific Basin Basalts"; January 30, 1987.

871284; B.B. Ward; ONR; "Immunological and Molecular Probes for Reaction Sites and Bacterial Catalysis of Trace Gas Reactions"; February 19, 1987.

871285; F. Gilbert, T.G. Masters; NSF; "Low Frequency Constraints on Spherical Earth Structure and Earthquake Mechanisms"; February 26, 1987.

871286; K.M. Watson; ONR; "Repair and Modification to NAVOCEANO Transmissometer"; n.d.

871287; O. Holm-Hansen; NSF; "Pilot Investigation for RACER: Photobiology and Primary Production"; February 5, 1987.

871289; A.A. Benson; NSF; "Starvation Rates of Larval Anchovy in the Sea, and the Relationship with the Condition of Grazing Zooplankton"; February 6, 1987.

871292; D. Roemmich; NSF; "A Trans-Pacific Section along 24°N"; February 11, 1987.

871294; J. Berger, J.N. Brune; USGS; "Earthquake Prediction Research in the Anza-Coyote Canyon Seismic Gap"; February 10, 1987.

871295; D.C. Agnew; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; February 12, 1987.

871296; D.C. Agnew; USGS; "PFGO: Cooperative Studies and CDO Program"; February 13, 1987.

871297; D.C. Agnew, M. Zumberge; USGS; "Towards a Widely-Deployable Long-Base Tiltmeter"; February 13, 1987.

871299; J.G. Anderson; DOI; "Ground Motion Estimation for the SD Area"; February 12, 1987.

871300; W.H. Thomas; EPA; "Effects of pH on Growth and Species Selection in Natural Assemblages of Sierra Nevada (CA) Lake Phytoplankton"; March 5, 1987.

871301; W.H. Fenical; DOASE; "Control of Bacterial and Fungal Disease in Aquaculture; A Natural, Non-Toxic Approach"; February 15, 1987.

871302; K.M. Watson; ONR; "SeaBeam Acoustic Measurements in the Deep Scattering Layers"; n.d.

871303; J.L. Bada; ACS; "Kinetically Coupled Organic Diagenetic Reactions and Their Geochemical Applications"; February 19, 1987.

871304; L. Tauxe; ONR; "Magnetization of Seamounts"; February 20, 1987.

871305; T.P. Barnett; NOAA; "A Study of Drifting Buoy Observations in the S Hemisphere"; February 19, 1987.

871306; B.E. Volcani; DOHHS; "Biochemical Studies of Siliceous Skeletal Formation: RO"; February 20, 1987.

871307; F. Azam; ONR; "Bacterial Community Interactions on Organic Particles: Role in Aggregate Dynamics in the Sea"; February 20, 1987.

871308; C.C. Trees; ONR; "Analyses of Bio-Optical Properties in the Greenland Sea"; February 24, 1987.

871309; K.M. Watson; ONR; "Vertical Correlation Measurements of Ambient Noise as a Function of Depth and Sea-State"; February 20, 1987.

871311; R.W. Johnson; ONR; "Initiation of Multi-Station WSI Network"; February 27, 1987.

871314R1; R.F. Weiss; NSF; "Undergraduate Fellowship Program"; February 27, 1987.

871315; R.A. Lewin; UERG; "Genetic and Physiological Improvement of *Botryococcus braunii* vs Showa"; March 2, 1987.

871316; R.T. Guza; ONR; "Additional Data Processing of TOWARD Data"; March 2, 1987.

871317; A. Chave, J. Filloux, D. Luther; NSF; "EM and Pressure Field Measurements on the Seafloor of the NE Pacific Ocean: Oceanographic and Geophysical Objectives"; March 4, 1987.

871318; R.J. Seymour; DBW; "Wave, Tide, and Wind Measurement in the Monterey Bay Area/DBW Contribution"; February 23, 1987.

871319; W.H. Berger, R.S. Keir; EPRI; "Ocean-Atmosphere Interaction in the Context of the CO2 Problem. IV"; March 20, 1987.

871320; J.L. Reid; ONR; "WOCE"; March 5, 1987.

871321; G.G. Shor; WHOI; "Seismic Tomography Experiment Support Subcontract"; March 6, 1987.

871322; K.M. Watson; ONR; "SEA SNAKE Surveillance System"; March 10, 1987.

871325; H. Craig; DOE; "Long Valley Caldera: Monitoring Studies of Gas Composition and He and C Isotopes"; March 9, 1987.

871326; H. Craig, Y. Horibe; NSF; "CH4, He, and Trace Gases in Polar Ice Cores"; March 31, 1987.

871328; J. Filloux, P. Niiler; NASA; "Ocean Storms Array: Bottom Pressure"; March 11, 1987.

871329; F. Azam, W.H. Thomas; SCEC; "Microalgae and Bacteria in E Brook Lake: Seasonal Rate Processes in Relation to Potential Acid Deposition (Continuation)"; March 16, 1987.

871332; L.M. Dorman; ONR; "Meeting Support for SNAG Coordinating Committee"; March 11, 1987.

871333; A.H. Olson, J.A. Orcutt; LANL; "Application of the Moving Finite Element Method to Elastic Scattering"; March 12, 1987.

871335; G.D.F. Wilson; NSF; "The Systematics of the Deep-Sea Asellote Isopods (Crustacea, Superfamily Janiroidea)"; March 12, 1987.

871336; M. Abbott; NSF; "Support of Satellite Oceanography Experiments"; March 13, 1987.

871338; R.J. Seymour; WES; "Wave Measurement in the Barbers Pt. Harbor, HI, Fisherman's Wharf Area of SF Bay, and Pacific Tsunami Observation Program"; March 9, 1987.

871339; J.L. Mueller; NASA; "Optical Evaluation of AVIRIS Performance over Case-II H2O"; March 16, 1987.

871341; J.R. Arnold; NASA; "Advance Propulsion Methods for Lunar Materials Transport"; n.d.

871342; J.R. Arnold; SS; "ARC Equipment Request: II"; March 18, 1987.

871343; K.M. Watson; ONR; "SES Hullform Technology Program"; March 20, 1987.

871344; K.M. Watson; ONR; "Investigations of Solitons in Ship Wakes"; April 17, 1987.

871345; J.L. Mueller; CSI; "Feasibility Assessment and Demonstration of Ocean Color Remote Sensing in Case-II H₂O of the SF Bay Estuarine Ecosystem"; April 1, 1987.

871346; W.S. Hodgkiss; ONR; "SEA SNAKE Surveillance System"; October 1, 1986.

871347; C.E. Reimers; NSF; "Phosphogenesis in Near- Surface SB Basin Sediments"; April 20, 1987.

871350; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean (REU Supplement)"; March 31, 1987.

871351; D. Lal; CSI; "Measurements of Cosmo- and Radiogenic Nuclear Reaction Rates in Rocks"; n.d.

871353; J.O. Roads; NOAA; "An Experimental Climate Forecast Center at SIO"; April 15, 1987.

871354; R.C.J. Somerville; CSI; "Modeling the Indian Monsoon Onset"; March 31, 1987.

871356; J.O. Roads; CSI; "Predictability Experiments with a Simple Coupled Atmosphere-Ocean Model"; n.d.

871357; J.J. Simpson; CSI; "Improved Parameterization of the Radiative Fluxes and SST over the CA Current Using In Situ and Remotely- Sensed Observations"; March 30, 1987.

871358; J.L. Bada; CSI; "Geo- and Cosmochemical Applications of 2-Step LIMS"; March 31, 1987.

871359; R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "Gyre-Scale Reciprocal Transmission Experiment"; April 1, 1987.

871360; P. Worcester; NSF; "OAT in the Greenland Sea"; April 2, 1987.

871361; J.R. Arnold; NASA; "Orbital Gamma Ray Experiment for Planetary Observer Missions"; March 30, 1987.

871362; W.H. Berger; CSI; "Relationship between Physical Parameters and Primary Productivity in the NE Pacific Ocean: Effects of Seasonality"; n.d.

871364; C.D. Keeling; CSI; "A Study of the Relationship between Atmospheric CO₂ Concentrations and the Global Terrestrial Biosphere Using NOAA TIROS-7 Satellite Data"; March 31, 1987.

871365; M. Abbott; NASA; "Supplement to: Data Display Equipment for Satellite Oceanography Facility"; March 31, 1987.

Active Contracts and Grants; March 31, 1987.

871366; C.H. Gautier; CSI; "Early Detection of Coastal Fog Onset Using GOES VAS Split-Window Low- Level Moisture Imagery"; April 1, 1987.

871367; M.R. Anderson, C. Gautier; CSI; "Initial Investigation of Antarctic Sea Ice Melt from NIMBUS-7 SMMR"; n.d.

871368; D.L. Cutchin, W.B. White; CSI; "AVHRR Images and Ship Measurements of the CA Current Region"; April 1, 1987.

871369; C.H. Gautier; CSI; "Precise Mapping and Analysis of Surface and H₂O Column Nutrient Concentrations from NOAA/AVHRR Measurements of SST"; April 1, 1987.

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871370; R.H. Stewart; MIT; "Experimental and Theoretical Determination of Sea-State Bias in Radar Altimetry"; April 3, 1987.

871372; C.E. Reimers; NSF; "O₂ Fluxes to the Deep- Sea Floor"; April 9, 1987.

871373; P.K. Dayton, M.J. Tegner; NSF; "Patterns of Disturbance, Reproductive Effort, and Succession across a Depth Gradient in a S CA Kelp Forest Community"; April 7, 1987.

871374; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; April 8, 1987.

871375R1; K.M. Watson; ONR; "Continuation of the MPL Multi-Disciplinary Ocean ST Program"; July 1987.

871376; J. Berger; LLNL; "Seismic Studies in E Kazakhstan: Large Chemical Explosions"; April 13, 1987.

871377; H. Craig; ACS; "He, Ne, Ar, and CH₄ in Natural Gases: Isotopic Studies of Sources and Migration Patterns"; April 10, 1987.

871378; M.M. Mullin; NSF; "Spatial and Temporal Variation in Larval and Juvenile CA Halibut, Determined Biochemically"; April 16, 1987.

871380; A.G. Dickson; LLNL; "Development of Models for the Bo, Al and Si Systems for Use in the Assessment of Waste Repository Performance"; April 22, 1987.

871381; S.E. Hough; LLNL; "A Study of the Depth Dependence of Attenuation in the Crust in the Basin and Range"; August 6, 1987.

871382; K.M. Watson; ONR; "Uplooking Imaging"; May 7, 1987.

871383; J.D. Macdougall; LLNL; "Non-Destructive Gamma Ray Analysis of U Series Nuclides in Volcanic Rocks"; April 15, 1987.

871384; M. Kastner; LLNL; "Ge and REE in Back-Arc Hydrothermal Solutions and Their Occurrence in Related S2- Deposits"; April 16, 1987.

871385; R.W. Johnson; AFGL; "Analysis and Interpretation of Simultaneous, Multi-Station WSI"; n.d.

871386; S. Constable; LLNL; "Studies of the Electrical Conductivity of Upper Mantle Rocks in the Temperature Range 100°-600°C"; April 16, 1987.

871387; J. Berger; NRDC; "US-USSR Seismological Verification Program"; April 22, 1987.

871388; A. Kalmijn; ONR; "Weak-Electric Field Experiments at the Bimini Test Site"; April 20, 1987.

871389; C.H. Gautier; NASA; "Proposal to Establish a Center for Ocean and Earth Space ST"; April 1987.

871391; W.H. Munk; PF; "Study for the Establishment of a Collection of Key Oceanographic Instruments"; April 30, 1987.

871392; M. Zumberge; NSF; "Precision Measurements of Crustal Deformation"; April 21, 1987.

871393; P.M. Williams; NSF; "Investigations of the Marine Organic C Cycle in the N Atlantic Ocean"; May 21, 1987.

871394; C.H. Gibson, W.H. Thomas; NSF; "Effects of Small-Scale Turbulence and Shear on Marine Phytoplankton: A Preliminary Study of Effects on Dinoflagellates and Contingent Follow-On Studies"; April 29, 1987.

871397; W. Heiligenberg; NSF; "Structure and Function of a Neuronal Pacemaker"; April 23, 1987.

871398; L. Tauxe; SAC; "Continuous Measurement of Paleomagnetism on Archive Halves of Leg 113 APC Cores"; April 24, 1987.

871399; M.A. Zumberge; LANL; "An Ice-Borehole Experiment to Determine the Newtonian Gravitational Constant"; April 27, 1987.

871401; R.H. Stewart; NASA; "Supplement to: Assessment of Altimeter Satellite Accuracy"; April 29, 1987.

871402; C.C. Trees; NASA; "Development of Bio- Optical Models Relating Primary Production to Remotely Sensed Aircraft Data in Frontal Systems of the Greenland Sea"; May 4, 1987.

871403; G.L. Kooyman; NSF; "Physiological Ecology of Diving in the Leatherback Sea Turtle"; May 1, 1987.

871404; J.A. Hildebrand; NSF; "An Oceanic Determination of the Newtonian Gravitational Constant"; May 28, 1987.

871405; A.C. Bucklin; NSF; "Allozymic Markers of Spatial and Temporal Population Structuring of Antarctic Zooplankton"; May 28, 1987.

871406; G.W. Lugmair; NASA; "Isotopic, Chemical and Mineralogical Investigations of Extraterrestrial Materials"; August 14, 1987.

871408; R.W. Johnson; ONR; "E/O SYS5 Camera Spare Parts"; May 4, 1987.

871409; V.C. Anderson, K.M. Watson; USNRL; "Program in Marine Physics Applied to USN Undersea Missions"; n.d.

871410; E.D. Goldberg; NSF; "The Marine Geochemistry of Au"; May 8, 1987.

871411; O. Holm-Hansen; SDSU; "Photolytic Degradation of Algal Pigments in Oceanic Surface H2O and a Steady State Model for H2O2 Formation"; May 4, 1987.

871412; K.M. Watson; ONR; "Evaluation of Acoustic and Optical Sensor Systems"; May 4, 1987.

871413; J.W. Hawkins; NSF; "Petrologic-Tectonic Evolution of the Lau Basin"; May 29, 1987.

871414; R. Salmon; NSF; "OGCM Based on Hamiltonian Methods"; May 6, 1987.

871415; G.F. Carnevale, G.K. Vallis; NSF; "Coherent Structures in Geophysical Flow"; May 11, 1987.

871417; W.F. Heiligenberg; NSF; "Neural Mechanisms of Sensory Info Processing"; June 2, 1987.

871418; W.R. Riedel, A. Sanfilippo; NSF; "Stratigraphic/Paleoenvironmental Coverage by the DSDP"; May 22, 1987.

871424; R.J. Seymour; SFCWP; "Operation and Maintenance of Deepwater Wave Measurement Station"; May 11, 1987.

871425; K.M. Watson; ONR; "Technical Support for USN DSVs"; May 8, 1987.

871426; K.L. Smith; NSF; "Scavenging Deep-Sea Amphipods in the S Ocean: Lab and In Situ Nutritional Studies"; May 12, 1987.

871427; E.D. Goldberg; NSF; "The Marine Geochemistries of Osmium and Rhodium"; May 15, 1987.

871428; C.H. Gautier; NASA; "The Development of a Prototype Software System for Education and Research on the Earth's Atmosphere and Surface"; May 13, 1987.

871429; P.P. Niiler; ONR; "Studies of Upper Ocean Circulation"; May 14, 1987.

871430; J.H. Filloux; NSF; "EMRIDGE: EM Investigation of a Mid-Oceanic Ridge"; May 20, 1987.

871431; R.W. Austin; NOSC; "USNS Bartlett Cruise Data Collection Support"; May 19, 1987.

871432; G.L. Kooyman; NSF; "Biology of King and Emperor Penguins While at Sea"; May 18, 1987.

871433; S.C. Webb; ONR; "WA Coast ULF Ambient Noise Experiment"; May 27, 1987.

871434; P.K. Dayton; NSF; "The Role of In Situ Productivity, Advection, and Microbial Activity Organizing Contrasting Benthic Communities at McMurdo Sound, Antarctica"; May 22, 1987.

871435; M. Huntley; NSF; "RACER: Physiological Ecology of Krill and Other Zooplankton"; May 18, 1987.

871437; A. Bucklin, G.A. Jackson, M.M. Mullin; NSF; "Transport Effects on Planktonic, Coastal Populations of N CA"; May 19, 1987.

871438; D.L. Cutchin, W.B. White; NSF; "Fabrication of a New Type Doppler Current Profiler"; June 8, 1987.

871439; G.J. Rose; DOHHS; "Electrosensory Processing in Laminated Midbrain Structure"; June 3, 1987.

871440; W.R. Riedel, A. Sanfilippo; SAC; "Stratigraphic/Paleoenvironmental Coverage by the DSDP"; May 20, 1987.

871441; B. Cornuelle, G.K. Vallis; INO; "Fundamentals of Data Assimilation in Ocean Models"; n.d.

871442; J.B. Graham; NSF; "Final Completion of a H₂O-Tunnel Respirometer for the Study of Pelagic Marine Fishes"; May 21, 1987.

871443; L. Talley, M. Tsuchiya; NSF; "Atlantic Ocean Circulation Studies Tropical Atlantic Section"; June 2, 1987.

871444; H. Staudigel, L. Tauxe; NSF; "The Magnetization of Seamounts"; May 28, 1987.

871445; L.M. Dorman, J.A. Hildebrand; NSF; "A Long- Period Seafloor Seismometer"; May 29, 1987.

871446; R.J. Seymour; WES; "Analysis of Wave Data Collected at Barbers Pt. Harbor, HI"; May 19, 1987.

871447; G.W. Lugmair, J.D. Macdougall; NSF; "Marginal Basin Basalts: Isotopic Studies Bearing on Magma Genesis and Source Evolution"; June 1, 1987.

871448; W.H. Berger; NSF; "CO₃- Dissolution and C Isotopes in the W Equatorial Pacific: Reconstruction of Deep Ocean Circulation and CO₂ Flux"; May 27, 1987.

871449; R.C. Smith; NASA; "Bio-Optics, Photoecology and Remote Sensing"; n.d.

871450; F.N. Spiess; NSF; "Seafloor Strain Patterns: Measurement System Validation"; May 29, 1987.

871451; H. Craig, Y. Horibe; NSF; "Deep Ocean Tracers and Hydrothermal Vents"; June 22, 1987.

871452; A.A. Yayanos NSF; "Characterization and Ecology of Deep-Sea Barophilic Bacteria"; May 26, 1987.

871453; G.A. Jackson, G.G. Shor; DOE; "Research Ship Support for: Studies in the SCCZ"; May 27, 1987.

871454; J.A. Orcutt; NSF; "Implementation of an Advanced Seismic Processing System on the SDSC CRAY X-MP/48"; May 27, 1987.

871455; K.M. Watson; ONR; "NOSC/NWC Combined Anti- Ship Targeting Program"; May 27, 1987.

871456; M. Huntley; NSF; "RACER: Management Proposal"; May 26, 1987.

871457; M.D. Ohman; NSF; "An Immunological Method for the Study of Predation on Marine Microzooplankton"; May 28, 1987.

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871458; P.P. Niiler; NSF; "Lagrangian Circulation in the Bransfield Strait"; May 29, 1987.

871459; T. Chereskin, D. Roemmich; NSF; "A Trans-Atlantic CTD/Hydrographic Section with ADCP at 8°N"; May 28, 1987.

871460; J.G. Anderson; NSF; "Guerrero Accelerograph Array: A Strong Motion Array along the MX Subduction Thrust"; June 17, 1987.

871461; J.R. Arnold, K. Nishiizumi; NSF; "Historical Study of Antarctic Rocks Using Radionuclides Produced by Cosmic Rays"; May 26, 1987.

871462; N.A. Bray, C.D. Winant; NSF; "Upwelling Variability and Marine Layer Forcing off N CA"; May 28, 1987.

871463; C.D. Winant; ONR; "Dynamics of the Strait of Gibraltar"; n.d.

871464; C.D. Winant; ONR; "Gulf of CA: Progress and Proposal"; n.d.

871466; J.H. Natland, E.L. Winterer; NSF; "Geologic and Geophysical Studies of Mesozoic Guyots (Collaborative Project)"; June 1, 1987.

871467; J.D. Macdougall; NSF; "Chemical and Isotopic Investigations of Mantle Xenoliths from NE China"; n.d.

871467R; J.D. Macdougall; NSF; "Chemical and Isotopic Investigations of Mantle Xenoliths from NE China"; March 1, 1991.

871468; J.N. Brune, J.R. Curray, L.M. Dorman; NSF; "Refraction Study of Anomalous Crust and Mantle Structure in the Bay of Bengal Geosyncline"; June 1, 1987.

871469; J.R. Arnold, D. Lal, K. Nishiizumi; NSF; "Ice Accumulation and Ablation Rates in Antarctica Based on In Situ Cosmogenic ¹⁴C (Collaborative Project)"; May 29, 1987.

871470; D.C. Agnew, J.A. Orcutt, H. Staudigel; NSF; "Development and Testing of a Submarine Tiltmeter for Deformation Measurements at Mid-Ocean Ridges"; May 31, 1987.

871471; O. Holm-Hansen; NSF; "RACER: Photobiology and Primary Production"; May 29, 1987.

871474; N.A. Bray; ONR; "Analysis of Heat and Salt Transport Observations in the Strait of Gibraltar"; June 1, 1987.

871475; J. Berger, J.A. Orcutt, S.C. Webb; SPAI; "Proposal to SPAI for Development of an ULF OBS System"; May 29, 1987.

871476; V.C. Anderson, K.M. Watson; ONR; "Continuation of the Interdisciplinary Research Program at MPL"; n.d.

871477; R.W. Eppley; NASA; "Assessing Ocean Productivity from Satellite Measurements"; May 29, 1987.

871478; F. Azam, A.F. Carlucci; DOE; "Role of Bacteria in Organic Matter Fluxes in the SCCZ"; June 18, 1987.

871479; G.A. Jackson; DOE; "A Proposal to Measure the Density and Nutrient Fields at Openings to a Marine Basin and to Model the Fluxes within the Basin"; June 2, 1987.

871480; P.M. Williams; DOE; "Sources and Composition of Organic Materials in H₂O and Sediments of the SCCZ"; June 4, 1987.

871481; P.P. Niiler; NSF; "TOGA Pan-Pacific Surface Current Study/Central Pacific Processes and Drifter Calibration"; June 16, 1987.

871482; M. Goodman, R.J. Seymour, J.B. Talbot; ONR; "Studies of Structural Degradation Associated with the Interfaces in Fiber-Resin Composites Exposed to Seawater"; June 24, 1987.

871483; E. Brinton; NOAA; "Analysis, Sorting, and Measurement of Plankton Samples"; June 10, 1987.

871485; C. Gautier; NASA; "A Multi-Sensor Remote Sensing Approach for Measuring Primary Production from Space"; June 5, 1987.

871486; C. Gautier; NSF; "The Role of Net Surface Radiation on Upper Ocean Heat Content in the Tropics"; June 15, 1987.

871487; G.D.F. Wilson; NSF; "Comparative and Evolutionary Morphology of Isopod Genitalia (Crustacea)"; June 8, 1987.

871488; D. Lal; NSF; "Dynamics of P in the Upper Ocean: Application of Cosmogenic ³²P and ³³P as Tracers"; June 10, 1987.

871489; W.S. Hodgkiss; ONR; "Reverberation Simulation"; June 30, 1987.

871490; J.A. Hildebrand, W.S. Hodgkiss; ONR; "Vertical Line Array Measurements of Low Frequency Signal Propagations and Ambient Noise in the NE Pacific"; n.d.

871492; K. Voss; JHU; "Standard Rampart: Study of Inherent/Apparent Optical Properties of Ocean H₂O"; June 12, 1987.

871493; J.G. Stewart; NSF; "Comparative Classifications of Gelidiales: Interpretations and Use"; June 10, 1987.

871496; J.H. Swift; NSF; "Seasonal and Interannual Variability in the Greenland Sea"; June 15, 1987.

871499; H. Felbeck; NSF; "Metabolism and Regulatory Role of D-Amino Acids in Marine Invertebrates"; June 16, 1987.

871500; M. Tsuchiya; NSF; "Atlantic Intermediate-H₂O Circulation"; n.d.

871502; J.D. Powell; ACE; "Scale Model Tests on Dredge Dragheads"; n.d.

871503; D.L. Cutchin, W.B. White; NOAA; "Continued Operation of the SIO VOS Program"; June 15, 1987.

871504; J.A. Orcutt; JHU; "Proposal to APL for Instrument Construction and Modification, Field Testing and Analysis Program"; June 18, 1987.

871505; J.J. Sullivan; NOAA; "Measuring Overwash on a Barrier Island"; n.d.

871506; R.J. Seymour; NSF; "Hot-Drawn Fiber- Reinforced Thermoplastic Wire"; June 19, 1987.

871507; G.G. Shor; NSF; "Support Services for NOAA Ships (Supplement to Grant OCE 87-02835)"; n.d.

871509; V.C. Anderson; DARPA; "Very Large Mid- Frequency Array Study"; June 22, 1987.

871510; P.M. Williams; ONR; "Studies of the Physical and Chemical Stability of Natural Sea-Surface Film"; June 26, 1987.

871511; A.F. Carlucci; NSF; "The Role of Microbial Populations in the Transformation and Flux of Organic Matter in CA Borderland Benthic Boundary Layer Environments"; July 2, 1987.

871512; J.B. Graham; NSF; "Energetic, Cardiovascular and Respiratory Aspects of Shark Swimming"; June 22, 1987.

871513; R. Pinkel; ONR; "Surface Waves, Ship Wakes, and Langmuir Cells: A Proposal Program for FY88"; July 13, 1987.

871514; T.L. Hayward; ONR; "Filaments in the CA Current: Effect upon Primary Production"; July 1, 1987.

871515; A.G. Dickson; ONR; "Na Ion Sensors as Reference Electrodes"; July 1, 1987.

871516; B.E. Volcani; DOHHS; "Biochemical Studies of Siliceous Skeletal Formation: Role of Si"; June 30, 1987.

871517; R. Revelle; NSF; "Support of a Scientific Secretary for the SCOR/IOC CCCO"; July 9, 1987.

881000 (871518); K.M. Watson; ONR; "R/P Flip and Orb Support, FY88"; July 10, 1987.

881001; S.E. Pazan, W.B. White; INO; "Mapping of Upper Ocean Thermal Structure for Evaluation of Regional Numerical Models in the Pacific and Indian Oceans"; July 1, 1987.

881002; H. Craig; NSF; "Continental and Convergent- Margin Volcanism: Isotopic Studies of Fluids and Rocks"; August 4, 1987.

881002R1; H. Craig; NSF; "Continental and Convergent-Margin Volcanism: Isotopic Studies of Fluids and Rocks"; January 27, 1988.

881003; F. Azam; ONR; "Bacterial Community Interactions on Organic Particles: Role in Aggregate Dynamics in the Sea"; July 6, 1987.

881004; M.A. Zumberge; NSF; "Supplement to: A Determination of the Newtonian Gravitational Constant"; July 6, 1987.

881005; R.E. Flick; CC; "CC: Sand Survey and Beach Profile Program"; July 8, 1987.

881006; J.R. Arnold; L. McFadden; NASA; "Asteroid and Comet Surface Properties"; June 1987.

Active Contracts and Grants; June 30, 1987.

881007; J.R. Arnold, L. McFadden; NASA; "Reflectance Spectroscopy of Meteorites: Relationship to Planets and Asteroids"; July 1987.

881008; K.M. Watson; ONR; "Oceanographic Instrument Tower Operation and Support"; July 10, 1987.

881009; K.M. Watson; ONR; "SES Hullform Technology Program"; July 13, 1987.

881011; F.N. Spiess; JHU; "Development of a Drill Hole Instrument Placement System"; July 21, 1987.

881012; R. Revelle; NSF; "Support of a Scientific Secretary for the SCOR/IOC CCCO"; July 20, 1987.

881013; J. Berger; NRDC; "USSR Seismic Stations"; July 21, 1987.

881014; G.G. Shor; NSF; "NMF: Major Repairs to Pier and Wharf"; n.d.

881015; G.G. Shor; ONR; "NMF: Major Repair to Pier and Wharf"; n.d.

881016; G.G. Shor; NOAA; "NMF: Major Repair to Pier and Wharf"; n.d.

881017; C.H. Gibson; DON; "Interpretation of Oceanic Microstructure Data"; July 24, 1987.

881018; R.C.J. Somerville; NSF; "Cloud Radiation Feedbacks in Climate Modeling"; July 23, 1987.

881019; T. Nogami; SNL; "Effects of Offshore Environment on Seismic Response of Soil Deposits and Pile Foundations"; July 16, 1987.

881020; J.G. Anderson, A.H. Olson; NSF; "Inversion of Earthquake Ground Motion for Dynamic Fault Slip"; July 27, 1987.

881021; R.E. Flick; ONR; "Nearshore Turbulence"; July 23, 1987.

881022; D.C. Agnew; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; July 27, 1987.

881023; F.H. Fisher; ONR; "Investigations of Alternative Floating Platforms as Seabased Test Sites and for Oceanographic Research Support"; July 10, 1987.

881024; T.P. Barnett; NSF; "Studies of Climate Dynamics and Predictability"; July 27, 1987.

881025; S.M. Smith; NOAA; "Bathymetric Data Collection and Processing: Helios Expedition, Legs 1, 2, 3 and 4. SAVE Expedition, Legs 1, 2 and 3. W8402A Cruise"; August 4, 1987.

[Box 43]

881026; H. Craig, D. Lal; NSF; "An Experimental Attempt to Determine History of ^3He , ^4He and Isotopes of Ne and Ar in the Mantle"; July 30, 1987.

881027; W.B. Thompson, W.G. Van Dorn; NSF; "Coastal Response to Tsunami II: Transient Case"; August 5, 1987.

881028; G.G. Shor; NSF; "Scientific Outfitting, 3rd Phase R/V Robert Gordon Sproul"; July 24, 1987.

881031; R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "Gyre-Scale Reciprocal Transmission Experiment"; July 31, 1987.

881032; M.G. Haygood; NSF; "Molecular Marine Microbiology Research Center"; July 28, 1987.

881033; J.G. Anderson; NSF; "The High Frequency Spectrum on Strong and Weak Ground Motions and Seismic Wave Attenuation"; July 29, 1987.

881034; J.H. Filloux; NSF; "Design and Demonstration of Low Frequency (1 Hz-DC) Semipermanent EM Remote Reference System"; August 4, 1987.

881035; C. Gautier, R. Somerville; NASA; "Air-Sea Interactions and the Indian Ocean Monsoon: Satellite and Modeling Studies"; August 4, 1987.

881036; J. Mueller; ONR; "MERT Instrument Data Acquisition System Support"; July 31, 1987.

881037; R.W. Eppley; NASA; "Assessing Ocean Productivity from Satellite Measurements"; February 8, 1988.

881038; J.B. Graham; NSF; "Tracking and Shipboard Studies of Albacore Tuna, *Thunnus alalunga*"; July 31, 1987.

881039; D.C. Agnew, M.A. Zumberge; NSF; "Precision Measurements of Crustal Deformation"; August 10, 1987.

881039R1; D.C. Agnew, M.A. Zumberge; NSF; "Precision Measurements of Crustal Deformation"; April 27, 1988.

881040; R.W. Eppley; NSF; "Phytoplankton Studies: NO₃- Transport, New Production and the Sinking Flux of Biogenic Particles"; August 24, 1987.

881041; F. Gilbert, T.G. Masters; NSF; "Large Scale Aspherical Earth Structure"; August 11, 1987.

881042; G. Arrhenius; NSF; "Fixation and Evolution of N₂ Compounds on Mineral Surfaces under Archaean Oceanic Conditions"; August 13, 1987.

881043; F.H. Fisher; ONR; "Vertical Correlation Measurements from Ambient Noise as a Function of Depth and Sea State"; August 7, 1987.

881044; K.L. Smith; NSF; "Role of Pelagic and Demersal Animals in Particulate Organic Matter Transport at Abyssal and Bathyal Depths"; August 7, 1987.

881045; K.M. Watson; ONR; "Undersea Equipment Support"; August 10, 1987.

881047; J. Berger; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; August 11, 1987

881048; W.R. Young; ONR; "Geo- and Ageostrophic Instabilities of Fronts and Vortices"; August 23, 1987.

881049; G.G. Shor; ONR; "A Proposal for the Assignment and Operation of the Deep Ocean Research Ship Agor 23"; August 26, 1987.

881050; L.M. Dorman, J.A. Hildebrand; WHOI; "Development of OBS"; October 14, 1987.

881052; P.M. Masters; NSF; "Preferential Preservation of Noncollagenous Protein during Bone Diagenesis: Applications for Chronometric and Stable Isotopic Measurements"; August 13, 1987.

881055; B.B. Ward; NASA; "CH₄ Oxidation in the Open Ocean"; August 19, 1987.

881056; V.C. Anderson; ONR; "Effects of Monomolecular Films on the Ocean Surface"; August 1, 1987.

881058; J.L. Reid; NSF; "A Study of the Circulation of the World Ocean (Creativity Continuation)"; August 24, 1987.

881059; G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; September 4, 1987.

881060; G.G. Shor; NSF; "Oceanographic Instrumentation"; September 4, 1987.

881061; D. Wirth; NSF; "Hydrographic Support to SAVE"; September 1, 1987.

881062; W.S. Hodgkiss; ONR; "Parametric Sonar Support"; August 21, 1987.

881063; R.W. Austin; NOSC; "SLC Cruise Data Reduction for the AMMTV Program"; August 19, 1987.

881065; C.S. Cox; SNAG/ONR; "Electric Field, Atmospheric ULF Acoustic Disturbance and Long Period Pressure Detection Studies"; August 28, 1987.

881067; J.R. Arnold, D. Lal, K. Nishiizumi; NSF; "Collaborative Project: Ice Accumulation and Ablation Rates in Greenland Based on In Situ Cosmogenic ¹⁴C"; August 28, 1987.

881068; O. Holm-Hansen; NSF; "Environmental Determinants of Phytoplankton Growth Rates and Adaptation in the Barents Sea"; August 11, 1987.

881069; W.R. Riedel; NSF; "Higher-Resolution Ichthyolith Stratigraphy"; September 4, 1987.

881070; L. McFadden; UMD; "Planet-Crossing Asteroids: Interrelationships within the Solar System"; October 6, 1987.

881071; R.E. Stevenson; "Letter Proposal for Money for E. Baker, Grad Student"; September 3, 1987.

881072; W.R. Riedel; NSF; "Marine Geological Sample Collections: SIO"; September 9, 1987.

881073; J.L. Mueller; NASA; "Analysis of Multispectral Airborne Radiometer System Data for the May 1987 Greenland Sea Program Experiment"; September 8, 1987.

881075; D. Lal; ONR; "P Recycling in the Upper Ocean"; n.d.

881076; B.G. Mitchell; UH; "Bio-Optical Profiling in Support of the HI Ocean Time-Series Experiment"; September 9, 1987.

881077; H. Craig, Y. Horibe; NSF; "CH₄, He, and Trace Gases in the Greenland and Antarctic Ice Sheets"; September 15, 1987.

881078; H. Craig, D.R. Hilton, R.J. Poreda; NSF; "Oceanic Basalt: Rare Gases, C and H Concentrations, and Isotope Ratios"; September 16, 1987.

881079; S.C. Webb; ONR; "ULF/VLF Instrumentation"; September 17, 1987.

881080; G.G. Shor; NSF; "Ship Operations (2nd Year of Grant OCE 87-02835)"; September 23, 1987.

881080R (881117R); G.G. Shor; NSF; "Additional Funding for OCE 87-02835"; July 20, 1988.

881081; J.A. Orcutt; ONR; "Seafloor Pressure and Electrical Array Studies at ULF"; September 9, 1987.

881084; J.B. Minster; NASA; "Plate Motions and Deformations from Geologic and Geodetic Data"; September 14, 1987.

881085; F.N. Spiess; SWRCB; "Advisory Service to the CA SWRCB"; n.d.

881087; W.H. Berger; NSF; "CA Current System during the Last 6 Centuries: Response to Abrupt Climatic Changes"; September 23, 1987.

881088; C. de Moustier; ONR; "Evaluation and Verification of Seafloor Acoustic Scattering Models"; September 17, 1987.

881089; D. Wirth; NSF; "Technician Support for SIO Ships"; October 1, 1987.

881090; M.A. Zumberge; NSF; "Absolute Gravity Measurements in CA"; September 17, 1987.

881091; P.K. Dayton; NSF; "Do Seamounts Have Characteristic Faunal Patterns?"; September 25, 1987.

881092; J. Mammerickx; NSF; "Tectonic History of the SW Pacific: A Synthesis of Bathymetric, Magnetic and Other Geophysical Data"; September 24, 1987.

881093; R.C. Smith; NSF; "Relationship between Quantum Yield, Particle Absorption, and Primary Productivity in CA Coastal H₂O"; September 21, 1987.

881094; J.M. Gieskes; NSF; "Bore Hole H₂O Studies, Hole 396B during IFREMER Re-Entry Experiment"; September 21, 1987.

881095; M. Huntley; NSF; "Learning and Memory in the Marine Copepod, *Calanus pacificus*"; September 16, 1987.

881096; R.E. Garrison, M. Kastner, C.E. Reimers; NSF; "Miocene to Recent Sedimentary Conditions on the Peruvian Margin: Apatite Formation, Fluid Circulation, and Diagenesis"; February 1, 1988.

881097; W.H. Berger; NSF; "CO₂- Dissolution: Pleistocene Saturation Fluctuations in the W- Equatorial Pacific"; September 28, 1987.

881098; K.L. Smith; NSF; "Role of Pelagic Animals in Particulate Organic Matter Transport at Abyssal Depths"; September 21, 1987.

881099; C.D. Keeling; NSF; "A Study of the Abundance and ¹³C/¹²C Ratio of C in the Atmosphere and Oceans in Relation to Global C Cycle"; September 30, 1987.

881100; D.L. Inman, S.A. Jenkins; NSF; "Feasibility of Sediment Bypassing around Dams on Mountainous Coastlines"; February 10, 1988.

881101; W.R. Young; NSF; "Topics in Large Scale Circulation Theory"; September 24, 1987.

881103; A. Chave, J. Filloux, D. Luther; NSF; "EM and Pressure Field Measurements on the Seafloor of the NE Pacific Ocean: Oceanographic and Geophysical Objectives"; October 7, 1987.

881104; M. Hendershott, D. Luther, A. Miller; NSF; "Observations and Theory of a Barotropic Planetary- Topographic Oscillation"; September 28, 1987.

881105; B.G. Mitchell; NSF; "Remote Sensing of Temporal and Spatial Dynamics of Phytoplankton Pigments and Production in Polar H₂O"; September 25, 1987.

881106; B.D. Long; NSF; "Instabilities of Equatorial Zonal Flows"; September 28, 1987.

881107; C. Constable, L. Tauxe; NSF; "Paleomagnetic Opportunities in ODP Archives"; September 29, 1987.

881108; H. Staudigel; NSF; "Compositional Domains in Altered Oceanic Crust"; October 2, 1987.

881109; W. Fenical, M. Huntley; NSF; "Chemically- Mediated Trophic Interactions in Marine Plankton"; September 25, 1987.

881110; M. Kastner; NSF; "Phosphatization and Phosphatic Facies in the Miocene Monterey Formation, CA"; October 6, 1987.

881111; W.H. Fenical; DOHHS; "Chemistry and Pharmacology of Marine Anti-Inflammatory Agents"; September 28, 1987.

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881112; A.G. Dickson, C.D. Keeling; NSF; "The CO₂ System in Seawater: The Certification of Standard Reference Materials for the Quality Control of Oceanic Measurements"; September 29, 1987.

881113; J. Namias; NSF; "Large Scale Air-Sea Interaction over the N Hemisphere and Associated Impact on Short-Term Climate of the Ocean- Atmosphere"; October 6, 1987.

881115; C. Tai, W.B. White; NSF; "Mapping the Surface Dynamic Topography of the Tropical Pacific"; October 2, 1987.

881116; J.A. Orcutt; ONR; "SENSOR Evaluation and Comparison Tests for a New Generation of Ocean Seismographs"; October 6, 1987.

881117; G.G. Shor; NSF; "Support Services for NOAA Ships"; n.d.

881119; F.N. Spiess; NSF; "Preliminary Design Study for a Medium Endurance Large Oceanographic Research Ship"; October 9, 1987.

881120; N.A. Bray; EGGOS; "Supplemental Tasks: N CA Coastal Circulation Study"; n.d.

881121; D.L. Cutchin, W.B. White; NOAA; "Continued Operation of the SIO VOS Program for Making Weather and Temperature Observations"; October 13, 1987.

881122; L.K. Talley; NSF; "Trans-Pacific Section across the Subpolar Gyre"; October 13, 1987.

881123; V.C. Anderson; ONR; "Evaluation of Diver Lock-Out Submersible"; October 15, 1987.

881124; K.M. Watson; ONR; "Deep Towed Vehicle Cable Tensioning System"; October 12, 1987.

881126; R. Pinkel; ONR; "Upper Ocean Effects"; October 30, 1987.

881127; J.A. Orcutt; NSF; "Geophysical Investigation of an Axial Magma Chamber on the EPR: Crustal Structure Analyses"; October 12, 1987.

881128; G.E. Backus; NASA; "Contributions from Geomagnetic Inverse Theory to the Study of Hydromagnetic Conditions near the Core-Mantle Boundary"; October 15, 1987.

881129; M.C. Hendershott; ONR; "Finestructure Generation and Decay in the Gulf of CA"; October 16, 1987.

881130; J.R. Arnold; OAST; "Intelligent Space Systems: A Program of Engineering Research and Advanced Education"; November 6, 1987.

881131; J.R. Arnold; NASA; "Continuation of a Research Program on Space Station Automation"; n.d.

881132; K.M. Watson; ONR; "Evaluation of Acoustic and Optical Sensor Systems; Augmentation to"; October 20, 1987.

881133; M.A. Zumberge; NSF; "Supplement to: A Determination of the Newtonian Gravitational Constant"; October 26, 1987.

881134; R.H. Stewart; NASA; "Experimental and Theoretical Determination of Sea-State Bias in Radar Altimetry"; November 3, 1987.

881135; W.R. Riedel; NSF; "Diatom and Radiolaria Evidence for Seasonal Sea Ice Cover in the Atlantic Sector of the S Ocean: H₂O Column and Quaternary Sediments"; October 27, 1987.

881137; J.R. Arnold, D. Lal, K. Nishiizumi, E.L. Winterer; NSF; "Nuclear Studies of Continental Erosion Processes and Rates: Collaborative Research"; November 4, 1987.

881138; T.G. Masters; NSF; "Measuring Long Period Travel Times"; November 4, 1987.

881139; J.R. Arnold, D. Lal, K. Marti, K. Nishiizumi; NSF; "Measurement of Continental Denudation/Sedimentation Time Scales Using Cosmic- Ray-Produced Nuclides"; November 17, 1987.

881140; M. Tarokh; NASA; "A Simple Control Algorithm for Trajectory Tracking of Robot Manipulators"; November 15, 1987.

881141; J.R. Arnold; NASA; "Evaluation of ADA Technology for Implementing Knowledge Base Systems in the FTS"; January 22, 1988.

881142; R.T. Guza; ONR; "Bathymetric Control of the Nearshore Wave Climate: Field Measurements"; November 5, 1987.

881143; J. Berger; NRDC; "US-USSR Seismological Verification Program"; November 13, 1987.

881144; D.W. Wilkie; IMS; "General Operating Support"; November 9, 1987.

881145: J.M. Gieskes; GRTTF; "Interstitial H₂O Studies during Gorda Ridge DSRV Alvin Dives"; November 11, 1987.

881146: J.M. Gieskes, E.D. Goldberg, J.W. Hawkins, D. Lal, G.W. Lugmair, J.D. Macdougall, K. Nishiizumi, A.J. Spivack; NSF; "Acquisition of ICPMS"; November 18, 1987.

881147: J.G. Anderson, J.E. Luco; NSF; "Integrated Analysis of the Data Recorded during the Whittier Narrows Earthquake of 10-1-87 and Implications for a Major Earthquake in the LA Area"; November 17, 1987.

881148: W.R. Riedel; NSF; "Approaches to Investigating Distortions of Planktonic Patterns in the Sedimentary Record"; November 16, 1987.

881149: J.L. Bada; NSF; "Kinetically Coupled Organic Diagenetic Reactions and Their Applications"; November 17, 1987.

881151: M. Kastner; GRTTF; "Mineral and Stable Isotope Studies of Escanaba Trough Hydrothermal Sediments and Interstitial H₂O"; November 13, 1987.

881152: T.P. Barnett; NASA; "Measuring Ocean Surface Current Shear with the SIR-C"; November 16, 1987.

881153: J.H. Natland; NSF; "Collaborative Research: The Temporal and Petrochemical Evolution of the Island of Tahiti"; November 16, 1987.

881155: J. Berger, J.B. Minster; DARPA; "Studies of High-Frequency Wave Propagation and Seismic Properties of the Crust and Upper Mantle in E Kazakhstan"; February 26, 1988.

881156: M.A. Zumberge; NSF; "Absolute Gravity Measurements in CA and HI"; November 17, 1987.

881157: F.H. Fisher, J.A. Hildebrand; ONR; "MPL Digital Acoustic Array for the DVLA Experiment"; n.d.

881160: R.R. Hessler; GRTTF; "A Survey of Megafauna and Life History of Vent Amphipods at the Gorda Ridge"; November 19, 1987.

881161: D.C. Agnew; NSF; "Measurements in the CA Borderland"; May 9, 1988.

881162: R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "OAT in the Greenland Sea"; December 7, 1987.

881163: B.M. Tebo; NSF; "O₂ Isotope Tracers of Bacterial Mn Oxidation"; November 23, 1987.

881164: J.L. Mueller; NASA; "Optical Evaluation of AVIRIS Performance over Case-II H₂O"; n.d.

881165: H. Craig; NSF; "He, Ar, and CH₄ Isotope Variations along the Sunda-Banda Arc System, Indonesia"; November 24, 1987.

881166: J.G. Anderson, A.H. Olson; NSF; "Inversion of Earthquake Ground Motion for Dynamic Fault Slip"; November 24, 1987.

881167: W.S. Hodgkiss; ONR; "FDS Review Panel"; November 16, 1987.

881168: W.H. Berger, H. Craig, M. Kastner, L. Tauxe, B.M. Tebo, E.L. Winterer; NSF; "Acquisition of a Precision IRMS"; November 25, 1987.

881169: R.B. Bacastow; ORNL; "Development of a 3-D Model of the Natural C Cycle in the Oceans and its Perturbation by Anthropogenic CO₂"; March 28, 1988.

881170: J.A. Orcutt; NSF; "Symposium on Mathematical Geophysics, Blanes (Costa Brava), Spain"; November 25, 1987.

881171: R.F. Weiss; LGO; "Indonesian Seas C₁F₁CH₄ Measurements"; November 25, 1987.

881173: J.A. Hildebrand; DON; "MPL Digital Array Design Studies for the DVLA Experiment"; December 7, 1987.

881174: R.F. Weiss; NSF; "Dissolved Gaseous Tracers in SAVE: C₁F₁CH₄"; December 1, 1987.

881176: V.C. Anderson; CEC; "Seafloor Geothermal Energy Technology"; December 3, 1987.

881177: M.M. Mullin; NSF; "Interannual Variation in Relative Fecundity of CA Current Copepods"; December 4, 1987.

881178: D.C. Agnew; NASA; "Towards a Statistical Description of Tectonic Motions Analysis of Crustal Dynamics Observations"; December 4, 1987.

881179: A.G. Dickson; LLNL; "A Formal Request for a Supplement to LLNL PO#1684403"; December 4, 1987.

881180: J.J. Sullivan; NOAA; "UCSG: National Fellowship"; n.d.

881182: R.A. Knox, D.S. Luther; NSF; "Observations and Analyses of Equatorial Pacific Upper Ocean Currents and Temperature and of Surface Meteorological Fields in TROPIC HEAT"; December 7, 1987.

881184: C.A. Stepien; NSF; "Biogeographic and Genetic Divergence of Antitropical Nearshore Fishes in E Pacific"; January 4, 1988.

881186: M. Tarokh; NASA; "Discrete Time Adaptive Controllers for Robot Manipulators"; n.d.

881187: S. Chen, R.C.J. Somerville; NSF; "Application of a Wave-Coupled Steady State Model"; December 14, 1987.

881189; D.P. Rogers; NSF; "Meso-Scale Modeling of the Marine Boundary Layer"; December 11, 1987.

881190; E.J. Luco, M.J.N. Priestly, T. Nogami; NSF; "Seismic Soil-Structure Interaction Model Test Facility"; December 11, 1988.

881191; B.B. Ward; NSF; "CH4 Oxidation by Marine Nitrifying Bacteria"; December 11, 1987.

881192; O. Holm-Hansen; NSF; "Bio-Optics and Photobiology in Lake Tahoe"; December 9, 1987.

881193; G. Sugihara; NSF; "A Critical Reexamination of Food Web Patterns in Real Ecosystems"; December 16, 1987.

881195; H.T. Hammel; NASA; "To Measure Facilitated Diffusion of O2 by HbS and HbA in Hemoglobin Solutions"; December 16, 1987.

881196; M. Goodman, R.J. Seymour, J. Talbot; NSF; "Studies of Structural Degradation Associated with the Interfaces in Fiber-Resin Composites Exposed to Seawater"; n.d.

881197; R.E. Davis; NSF; "ARS Facility: Management of Operation"; December 17, 1987.

881198; G.G. Shor; NWU; "Research Support for Cruise: Batiza"; December 18, 1987.

881199; R.E. Davis; WHOI; "Reliable Marine Anemometry"; December 21, 1987.

881200; P.S. Doyle, W.R. Riedel; NSF; "Interpretation of Microscopic Fish Skeletal Debris in Cenozoic Pelagic Sediments"; December 23, 1987.

881201; A.G. Dickson, J.H. Weare; LLNL; "Development of Models for Use in the Assessment of Waste Repository Performance"; December 28, 1987.

881203; R. Austin; ONR; "MERT Calibration and Characterization"; January 14, 1988.

881204; L. McFadden; NASA; "Asteroids and Comets: Global Analysis Based on IR Astronomical Satellite and Existing Ground-Based Data"; December 30, 1987.

881205; J.A. Orcutt; AFOSR; "Symposium on Mathematical Geophysics, Blanes (Costa Brava), Spain"; January 14, 1988.

881206; J.A. Orcutt; ONR; "Symposium on Mathematical Geophysics, Blanes (Costa Brava), Spain"; January 14, 1988.

881207; J.A. Orcutt; DOE; "Symposium on Mathematical Geophysics, Blanes (Costa Brava), Spain"; January 14, 1988.

881209; H. Craig; DOE; "Long Valley Caldera: Monitoring Studies of Gas Composition and He, Ar, and C Isotopes"; January 25, 1988.

881210; A.H. Olsen; UNR; "IGPP-UCSD Participation in the W Center for Seismic Hazard Studies"; December 30, 1987.

881211; J.G. Anderson, J.E. Luco; NSF; "Initial Study of the Mexicali Hospital Damaged in the November 24, 1987, Superstition Hills Earthquake"; January 4, 1988.

881212; J. Simpson; NASA; "Support of Satellite Oceanography Experiments"; January 4, 1988.

881213; R. Pinkel; WHOI; "Surface Mooring ST Center"; January 5, 1988.

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881214; J.L. Bada; ACS; "A Dedicated 2-Step LMS for Organic Geochemical Investigations"; January 7, 1988.

881215; N.A. Bray, C.D. Winant; WHOI; "Coastal Mooring Technology"; January 5, 1988.

881216; R.L. Fisher; BU; "Shipboard Participation and Data Reduction in Bathymetric Exploration and Rock Sampling (by Dredge) in the Tonga Trench"; n.d.

881217; S.A. Jenkins; NSF; "Entropy-Pressure Effects in Dense Suspensions of Fine Sediments"; January 6, 1988.

881218; E.D. Goldberg; NSF; "Comparative Marine Chemistries of Rhenium, Platinum Group Metals and Their Periodic Table Neighbors"; January 10, 1988.

881219; O. Holm-Hansen, B.G. Mitchell, M. Vernet; NSF; "UV Radiation in Antarctic H2O: Dynamic Response of Phytoplankton and Attenuation by Pigments"; January 13, 1988.

881220; C.H. Gibson, W.H. Thomas; NSF; "Effects of Small-Scale Turbulence and Shear on Marine Dinoflagellates: A Pilot Study"; January 22, 1988.

881222; F.N. Spiess; NSF; "Seafloor Research Technology Development Center"; n.d.

881226; R.A. Lewin; UERG; "Genetic Improvement of the Petrol Yielding Alga, Botryococcus"; January 14, 1988.

881227; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Studies of Volcanic Rocks and Xenoliths as Probes of the Earth's Mantle"; January 11, 1988.

881229; J.F. Gilbert; NSF; "The Center for Computational Geophysics"; January 11, 1988.

881230: J.J. Sullivan; NOAA; "Selection Sites for Bivalve Bioindicator Monitoring Program"; January 12, 1988.

881231: C. Constable, L. Tauxe; NSF; "Paleointensity of the Geomagnetic Field: The Last « Million Years"; January 25, 1988.

881233: B.B. Ward; NSF; "NO₂- Reduction and Denitrification: Probes for Denitrifying Bacterial Activity"; January 14, 1988.

881234: A.J. Kalmijn; NSF; "The Function of the Inner Ear in the Hydrodynamic Near Field"; January 14, 1988.

881235: M. Abbott; CIT; "Studies of Ocean Productivity"; January 15, 1988.

881236: J. Berger, T.G. Masters; USGS; "Earthquake Prediction Research in the Anza-Coyote Canyon Seismic Gap"; January 21, 1988.

881237: D.C. Agnew, M. Zumberge; USGS; "An Absolute Long-Base Tiltmeter with Vertical Anchoring"; January 22, 1988.

881238: J.W. Miles; NSF; "Geophysical Fluid Dynamics"; January 21, 1988.

881239: C.P. de Moustier; NSF; "Improvements in the Processing of Ships Navigation"; n.d.

881240: J.H. Filloux; NSF; "EMRIDGE: EM Investigation of a Mid-Oceanic Ridge"; January 28, 1988.

881241: G.N. Somero; NSF; "Adaptive Plasticity of Fish Locomotory Muscle"; January 20, 1988.

881244: J.M. Gieskes, M. Kastner; NSF; "Observations and Experiments on Hydrothermal Reactions between Hemipelagic Sediments and Seawater"; January 22, 1988.

881245: N.A. Bray, R.T. Guza, G.A. Jackson, M.M. Mullin, C.D. Winant; NSF; "Planning Proposal for a Coastal Research Center"; January 21, 1988.

881246: N.D. Holland; NSF; "Effects of Current on Feeding, Resource Partitioning and Habitat Selection in Feather Stars (Echinodermata: Crinoidea)"; January 22, 1988.

881247: J.B. Graham; NSF; "Final Completion of a H₂O-Tunnel Respirometer for the Study of Pelagic Marine Fishes"; January 20, 1988.

881248: J.M. Gieskes; NSF; "Interstitial H₂O Studies of Hydrothermal Sediments Guaymas Basin and Gorda Ridge"; January 25, 1988.

881249: D.R. Cayan; UCR; "The Influence of Climate Variations on Long Period Fluctuations in CA Streamflow"; January 28, 1988.

881250: S.C. Webb; NSF; "A Transient EM System for Seafloor Geologic Mapping"; January 27, 1988.

881251: R.A. Knox, P.P. Niiler; NSF; "Lagrangian Dynamics and Thermodynamics of Cold H₂O Filaments in Tropical Instability Waves"; January 29, 1988.

881252: D.J. Faulkner; DOHHS; "Antitumor Antibiotic from Marine Invertebrates"; January 26, 1988.

881255: M. Vernet; NSF; "An Unusual Chlorophyll-a Derivative in Tropical Phytoplankton: Artifact or Real?"; January 28, 1988.

881256: H. Staudigel; NSF; "Magellan Seamount: A Geological Record of the S Pacific Isotopic and Thermal Anomaly"; February 5, 1988.

881257: D.C. Agnew, J.A. Orcutt, H. Staudigel; NSF; "Development and Testing of a Submarine Tiltmeter for Deformation Measurements at Mid-Ocean Ridges"; January 28, 1988.

881258: A. Soutar, S.A. Tont; NSF; "High Resolution Phytoplankton Record Comparisons in the S CA Bight- H₂O Column and Sediments"; February 1, 1988.

881259: J.B. Graham, G.L. Kooyman; NSF; "A Planning Grant for 'A Center for the Study of the Energetics of Flow in Aquatic Organisms and Biomaterials Technology'"; January 25, 1988.

881260: R.A. Knox, J.A. McGowan; NSF; "A Multidisciplinary Station for Time Series Observation of Oceanic Ecosystems (A ST Research Center Planning Grant)"; January 29, 1988.

881261: J.R. Curry; NSF; "The Continental Margins and Tectonics of Sri Lanka"; February 11, 1988.

881263: T. Nogami; NSF; "Nonlinear 3-D Subgrade Model for Dynamic Response Analysis of Surface Foundations"; February 4, 1988.

881264: M.M. Mullin; NSF; "Center for Technological Improvements for Plankton Ecology (An S&T Center Planning Grant)"; January 28, 1988.

881265: M.D. Ohman; NSF; "An Immunological Method for the Study of Predation on Marine Microzooplankton"; January 29, 1988.

881266: J.A. McGowan; NSF; "Pelagic Bird Assemblages in the CA Current"; January 29, 1988.

881269: O. Holm-Hansen, B.G. Mitchell; NASA; "Analysis of Data from a 6-Month Bio-Optical Mooring"; January 28, 1988.

881270: A.J. Kalmijn; ONR; "Processing of Electric and Hydrodynamic Sensory Data"; January 29, 1988.

881272; M. Huntley, M. Vernet; NSF; "Fate of Chlorophyll-a during Zooplankton Gut Passage"; January 27, 1988.

881273; J.A. Orcutt; NSF; "Seismicity and Structure of the Galapagos Propagating Rift"; February 1, 1988.

881275; P.F. Lonsdale; NSF; "Structure and Composition of Fast-Spread Oceanic Crust: A Collaborative Study to Complement ODP Drilling"; February 5, 1988.

881276; P.K. Dayton, M.J. Tegner; NSF; "Patterns of Disturbance, Reproductive Effort, and Succession across a Depth Gradient in a S CA Kelp Forest Community"; February 5, 1988.

881277; A.J. Kalmijn; WF; "An Advanced Course in Sensory Biophysics for Educators and Scientists"; February 23, 1988.

881279; J.H. Filloux, P. Niiler; NASA; "Ocean Storms Array: Bottom Pressure"; February 5, 1988.

881281; D. Lal; NSF; "Dynamics of P in the Upper Ocean: Application of Cosmogenic ³²P and ³³P as Tracers"; February 10, 1988.

881282; J.H. Swift; NSF; "An Integrated Seawater Profiling and Sampling System: Volume I"; February 1988.

881282; J.H. Swift; NSF; "An Integrated Seawater Profiling and Sampling System: Volume II"; February 1988.

881282R; J.H. Swift; NSF; "An Integrated Seawater Profiling and Sampling System"; August 3, 1988.

881283; G. Backus, R.L. Parker; NASA; "Constructing Core Fields Consistent with Geomagnetic and Geophysical Constraints"; February 9, 1988.

881288; P.P. Niiler; NSF; "Measurement of Large- Scale Upper Ocean Thermal Fields and Heat Budget in the Tropical Pacific"; February 12, 1988.

881289; B. Cornuelle, D.H. Roemmich; NSF; "Time Variability of the Hydrography and Circulation of a Subtropical Gyre"; February 18, 1988.

881290; M.E. Huntley; NSF; "RACER: Feeding, Growth, and Early Development of Antarctic Krill, *Euphausia superba* Dana"; n.d.

881291; M.M. Mullin; NSF; "Lab and Field Equipment for Marine Ecology at SIO"; February 12, 1988.

881292; R.L. Salmon; NSF; "Ocean Circulation Based on Hamiltonian Methods"; February 20, 1988

881294; V.C. Anderson, F.H. Fisher; TASI; "Acoustic Measurement Systems Development and Support"; February 17, 1988.

881295; R.W. Austin, C.C. Trees; NOSC; "Bio-Optical Provinces, Their Characterization, Similarities and Differences"; March 11, 1988.

881296; C.C. Trees, K.J. Voss; NSF; "Application of DOAS in Phytoplankton Absorption and Production Measurements"; March 5, 1988.

881298; J.H. Swift; NSF; "CTD/Hydrographic Support for the GOFS N Atlantic Spring Bloom Experiment"; February 18, 1988.

881299; P.F. Lonsdale; ONR; "NE Pacific Plate Fabric"; February 17, 1988.

881300; D.P. Rogers; NSF; "Transport of Mass, Momentum, Heat, and Moisture in a Convective Cloud Field"; February 18, 1988.

881302; K.M. Watson; ONR; "DOLPHIN WAIS Increased Scope"; March 1, 1988.

881303; R.W. Johnson; ONR; "E/O SYS5 Camera Spare Parts"; March 2, 1988.

881304; J.D. Macdougall; NSF; "Isotopic and Chemical Studies of Mafic Rocks from India"; February 23, 1988.

881305; J.W. Hawkins, P.F. Lonsdale; NSF; "Axial Volcanism in the Mariana Trough Back-Arc Basin"; February 23, 1988.

881306; O. Holm-Hansen; NSF; "Pilot Investigation for RACER: Photobiology and Primary Production"; February 10, 1988.

881307; L.M. Dorman; NORDA; "SIO Participation in FIXFIX Experiment"; March 2, 1988.

881309; R.E. Davis; ONR; "The Meteorological Towers for Ocean Storms"; February 25, 1988.

881311R1; L.L. Cheng, R.A. Lewin; ONR; "Physiological Ecology of Marine Picoplankton Algae"; April 26, 1988.

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881312; G.A. Jackson, G.G. Shor; DOE; "Research Ship Support for Studies in the SCCZ"; March 2, 1988.

881313; R.E. Davis; ONR; "Upper Ocean Dynamics: Recovery of Ocean Storms Instruments"; March 1, 1988.

881314; B.G. Mitchell; ONR; "Bio-Optical Studies in Support of the CEAREX"; March 2, 1988.

881316; G.D.F. Wilson; NSF; "The Systematics of the Deep-Sea Asellote Isopods (Crustacea, Superfamily Janiroidea)"; March 3, 1988.

881317; C. Gautier; NASA; "The Investigation of the Surface Radiation Budget from Satellite Observations"; March 7, 1988.

881318; R.E. Davis, P.P. Niiler; ONR; "Acoustic Doppler Profiler Operation on R/V Thomas Washington in CTZ"; March 2, 1988.

881319; G.G. Shor; ONR; "Ship Support for Dr. M. Lilley"; March 7, 1988.

881320; K.M. Watson; ONR; "Unmanned Underwater Vehicle Technology"; March 17, 1988.

881321; G. Sugihara; ONR; "A Fractal Study of Ocean Color Patterns in the CA Current during the 1982-83 ENSO"; March 8, 1988.

881322; G. Sugihara; ONR; "A Fractal Study of Ocean Color Patterns in the CA Current during the 1982-83 ENSO"; March 8, 1988.

881323; H. Staudigel; NGS; "Magnetic Properties of Seamount Interiors: The La Palma Seamount Series"; March 8, 1988.

881324; W.B. White; NSF; "Global Upper Ocean Thermal Analyses for the WOCE"; April 11, 1988.

881325; C. Gautier; NASA; "The Development of a Prototype Software System for Education and Research on the Earth's Atmosphere and Surface"; March 9, 1988.

881327; D.P. Rogers; ONR; "Cloud-Subcloud Layer Interactions in the Marine Boundary Layer and Their Affect on Surface Stress"; March 10, 1988.

881328; J.L. Bada; CSI; "A Dedicated 2-Step LMS System for Organic Cosmogeochimistry"; March 22, 1988.

881330; A.A. Benson, F.I. Tsuji; NSF; "Biochemical Studies of Bioluminescence"; March 15, 1988.

881333; E.D. Goldberg; UNLV; "Evaluation of Osmium Analytical Methods"; March 18, 1988.

881336; M. Tarokh; CSI; "Adaptive Control of Head Position in Computer Disk Files"; March 21, 1988.

881337; J.H. Filloux; UW; "EM Study of Litho- and Asthenosphere Beneath the Juan de Fuca Plate: SIO's SFMT Participation"; March 24, 1988.

881338; P.K. Dayton, M.J. Tegner; NSF; "Patterns of Disturbance, Reproductive Effort, and Succession across a Depth Gradient in a S CA Kelp Forest Community"; March 22, 1988.

881339; W.R. Riedel, A. Sanfilippo; NSF; "Stratigraphy and Taxonomy of Cenozoic Radiolaria"; March 24, 1988.

881340; D.P. Rogers; CSI; "Cloud Processes over the E Pacific Ocean"; March 25, 1988.

881341; T.P. Barnett; NSF; "Studies of Global Climate Dynamics and Predictability"; March 25, 1988.

881343; D.W. Lingner; CSI; "Modeling and Remote Sensing of Downwelling Irradiance at the Ocean Surface"; March 25, 1988.

881346; R. Frouin; CSI; "Net Surface Solar Irradiance over the Global Oceans from NIMBUS-7 ERBE Data"; March 28, 1988.

881348; A.A. Yayanos; ONR; "Support for a Culture Collection of Deep-Sea Barophilic Bacteria"; March 29, 1988.

881349; G.G. Shor; ONR; "Continuation of the Marine Assistance Program"; April 13, 1988.

881351; J.A. Orcutt; JHU; "Modification to Proposal to APL for Instrument Construction and Modification, Field Testing and Analysis Program for Year 2"; July 28, 1988.

881352; W.H. Berger, R.S. Keir; EPRI; "Interaction of the Global C and Climate Systems Conference"; April 12, 1988.

881353; V.C. Anderson, R.J. Seymour, G.D.F. Wilson; NOAA; "Mn Nodule Mining Impact Investigations"; June 9, 1988.

881353R1; V.C. Anderson, R.J. Seymour, G.D.F. Wilson; NOAA; "Mn Nodule Mining Impact Investigations: Volume I"; August 23, 1988.

881353R1; V.C. Anderson, R.J. Seymour, G.D.F. Wilson; NOAA; "Mn Nodule Mining Impact Investigations: Volume II"; August 23, 1988.

881353R2; V.C. Anderson, R.J. Seymour, G.D.F. Wilson; NOAA; "Mn Nodule Mining Impact Investigations"; November 18, 1988.

881356; J.R. Arnold, D. Lal, K. Nishiizumi; IGPP/LLNL; "Application of Earth Science Problems Using the New AMS LLNL"; April 7, 1988.

881358; R.L. Salmon; NSF; "Ocean Circulation Based on Hamiltonian Methods"; April 11, 1988.

881360; F.H. Fisher, K.M. Watson; USNRL; "Program in Marine Physics Applied to USN Undersea Missions"; n.d.

881362; F.H. Fisher, K.M. Watson; ONR; "Continuation of the Interdisciplinary Research Program at MPL"; July 29, 1988.

881363; C. de Moustier; ONR; "Investigation of 12 kHz Deep Scattering Layers Using SeaBeam"; March 17, 1988.

881364; R.W. Johnson; ONR; "E/O SYS5 Data Processing Support"; April 15, 1988.

881365; J.A. Orcutt; AFGL; "Propagation of Regional Phases: Observations and Theory"; April 12, 1988.

881366; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; April 11, 1988.

881368; W.B. White; NSF; "Improved Dynamical Understanding and Operational Forecasting of the ENSO Cycle with Coupled Tropical Ocean/Atmosphere Models"; April 15, 1988.

881369; B. Cornuelle, D. Roemmich; NSF; "WOCE: Observations of the Seasonal Upper-Ocean Thermal Structure between HI and NZ from a Merchant Ship"; April 20, 1988.

881370; F.N. Spiess; JHU; "Development and Testing of a Drill Hole Instrument Placement System"; May 20, 1988.

881373; R.J. Seymour; NSF; "Undergraduate Student Support for Research on Hot-Drawn Fiber-Reinforced Thermoplastic Wire"; April 19, 1988.

881374; T. Barnett, J. Namias, J. Roads, R. Somerville; NOAA; "The Experimental Climate Forecast Center at SIO"; April 22, 1988.

881375; C. Tai, W.B. White; NSF; "Investigation into the Dynamics of the 1986-87 ENSO Using Geosat Altimetric Sea Level and In Situ Dynamic Height in Conjunction with Numerical Modeling"; April 22, 1988.

881376; W.S. Hodgkiss; ONR; "ACSAS Expanded Capacity Recording System and Experiment Support"; April 20, 1988.

881377; R.H. Stewart; ONR; "Remotely Sensed Data and the Calculation of Upper-Ocean Thermal Structure"; April 29, 1988.

881378; R.F. Weiss; NSF; "Trace Gases in the Ocean and Atmosphere"; April 25, 1988.

881380; M.C. Hendershott, D.S. Luther, A.J. Miller; NSF; "Observations and Theory of Barotropic Planetary-Topographic Oscillations"; April 22, 1988.

881381; K.M. Watson; ONR; "DOLPHIN WAIS Cameras"; April 29, 1988.

881382; F.N. Spiess; CIT; "Continuation of Investigation of the Ocean Benchmarks for the GRPS"; May 6, 1988.

881383; R.E. Davis; NSF; "McMurdo Sound MetSat Station: Upgrade, Maintenance, and ARC"; May 6, 1988.

881384; R.W. Eppley; NSF; "Phytoplankton Studies: NO₃- Transport, New Production and the Sinking Flux of Biogenic Particles"; May 25, 1988.

881386; A. Harding, J.A. Orcutt; NSF; "Seismic Investigation of the S EPR"; May 23, 1988.

881388; W.B. White; INO; "SIO/INO Analysis and Model Verification Center"; May 4, 1988.

881389; J. Namias; NSF; "Climate Variability Studies over the N Hemisphere"; May 18, 1988.

881390; C.S. Cox, S. Webb; NSF; "Measurements of Deformation at the Cascadia Subduction Zone: Is the Thrust Locked or Steadily Slipping?"; May 24, 1988.

881391; W.R. Riedel; NSF; "Marine Geological Sample Collections: SIO"; May 12, 1988.

881393; D.L. Inman; ONR; "Fluid-Granular Boundary Layer in and near the Surf Zone"; n.d.

881394; K.L. Smith; NSF; "Pelagic/Benthic Coupling and Cycling of the C in the Deep-Sea: Development of Acoustic Monitoring Techniques"; May 6, 1988.

881395; R.E. Flick; ONR; "Nearshore Turbulence"; n.d.

881396; J.B. Minster; NASA; "Supplemental Funds to Attend the Workshop, 'The Interdisciplinary Role of Space Geodesy', and the Crustal Dynamic Investigators Meeting"; May 10, 1988.

881398; J.L. Bada; ONR; "A Dedicated 2-Step LMS System for Marine Chemistry"; May 13, 1988.

881399; H.D.I. Abarbanel; NSF; "Phase Space Density Representation of Inhomogeneous Flows"; May 18, 1988.

881400; J. Namias; OWR; "CA Precipitation Forecast Research"; May 16, 1988.

881401; C.E. Reimers; NSF; "Collaborative Project: Chemical Fluxes from the Deep-Sea Floor beneath the CA Current Response to Seasonal Biogenic Supply and Pore Fluid Venting"; May 26, 1988.

881402; J. Mammerickx; NSF; "Tectonic History of the SW Pacific: A Synthesis of Bathymetric, Magnetic, and Other Geophysical Data"; May 17, 1988.

881403; J.A. Orcutt; NSF; "Mantle Control of a Dynamically Evolving Spreading Center"; June 2, 1988.

881404; K.L. Smith; ONR; "Active Trophic Coupling between Pelagic and Benthic Communities over Seamounts"; n.d.

881405; A.J. Spivack, H. Staudigel; NSF; "⁸⁷Sr/⁸⁶Sr and ¹¹B in the Solea Graben Upflow Zone: Implications for the Reaction Zone of Black Smokers"; May 26, 1988.

881406: J.L. Bada; NSF; "A Dedicated 2-Step LMS and its Use in Investigations of the Aromatic Compounds in Various Geochemical Samples"; May 24, 1988.

881407: J.M. Gieskes, J.W. Hawkins, G.W. Lugmair, J.D. Macdougall, K. Nishiizumi; NSF; "Acquisition of ICPMS"; May 18, 1988.

881409: W.H. Berger; NSF; "CO2 Controls: Pleistocene CO2- Saturation Fluctuations in the W Equatorial Pacific"; May 23, 1988.

881411: J.F. Gilbert, T.G. Masters; NSF; "Large Scale Aspherical Earth Structure"; May 20, 1988.

881412: K.L. Smith; ONR; "Effects on Flow on Hard- Substrate Benthic Communities Associated with Seamounts"; May 17, 1988.

881413: G.D.F. Wilson; NSF; "Comparative and Evolutionary Morphology of Isopod Crustacean Genitalia"; June 16, 1988.

881414: G.D.F. Wilson; NSF; "Macrobenthic Community Structure in an Abyssal Mn Nodule Environment"; May 27, 1988.

881416: H. Craig; NASA; "C Isotopes in Polar Ice Core CH4"; June 10, 1988.

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881417: L.R. Haury; ONR; "Towed Instrumentation in Support of Seamount Oceanography"; May 20, 1988.

881418: L.M. Dorman, J.A. Hildebrand; NSF; "Seamount Tomography Using OBS"; May 26, 1988.

881419: J.B. Graham; NSF; "Tracking and Shipboard Studies of Albacore Tuna, Thunnus alalunga"; May 19, 1988.

881420: J.H. Natland; NSF; "Collaborative Project: Integrated Studies of Layer 3, SW Indian Ridge"; May 26, 1988.

881421: W.H. Berger; NSF; "GOFS-Related Studies: A Productivity Data Base"; May 23, 1988.

881422: J.M. Gieskes; NSF; "Hydrogeochemical Studies in the Barbados Subduction Zone: Influence of Volcanic Matter Alteration and of Crustal Dewatering on the Interstitial H2O Chemistry"; May 25, 1988.

881423: M.M. Mullin; NSF; "Acoustic Assessment of Nearshore Zooplanktonic Patches Relative to Environmental Properties, Using a Doppler Current Profiler A Pilot Study"; May 25, 1988.

881424: A.F. Carlucci; NSF; "The Role of Microbial Populations in the Transformation and Flux of Organic Matter in CA Borderland Benthic Boundary Layer Environments"; May 26, 1988.

881425: D.C. Agnew, M.A. Zumberge; NSF; "Continuous Crustal Deformation Measurement: Data Analysis and Instrument Deployment"; May 24, 1988.

881426: G.G. Shor; ONR; "SeaMarc with SeaBeam for Reverberation and Charting Studies"; May 26, 1988.

881429: H. Craig; NSF; "Submersible Studies on the Easter Microplate: Hydrothermal Vents in Hotspot and MORB Spreading Centers"; May 26, 1988.

881431: C.D. Keeling; NSF; "A Study of the Abundance and 13C/12C Ratio of Atmospheric CO2 and Oceanic C in Relation to the Global C Cycle"; May 31, 1988.

881432: V.C. Anderson; ONR; "Effects of Monomolecular Films on the Ocean Surface"; May 27, 1988.

881433: C.K. Paul, F.N. Spiess; NSF; "Atlantic Salt Domes and CO2- Escarpments: Geomorphology, Geochemical Processes, and Geological Consequences"; May 24, 1988.

881434: W.H. Fenical; NSF; "The Ecology of Seaweed Chemical Defenses"; May 27, 1988.

881435: R.C. Smith; NSF; "A Model for the Assessment of UV Radiation in Antarctic H2O"; May 25, 1988.

881436: W.S. Hodgkiss; ONR; "An Ocean Acoustic Modeling Facility"; May 27, 1988.

881437: V.C. Anderson; ONR; "Upgrading of the R/P Orb"; May 27, 1988.

881438: V.C. Anderson; ONR; "Bragg Wave Generator Development"; n.d.

881439: J.A. Orcutt; NSF; "Experimental and Theoretical OBS Studies"; May 25, 1988.

881440: C.S. Cox; NSF; "Stable Pressure Sensor"; May 31, 1988.

881441: O. Holm-Hansen, B.G. Mitchell, M. Vernet; NSF; "RACER: Mechanisms of Bloom Formation and Decline"; June 5, 1988.

881442: N.A. Bray, C.D. Winant; NSF; "Upwelling Variability and Marine Layer Forcing off N CA"; May 26, 1988.

881444: J. Berger, W.E. Farrell, J.A. Orcutt; ONR; "Acquisition of an ULF, Broadband OBS"; May 26, 1988.

881445: A.J. Spivack; NSF; "Acquisition of a TIMS"; May 26, 1988.

881446: G.G. Shor; NSF; "Development of Deep Trawl Capability on R/V Melville"; May 26, 1988.

881447: A.J. Spivack; NSF; "B Isotope Exchange between Seawater and the Oceanic Crust"; June 9, 1988.

881448; M.D. Ohman; NSF; "Vertical Variability of Zooplankton Lipids"; May 27, 1988.

881449; E. Brinton, J.A. McGowan; NSF; "Specific Structure of Zooplankton Communities in the CA Current during a Year of Near-Average Environmental Conditions"; May 27, 1988.

881451; J.L. Hakanson; NSF; "Condition of Anchovy Larvae in Relation to an Index of Microcopepod Egg Production"; May 26, 1988.

881453; F.N. Spiess; NSF; "Engineering Study of Televiewer Possibilities for a Deep-Sea Wireline Re-Entry Probe"; May 31, 1988.

881454; H. Craig; NSF; "He, Ne, Ar, CO₂, and N₂: Isotopic Systematics in Continental and Hotspot Volcanism"; May 31, 1988.

881455; P.F. Lonsdale; NSF; "Collaborative Project: Structural Geomorphology of the Pacific-Antarctic EPR"; June 6, 1988.

881456; L.M. Dorman, J.A. Hildebrand; NSF; "Relations of Magma Chamber Characteristics and Processes with Shallow Crustal Structure, MORB Chemistry and Hydrothermal Processes: EPR Axis at 90°3'N"; June 1, 1988.

881457; A.D. Chave, J.H. Filloux; NSF; "Seafloor MT Investigation of Hotspot and Swell of TEAHITIA (Jointly with French MAGELLAN Program)"; June 3, 1988.

881458; A.D. Chave, J.H. Filloux; NSF; "Observation of the Variability and Transport of the Boundary Current E of the Bahamas"; June 3, 1988.

881459; D.S. Luther; NSF; "Energetics and Fluxes of Near-Surface Currents in the Central Equatorial Pacific from Analyses of ADCP and CTD Sections"; June 3, 1988.

881460; J.R. Arnold; NASA; "Orbital Gamma Ray Experiment for Planetary Observer Missions"; n.d.

881462; E. Brinton, M.E. Huntley, P.P. Niiler; NSF; "RACER: Development, Growth, and Production of Macrozooplankton, Including Krill"; May 31, 1988.

881463; A.D. Chave, J.H. Filloux; NOAA; "Observation of the Variability and Transport of the Boundary Current E of the Bahamas"; June 2, 1988.

881464; J.J. Simpson; NASA; "Interim Support of SIO Satellite Oceanography Facility"; May 26, 1988.

881468; R.F. Weiss; NSF; "Lake Baikal Project Supplement to Existing Dissolved Gaseous Tracers in SAVE: ClFICH₄"; June 7, 1988.

881469; L. Cheng, R.A. Lewin; DOE; "Regulation of Exponential Lipid and Hydrocarbon Production in Plants"; June 6, 1988.

881470; R.W. Johnson; ONR; "E/O SYS5 Camera, Hardware Implementation and Preliminary Software Modification"; June 14, 1988.

881471; R.W. Johnson; ONR "E/O SYS5 Field Unit #7"; June 14, 1988.

881473; C.H. Gautier, R.C.J. Somerville; NASA; "The Coupled Air-Sea SW Monsoon System: Energy and Moisture in Motion"; June 27, 1988.

881474; K.M. Watson; ONR; "Evaluation of Acoustic and Optical Sensor Systems; Augmentation to"; July 8, 1988.

881475; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Studies of Volcanic Rocks and Xenoliths as Probes of the Earth's Mantle"; June 16, 1988.

881476; J.R. Arnold; NASA; "Evaluation of ADA Technology for Implementing Knowledge Base Systems in the FTS"; n.d.

881477; R.T. Guza; DBW; "Dynamics of Small Bays at Mission Bay Harbor"; n.d.

881479; G. Sugihara; NSF; "Comparison and Integration of Community Modeling Methods: A Collaborative Proposal"; June 17, 1988.

881480; J.F. Gilbert, J.A. Orcutt; NSF; "Constrained Optimal Solutions in Seismic Imaging"; June 17, 1988.

881481; D. Lal; NSF; "Acquisition of an IGCW Crystal Detector for Studies of ⁷Be and ²³⁴Th in Surface Ocean H₂O"; June 17, 1988.

881482; R.W. Eppley; NASA; "Assessing Ocean Productivity from Satellite Measurements"; June 30, 1988.

881483; B.G. Mitchell; ONR; "Bio-Optical Studies in Support of the CEAREX"; June 20, 1988.

881484; C. Gautier, R.C.J. Somerville; NASA; "Air-Sea Interactions and the Indian Monsoon: Satellite and Modeling Studies"; June 24, 1988.

881485; R.C. Smith; NASA; "Bio-Optics, Photoecology and Remote Sensing"; June 1988.

881486; C.H. Gautier; NASA; "Application of Altimetry Measurements to Studies of the Low Frequency Variations of the Upper Ocean Heat Content and Transport in the Tropical Pacific"; June 24, 1988.

881487; C.H. Gautier; NASA; "AIRS: Calibration and Ocean Surface Radiation Budget Computations"; June 24, 1988.

881489; B. Jahnke; NSF; "Parameterization and Remote Sensing of Air-Sea Gas Exchange"; July 5, 1988.

881490; G.L. Kooyman; NSF; "Diving Behavior and Physiology of the Leatherback Sea Turtle"; June 28, 1988.

881492; H. Craig; NSF; "Deep Ocean Tracers and Hydrothermal Vents"; August 5, 1988.

881494; B. Jahnke; NSF; "Mechanisms of Air-Sea Gas Exchange"; July 5, 1988.

881495; C.D. Keeling; ORNL; "A Study of the Abundance and $^{13}\text{C}/^{12}\text{C}$ Ratio of Atmospheric CO_2 and Oceanic C in Relation to the Global C Cycle"; July 11, 1988.

881497; P.M. Williams; DOE; "Sources and Composition of Organic Materials in H_2O and Sediments of the SCCZ"; July 13, 1988.

881498; R.J. Seymour; WES; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; June 29, 1988.

891000; W.S. Hodgkiss; ONR; "ACSAS Program Support"; July 1, 1988.

891001; K.M. Watson; ONR; "NOSC Optical Propagation Experiment"; July 12, 1988.

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891002; A.A. Yayanos; NSF; "Characterization and Ecology of Deep-Sea Barophilic Bacteria"; July 6, 1988.

891003; R.C.J. Somerville; NSF; "Cloud-Radiation Feedbacks in Climate Modeling"; July 7, 1988.

891004; F. Azam, A.F. Carlucci; DOE; "Role of Bacteria in Organic Matter Fluxes in the SCCZ"; July 12, 1988.

891005; G.A. Jackson; DOE; "A Proposal to Measure the Density and Nutrient Fields at Openings to a Marine Basin and to Model the Fluxes within the Basin"; July 11, 1988.

891006; S.A. Jenkins; ONR; "Internal Reflection Due to Boundary Rectification"; n.d.

891007; K.M. Watson; ONR; "R/P Orb Thruster Fabrication"; July 12, 1988.

891009; W.L. Stockton; NSF; "Growth, Predation, and Mortality in Antarctic Foraminifera: Effects on Community Structure"; July 12, 1988.

891010; G.W. Lugmair; NASA; "Isotopic, Chemical and Mineralogical Investigations of Extraterrestrial Materials"; July 20, 1988.

891011; P.M. Williams; ONR; "Studies of the Physical and Chemical Stability of Natural Sea-Surface Films"; July 22, 1988.

891012; D.R. Hilton; NGS; "He, Ar, and CH_4 Studies: The Sunda-Banda Arc, Indonesia"; July 19, 1988.

891013; C.D. Keeling; NSF; "A Study of the Abundance and $^{13}\text{C}/^{12}\text{C}$ Ratio of C in the Atmosphere and Oceans in Relation to the Global C Cycle"; July 19, 1988.

891014; F. Azam; ONR; "The Contribution by Marine Bacteria to the Absorption and Scattering of Light in the Open Ocean"; July 20, 1988.

891015; T. Nogami; NSF; "Nonlinear 3-D Subgrade Model for Dynamic Response Analysis of Surface Foundations"; July 28, 1988.

891016; R. Revelle; NSF; "Support of a Scientific Secretary for the SCOR/IOC CCCO"; July 25, 1988.

891017; V.C. Anderson; ONR; "A Program in CM/CCM"; July 25, 1988.

891019; M. Tarokh; NASA; "Force Control of Robot Manipulator: Discrete-Time Adaptive Control Approach"; July 28, 1988.

891020; D.C. Agnew, J. Berger, T.G. Masters, J.A. Orcutt; IRIS; "Development of an Interim IRIS/IDA Data Collection Center"; July 28, 1988.

891021; L. McFadden; NASA; "Relations between Meteorites and Solar System Bodies: Lab Spectral Reflectance Studies"; July 29, 1988.

891022; N.E. Graham, C. Tai, W.B. White; NSF; "Verification and Improvement of the GFDL Global OGCM by Scientific Comparison with Upper Ocean In Situ and Remotely-Sensed Observations in the Tropical Global Ocean"; August 1, 1988.

891023; L. McFadden; NASA; "Relations between Asteroids and Comets: Ground Based Spectral Reflectance Studies"; July 31, 1988.

Active Contracts and Grants; August 1988.

891023R1; L. McFadden; NASA; "Relations Between Asteroids and Comets: Ground Based Spectral Reflectance Studies"; November 8, 1988.

891024; J.A. Orcutt; NSF; "Seismicity and Structure of the Galapagos Propagating Rift: Replacement of an OBS"; August 1, 1988.

891026; R.J. Seymour; WES; "Wind and Wave Measurement in Barbers Pt. Harbor, HI"; August 1, 1988.

891027; M.M. Mullin; NSF; "Spatial and Temporal Variation in Egg Production and Herbivory of Copepod Species off S CA"; August 30, 1988.

891028; M.G. Haygood; ONR; "Flashlight Fish Symbiosis"; August 2, 1988.

891029; A.F. Carlucci; ONR; "Microbiological Alteration of Marine Surface Microlayers: Possible Effects on Remote Sensing Measurements"; August 11, 1988.

891030; P.F. Lonsdale; ONR; "Fieberling Guyot Studies"; n.d.

891031; K.M. Watson; ONR; "Generation of Soliton- Like Features in the Wake of a Surface Ship"; n.d.

891032; J.A. Smith; ONR; "Interaction of Surface Waves and Near-Surface Currents"; August 5, 1988.

891033; W.S. Hodgkiss; ONR; "Coherence of Transients"; n.d.

891035; B.E. Volcani; ONR; "Diatom Plasmids: Molecular Biology Studies"; August 4, 1988.

891036; K.L. Smith; ONR; "Active Trophic Coupling between Pelagic and Benthic Communities over Seamounts"; August 5, 1988.

891037; R.J. Seymour; DARPA; "Long-Term Environmental Cracking of Fiber-Reinforced Composite Submarine Hulls: Volume I"; August 4, 1988.

891038; J.S. Gee; SSP; "Magnetostratigraphic and Transition Studies from Leg 121"; August 3, 1988.

891039; R.E. Davis; NSF; "Palmer Station Satellite Imaging Capability"; August 25, 1988.

891040; J.L. Bada; ONR; "Laser Based Analytical Methods for Investigations of Seawater Fluorescence and Oceanic Surface Films"; August 5, 1988.

891041; J.A. Orcutt; ONR; "Modification to Proposal to APL for Instrument Construction and Modification, Field Testing and Analysis Program for Year 2"; August 8, 1988.

891042; L. Tauxe; NSF; "Collaborative Project: Chronostratigraphy of the Eureka Sound Group at Strand Fiord, Axel Heiberg Island, NWT, Canada"; August 25, 1988.

891043; J. Berger; USGS; "Earthquake Experiments in the Anza-Coyote Canyon Seismic Gap"; August 8, 1988.

891045; K.M. Watson; ONR; "R/P Flip and Orb Support, FY89"; August 15, 1988.

891046; K.M. Watson; ONR; "R/P Flip and Orb Support, FY89"; August 15, 1988.

891047; T.L. Hayward; ONR; "Filaments in the CA Current: Effects upon Primary Production"; August 10, 1988.

891048; J.L. Reid; ONR; "WOCE"; August 11, 1988.

891049; K.J. Voss; ONR; "Ocean Optics, A Multi- Faceted Approach"; August 9, 1988.

891051; L. Haury; ONR; "Zooplankton Patterns in Relation of Physical Processes and Behavior"; August 10, 1988.

891052; E.A. Frieman; ONR; "Ocean Studies"; August 11, 1988.

891055; G. Carnevale, R. Salmon; ONR; "Analytic and Numerical Studies of Flow over Ocean Bottom- Topography"; August 19, 1988.

891057; R.W. Johnson; AFSC; "An Imagery Based Day/Night System for Automatic Visibility and Cloud Cover Measurements"; August 18, 1988.

891059; A.J. Kalmijn; ONR; "Hydrodynamic and Acoustic Field Detection"; August 12, 1988.

891060; A.J. Kalmijn; ONR; "Electric and Magnetic Field Detection"; August 12, 1988.

891061; C.E. Reimers, R.J. Seymour; NOSC; "The Design and Construction of a Prototype Sediment H2O Interface Sampling Device"; n.d.

891062; W.R. Riedel; ONR; "Partial Support for Curating Geological Collections"; August 15, 1988.

891063; E.L. Winterer; ONR; "Origin of Mesoscale 'Crossgrain' Relief of E Pacific"; August 15, 1988.

891064; J.A. Orcutt; AFOSR; "Modern Seismic Travel Time Tables and Station Corrections for P and S Waves"; August 16, 1988.

891065; C. Tai, W.B. White; ONR; "Investigating the Dynamics of Mesoscale Eddy Activity in the Kuroshio Extension Using Remotely-Sensed and In Situ Observations Together with an Eddy-Resolving Quasi- Geostrophic Numerical Model"; August 17, 1988.

891066; M.M. Mullin; NOAA; "Support of Coastal Seawater Temperature Measurements"; August 17, 1988.

891067; C.S. Cox; ONR; "EM Survey System"; August 16, 1988.

891068; M. Huntley; ONR; "Zooplankton Grazers as Transformers of Ocean Optics"; August 18, 1988.

891069; P.P. Niiler; ONR; "Analysis of Lagrangian Measurements in CTZ off S CA (as Part of CTZ/ARI)"; August 19, 1988.

891071; F.H. Fisher, J.A. Hildebrand, W.S. Hodgkiss; ONR; "Downslope Conversion"; October 17, 1988.

891072; G.G. Shor, J. Williams; NSF; "Shipboard Scientific Support Equipment"; August 29, 1988.

891073; G.G. Shor, J.H. Swift, D. Wirth; NSF; "Oceanographic Instrumentation SIO Ships and the ODF"; September 6, 1988.

891074; C.D. Winant; DBW; "Spatial Structure of Winds along the CA Coast"; n.d.

891075; C.D. Winant; DBW; "Currents on the CA Shelf"; n.d.

891076; E. Goldberg; FF; "Workshop on Critical Problems Involving the Quality of the CA Coastal Zone"; January 4, 1989.

891077; J.R. Arnold, K. Nishiizumi; NSF; "Cosmogenic Radionuclides in the GISP II Ice Core: 10Be, 26Al, 36Cl"; August 26, 1988.

891078; R.J. Seymour; NSF; "Hot-Drawn Fiber- Reinforced Thermoplastic Wire"; August 23, 1988.

891079; J.H. Swift; ONR; "Arctic Circulation Studies"; August 24, 1988.

891080; J.S. Jaffe; NSF; "Real Time 3-D Ultrasonic Imaging System"; September 15, 1988.

891082; R.J. Seymour; WBE; "Repositioning the Channel Entrance Wave Energy Station, Barbers Pt., HI"; August 23, 1988.

891085; W.R. Riedel, A. Sanfilippo; NSF; "Systematics and Fossil Record of Cenozoic Radiolarians"; September 8, 1988.

891086; P.M. Williams; NSF; "Investigations of the Marine Organic C Cycle in the N Atlantic Ocean"; September 1, 1988.

891087; B.B. Ward; NASA; "CH4 Oxidation in the Open Ocean"; September 12, 1988.

891088; O. Holm-Hansen, B.G. Mitchell, M. Vernet; NSF; "Environmental Determinants of Phytoplankton Growth Rates and Adaptation in the Barents Sea"; September 7, 1988.

891089; B.G. Mitchell; ONR; "Refinement and Validation of Empirical Techniques for the Determination of Absorption Coefficients for Marine Particulates"; September 1, 1988.

891091; R.J. Seymour; ACE; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; September 7, 1988.

891092; S. Constable, C.S. Cox; NSF; "Joint UK/US Controlled Source EM Experiment over the EPR"; September 15, 1988.

891093; M. Vernet; NSF; "Is There Bacteriochlorophyll in Sedimenting Particles in the Barents Sea"; September 12, 1988.

891095; B.B. Ward; NSF; "The Role of Denitrification in the Microbiology of the Particle Maximum/OMZ off Peru"; October 4, 1988.

891096; L. McFadden; STSI; "Asteroid and Comet Studies with the Hubble Space Telescope"; September 13, 1988.

891098; W.R. Riedel, A. Sanfilippo; NSF; "Stratigraphic/Paleoenvironmental Coverage by the DSDP"; September 19, 1988.

891099; D. Lal; NSF; "An Experimental Attempt to Determine History of 3He, 4He, and Isotopes of Ne and Ar in the Mantle"; November 28, 1988.

891099R1; H. Craig, D. Lal; NSF; "An Experimental Attempt to Determine History of 3He, 4He, and Isotopes of Ne and Ar in the Mantle"; March 24, 1989.

891100; G. Sugihara; DOE; "Comparison and Integration of Community Modeling Methods: A Collaborative Proposal"; October 25, 1988.

891101; R.H. Stewart; NASA; "Satellite and Ship Studies of the CA Current during and after the 1982 ENSO"; September 19, 1988.

891102; D.E. Boegeman, J.A. Hildebrand, F.N. Spiess; JOII; "Development and Operation of a Wireline Re- Entry System for Use in DSDP Holes"; October 6, 1988.

891102R1; D.E. Boegeman, J.A. Hildebrand, F.N. Spiess; JOII; "Development and Operation of Wireline Re-Entry System for Use in DSDP Holes"; October 6, 1988.

891103; J.H. Filloux; NASA; "Ocean Storms Array: Bottom Pressure"; September 22, 1988.

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891104; A.J. Harding; NSF; "Investigation of the Effects of Seafloor Bathymetry on the Imaging of Magma Chamber Reflectors"; September 26, 1988.

891105; T.P. Barnett; NSF; "REU"; September 20, 1988.

891106; J. Berger; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; September 28, 1988.

891107; M.E. Huntley, M. Vernet; NSF; "Fate of Chlorophyll-a during Zooplankton Gut Passage"; September 29, 1988.

891108; K.J. Voss; JHU; "Measurement of the Pt. Spread Function in AUTEK and the Sargasso Sea"; September 26, 1988.

891109; W.H. Berger, R.S. Keir; NSF; "Late Pleistocene 13C Stratigraphy in the W Pacific"; September 29, 1988.

891111; J.A. McGowan; NSF; "How Large Scale Circulation Patterns Influence Bird Abundance and Species Composition in the CA Current"; October 6, 1988.

891112; O. Holm-Hansen; NSF; "Evaluation of Critical Depth Hypothesis for Phytoplankton in Polar H₂O"; September 30, 1988.

891113; J.S. Jaffe; ONR; "Ocean Optics, Ocean Imaging, and Optical Tomography"; October 8, 1988.

891114; K.M. Watson; ONR; "SCAT Prototype Components Support"; October 3, 1988.

891115; C. Constable, S. Constable; NSF; "Whole Earth Mantle Conductivity"; November 16, 1988.

891116; K.M. Watson; ONR; "SAXON Project Participation and Support Supplement"; September 28, 1988.

891117; W.S. Hodgkiss; ONR; "SVLA Data Analysis"; October 4, 1988.

891118; A.G. Dickson, J.H. Weare; LLNL; "Development of Models for Use in the Assessment of Waste Repository Performance"; October 14, 1988.

891119; C. Tai, W.B. White; CIT; "Volume I: An Integrated Research Program for TOPEX/POSEIDON with Emphasis on the Pacific Ocean: Science Investigation Phase. Volume II: Management and Cost Plans"; September 30, 1988.

891119R1; C. Tai, W.B. White; CIT; "An Integrated Research Program for TOPEX/POSEIDON with Emphasis on the Pacific Ocean: Science Investigation Phase"; March 3, 1989.

891120; L.M. Dorman, J.A. Hildebrand; WHOI; "Development of OBS"; December 5, 1988.

891121; M. Tarokh; USARC; "Control of Large Scale Decentralized Systems by Pole Assignment"; September 30, 1988.

Active Contracts and Grants; September 30, 1988.

891122; F.H. Fisher, J.A. Hildebrand; ONR; "MPL Digital Acoustic Array"; October 12, 1988.

891124; L.D. Talley; NSF; "Presidential Young Investigator Award"; October 2, 1988.

891125; D.J. Faulkner; DOHHS; "Chemistry and Pharmacology of Marine Anti-Inflammatory Agents"; October 14, 1988.

891126; K.J. Voss; JHU; "Modification of the Pt. Spread Function Camera System"; October 7, 1988.

891127; J.O. Roads; USGS; "Study of a Model Hydrological Cycle on NA in a Version of the NCAR GCM (17, 18, 40)"; October 10, 1988.

891128; D.C. Agnew; USGS; "PFGO: Cooperative Studies and CDO Program"; October 7, 1988.

891129; G.G. Shor; NSF; "Ship Operations (3rd Year of Grant OCE 87-02835)"; October 20, 1988.

891131; P.K. Dayton, M.J. Tegner; NSF; "Patterns of Disturbance, Reproductive Effort, and Succession across a Depth Gradient in a S CA Kelp Forest Community"; November 7, 1988.

891133; D. Wirth; NSF; "Technician Support for SIO Ships"; October 24, 1988.

891134; R.L. Salmon; NSF; "OGCM Based on Hamiltonian Methods"; October 21, 1988.

891136; E.L. Winterer; SAC; "Support for Piston Coring during ODP Survey, Ontong Java Plateau"; October 17, 1988.

891137; G.K. Vallis; INO; "Fundamentals of Data Assimilation in Ocean Models"; October 17, 1988.

891139; L. Cheng, R.A. Lewin; NSF; "N₂ Uptake, Assimilation and Transfer between Prochloron and its Ascidian Hosts"; October 18, 1988.

891140; W.H. Fenical; DOHHS; "Chemistry and Pharmacology of Marine Anti-Inflammatory Agents"; October 15, 1988.

891141; O. Holm-Hansen, B.G. Mitchell; NSF; "Bio- Optical and Photobiological Studies in Lake Tahoe"; December 6, 1988.

891143; D.W. Wilkie; IMS; "General Operating Support"; October 21, 1988.

891144; C.C. Trees; DOE; "Primary Production off S CA Relative to Surface Layer C Budgets. A Component of the CaBS"; November 15, 1988.

891145; J.J. Simpson; NASA; "Support of Satellite Oceanography Experiments"; October 21, 1988.

891146; L.M. Dorman, J.A. Orcutt; ONR; "SNAG Calibration Experiment Buzzards Bay"; October 27, 1988.

891147; C. Gautier; CIT; "The Role of Air-Sea Exchanges and Ocean Circulation in Climate Variability"; November 9, 1988.

891148; R.J. Seymour; ACE; "CDIP Collection, Analysis, Reporting and Storage of Wave Data"; n.d.

891150; A.A. Yayanos; SNL; "Lab and Field Equipment for Instruction and Research in Biological Oceanography"; October 28, 1988.

891151; D. Inman; AID; "Predictive Model for Shoreline Changes along the Nile Littoral Cell. A Proposal for an Egypt/Israel/US Study"; n.d.

891152; J.R. Arnold; NASA; "Evaluation of ADA Technology for Implementing Knowledge Base Systems in the FTS"; November 3, 1988.

891153; V.C. Anderson, F.H. Fisher, W.S. Hodgkiss; DARPA; "Measurement of Underwater Noise: Volume I Cost Proposal"; November 4, 1988.

891153; V.C. Anderson, F.H. Fisher, W.S. Hodgkiss; DARPA; "Measurement of Underwater Noise: Volume II Technical Proposal"; November 4, 1988.

891155; P.M. Shearer; AFGL; "Surface vs Borehole Seismic Recordings of Nuclear Explosions"; November 22, 1988.

891156; P.M. Shearer; AFGL; "Improvements to the Anza Borehole Seismic Array for Recording Nuclear Explosions"; November 22, 1988.

891157; B.B. Ward, P.M. Williams; DOE; "The Role of Dissolved Organic C, N₂ and CH₄ in the Cycling of Organic Matter in S CA Coastal Basins"; November 8, 1988.

891158; J.H. Natland; NSF; "Collaborative Project: Integrated Studies of Layer 3, SW Indian Ridge"; November 4, 1988.

891159; T.G. Masters; NSF; "Measuring Long-Period Travel Times"; November 17, 1988.

891160; G.A. Jackson; DOE; "Modeling the Transformations, Transport, and Fate of Organic and Particulate Matter off S CA"; November 9, 1988.

891161; F. Azam, A.F. Carlucci; DOE; "Role of Bacteria in the Transformations and Transport of Materials in SCCZ: A Component of the CaBS Program"; November 11, 1988.

891162; G.A. Jackson; DOE; "Ship Operation in Support of CaBS"; November 10, 1988.

891163; G. Arrhenius; NSF; "Molecular Evolution of PO₄³⁻"; November 28, 1988.

891165; J.B. Graham, R. Shabetai; NSF; "Shark Hemodynamics and Locomotor Adaptations"; November 15, 1988.

891166; D. Wirth; NSF; "Hydrographic Support to SAVE"; November 15, 1988.

891167; J.A. Orcutt; NSF; "Implementation of an Advanced Seismic Processing System on the SDSC CRAY X-MP/48"; November 21, 1988.

891170; P.P. Niiler; NSF; "WOCE Heavy Weather Drifter Tests"; November 17, 1988.

891172; J.R. Arnold, K. Marti, K. Nishiizumi; NASA; "Climate-Erosion Rate Studies Using Cosmogenic Nuclides"; December 9, 1988.

891173; J.R. Arnold, D. Lal, K. Nishiizumi; NSF; "Collaborative Research: Nuclear Studies of Continental Erosion Processes and Rates"; November 28, 1988.

891174; N.A. Bray, C.D. Winant; EGGOS; "Additional Task in Support of N CA Coastal Circulation Study (UCSD Proposal 86-1464)"; November 16, 1988.

891175; J.W. Hawkins; SAC; "Lau Basin Surveys Additional Site Survey Work for Proposed ODP Studies"; November 18, 1988.

891176; K.M. Watson; ONR; "Augmentation to the Interdisciplinary Research Program at MPL"; November 22, 1988.

891177; B. Jahne; NSF; "Parameterization and Remote Sensing of Air-Sea Gas Exchange"; January 25, 1989.

891178; B. Jahne; NSF; "Mechanisms of Air-Sea Gas Exchange"; January 25, 1989.

891179; J.L. Bada; NSF; "A Nd:YAG Laser for a 2-Step LMS Dedicated to Organic Geochemical Analyses"; November 21, 1988.

891180; R.W. Johnson; ONR; "Prototype Nighttime Cloud System"; November 8, 1988.

891181; R.W. Johnson; ONR; "E/O SYS5 Field Unit 8"; November 8, 1988.

891182; R. Pinkel; ONR; "Support for R/P Flip Towship"; n.d.

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891185; D.C. Agnew; NSF; "PFGO: A Facility for Studies of Crustal Deformation"; November 21, 1988.

891186; J. Berger; IRIS; "Eurasian Seismic Studies Program"; December 7, 1988.

891187; G. Arrhenius, L. Tauxe; NSF; "Acquisition of Equipment for Paleomagnetic and Biogeochemical Research"; November 29, 1988.

891188; B.B. Ward; NASA "Links Between (CH₄)₂S and CH₄, Between Ocean and Climate"; December 2, 1988.

891189; J. Brown; JHU; "Subcontract 602824-0"; June 21, 1989.

891190; A.J. Spivack, H. Staudigel; NSF; "B Isotopic Composition of the Troodos Ophiolite"; November 28, 1988.

891191; A.J. Spivack; NSF; "Acquisition of a TIMS"; November 28, 1988.

891192; C.C. Trees; NASA; "A Wide Field-of-View Sensor for EOS EWiFS"; November 23, 1988.

881193; D.P. Rogers; ONR; "The Response of the Marine Atmospheric Boundary Layer to Oceanic and Atmospheric Forcing"; November 28, 1988.

891194; A. Sanfilippo; JOII; "DSDP Micropaleontological Reference Centers/Preparation of Radiolarian Slides"; December 12, 1988.

891195; R. Revelle; NSF; "Support of a Scientific Secretary for the SCOR/IOC CCCO"; November 29, 1988.

891197; T. Nogami; PGEC; "Improved Method for Prediction of Lateral Response of Pier Foundations: Soil Model"; n.d.

891198; R.H. Stewart; NASA; "Experimental and Theoretical Determination of Sea-State Bias in Radar Altimetry"; January 11, 1989.

891199; T. Nogami; PGEC; "Improved Method for Prediction of Lateral Response of Pier Foundations: Soil Method"; n.d.

891200; T. Nogami; EPRI; "Improved Method for Prediction of Lateral Response of Pier Foundations: Soil Method"; n.d.

891201; T. Nogami; PGEC; "Improved Method for Prediction of Lateral Response of Pier Foundations: Soil Method"; n.d.

891202; T. Nogami; PGEC; "Improved Method for Prediction of Lateral Response of Pier Foundations: Soil Method"; n.d.

891203; D.L. Inman; WES; "Development of a Bedload Sensor for Wave and Current Regimes"; December 5, 1988.

891204; D. Lal; ACS; "Nuclear Studies of Soil Dynamics; Applications of In Situ Cosmogenic ¹⁴C and ³⁹Ar"; December 12, 1988.

891206; R.L. Fisher; NSF; "Compilation of Topographic, Magnetic, and Geophysical Data from the Indian Ocean: Topography"; December 7, 1988.

891207; J.T. Enright; NSF; "Eye Movements and Perception"; December 8, 1988.

891209; N.A. Bray; ONR; "Analysis of Hydrographic Observations in the Vicinity of the Strait of Gibraltar"; December 7, 1988.

891210; J.J. Sullivan; NOAA; "USCG Forging Links in the Pacific"; December 1, 1988.

891211; N.D. Holland; NSF; "Fine Structural Study of Lancelet (Amphioxus) Development: Generation of New Characters for Cladistic Analysis of Chordate Relationships"; December 9, 1988.

891212; J.W. Miles; NSF; "Geophysical Fluid Dynamics"; January 5, 1989.

891212R1; J.W. Miles; NSF; "Geophysical Fluid Dynamics"; October 10, 1989.

891213; D.L. Inman; NSF; "Geophysical Grain Flows (Meeting)"; December 13, 1988.

891214; C.C. Trees; NASA; "An Investigation of Alterations in Antarctic Phytoplankton Populations Related to O3 Depletion"; November 10, 1988.

891216; W.H. Berger; ACS; "Productivity and Paleoproductivity: Present and Glacial Atlantic Ocean"; December 2, 1988.

891217; G.E. Backus; NSF; "Contributions from Geomagnetic Inverse Theory to the Study of the Hydromagnetic Conditions near the Core-Mantle Boundary"; December 16, 1988.

891217R2; G.E. Backus; NSF; "Contributions from Geomagnetic Inverse Theory to the Study of the Hydromagnetic Conditions near the Core-Mantle Boundary"; February 4, 1991.

891218; G.E. Backus; NASA; "Contributions from Geomagnetic Inverse Theory to the Study of Hydromagnetic Conditions near the Core-Mantle Boundary"; December 15, 1988.

891220; H.D.I. Abarbanel; DOE; "Studies in the Nonlinear Dynamics of Dissipative Systems"; January 11, 1989.

891221; J. Namias, J.O. Roads; NASA; "A Comparison of Model Hydrological Cycles over NA with Observations"; December 14, 1988.

891222; Y. Bock; NSF; "Geodetic Investigations of Oblique Plate Convergence in Sumatra"; January 5, 1989.

891223; R.J. Frouin, R. Somerville; NASA; "CO₂ and Trace Gas Emissions to the Atmosphere by Biomass Burning in W Africa: Annual and Interannual Variability Using SRS and Ecosystem Modeling"; December 15, 1988.

891224; A.A. Yayanos; NSF; "Global Distribution of Thymine Dimers and of DNA Repair Capacity as Indices of Spatial and Temporal Variability in Solar UV Damage to Marine Ecosystems"; December 19, 1988.

891226; J. Berger; SAIC; "US-USSR Seismic Data Archive"; December 21, 1988.

891227; W.R. Riedel; NSF; "Marine Geological Sample Collections: SIO"; December 19, 1988.

891228; R.J. Seymour; TUSA; "Doppler Current Meter Collection, Analysis and Reporting"; December 15, 1988.

891229; K.J. Voss; ONR; "The Closure Problem in Ocean Optics"; January 4, 1989.

891230; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic Studies of Volcanic Rocks and Xenoliths as Probes of the Earth's Mantle"; January 4, 1989.

891231; M. Kastner; NSF; "REU: Miocene to Recent Sedimentary Conditions in the Peruvian Margin: Apatite Formation, Fluid Circulation, and Diagenesis"; December 22, 1988.

891232; H. Staudigel, L. Tauxe; NSF; "The Magnetization of Seamounts"; December 22, 1988.

891233; K.M. Watson; ONR; "SCAT Prototype Components and Satellite Electrical Components"; December 22, 1988.

Active Contracts and Grants; December 31, 1988.

891234; G. Sugihara; NSF; "A Critical Re-Examination of Food Web Patterns in Real Ecosystems"; January 5, 1989.

891237; J.L. Bada; ACS; "Organic Geochemical Applications of 2-Step LMS"; January 3, 1989.

891238; C.K. Paul; NSF; "Deep-Tow Surveys of Atlantic Diapirs and CO₃ Escarpments: Geomorphology, Geochemical Processes, and Geological Consequences"; January 30, 1989.

891239; D.C. Agnew; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; n.d.

891240; C.D. Agnew; USGS; "PFGO: Comparative Studies and Geophysical Investigations"; January 24, 1989.

891241; D.J. Faulkner; NSF; "Natural Products Chemistry of Marine Molluscs"; January 11, 1989.

891242; J.N. Brune, G. Masters, J.B. Minster; USGS; "Detailed Analysis of Seismicity, Source Mechanism, and Wave Propagation at ANZA"; January 19, 1989.

891243; P.P. Niiler; NSF; "TOGA Pan-Pacific Surface Current Study/Central Pacific Processes and Drifter Calibration"; January 9, 1989.

891244; P.P. Niiler; NSF; "Measurement of Large Scale Upper Ocean Thermal Fields and Heat Budget in the Tropical Pacific"; January 9, 1989.

891245; K.M. Watson; ONR; "MER Calibration"; January 19, 1989.

891246; F.H. Fisher; ONR; "Improvements to the Acoustic and Optical Sensor Systems"; January 10, 1989.

891247; K.M. Watson; ONR; "DOLPHIN WAIS Support and ESC System Modification"; January 10, 1989.

891248; C.E. Reimers; NSF; "O₂, pH, pCO₂, and C Diagenesis in Hemipelagic Sediments"; January 31, 1989.

891249; J.A. Hildebrand, M.A. Zumberge; NSF; "Construction and Testing of an OBAGM"; January 31, 1989.

891251; C.S. Cox; ONR; "Electrical Field, Atmospheric ULF Acoustic Disturbance and Long Period Pressure Detection Studies"; January 10, 1989.

891252; D.G. Hankin; UCSG; "Temporal and Spatial Variation in the Species Composition of the Deep H₂O Eureka Trawl Fisheries, with Emphasis on Sablefish"; January 17, 1989.

891253; R.S. Keir; EPRI; "Regional Uptake of Anthropogenic CO₂ by the Ocean: The Effects of Piston Velocity Distribution and Upper Ocean Circulation"; January 23, 1989.

891254; H. Felbeck; NSF; "Phylogenetic and Metabolic Studies of Invertebrates with Chemoautotrophic Bacterial Endosymbionts from Hydrothermal Vents"; January 12, 1989.

891256; J. Mammerickx, J.H. Natland, D.T. Sandwell; NSF; "Stretching of the Central Pacific Lithosphere: En-Echelon Ridges and Crossgrain Lineations on the Superswell"; January 26, 1989.

891257; V.C. Anderson; ONR; "Continuation of a Program in CM/CCM"; January 11, 1989.

891258; K.J. Voss; NOSC; "The Submerged Sensor Program"; January 13, 1989.

891259; G.K. Vallis; NSF; "Investigation of Persistent and Coherent Structures in Geophysical and Turbulent Flow"; January 19, 1989.

891260; P.M. Shearer; USGS; "Quantitative Analyses of Shear-Wave Polarizations and Inversion for Shear-Wave Splitting Parameters"; January 18, 1989.

891261; D.C. Agnew; USGS; "Monitoring the S San Andreas Fault A Monument Anchoring Experiment"; January 24, 1989.

891262; R.J. Seymour; WES; "CDIP Collection, Analysis, Reporting and Storage of Wave Data"; January 6, 1989.

891263; R.J. Seymour; WES; "CDIP Collection, Analysis, Reporting and Storage of Wave Data"; January 6, 1989.

891264; K.M. Watson; ONR; "Satellite Electrical Components"; January 19, 1989.

[Box 51]

891266; S. Constable, H. Staudigel; NSF; "Development and Test of a Long Base Line Tiltmeter for Submarine Volcano Monitoring"; January 27, 1989.

891267; Y. Bock; NSF; "Geodetic Investigation of Oblique Plate Convergence in Sumatra Supplementary Proposal to Science in Developing Countries Program"; January 31, 1989.

891269; R.D. Vetter; NSF; "Metabolic Adaptations of Hydrothermal Vent Animals"; January 17, 1989.

891271; F.N. Spiess; UW; "Fine Scale Investigations of the Intersection of the Kane Fracture Zone and the Mid-Atlantic Ridge"; January 30, 1988.

891272; L. Tauxe; NSF; "Chemical Remanent Magnetization: A Study of Natural and Synthetic Fe Oxides"; January 18, 1989.

891273; B.B. Ward; NSF; "CH₄ Oxidation by Marine Nitrifying Bacteria"; January 23, 1989.

891275; M.G. Haygood; NSF; "Investigations of Fe and Other Metal Ion Sequestering Mechanisms of Marine Bacteria"; January 19, 1989.

891276; H. Staudigel; NSF; "Compositional Domains in Altered Oceanic Crust"; February 2, 1989.

891277; G.W. Lugmair, J.D. Maccougall; NSF; "Mantle Sources and Petrogenetic Controls of Oceanic Volcanism in Different Tectonic Settings"; January 30, 1989.

891278; C.C. Trees; NSF; "An Investigation of Alterations in Antarctic Phytoplankton Populations Related to O₃ Depletion"; January 23, 1989.

891279; G.G. Shor; UW; "Shipboard Support Service for Dr. P. Johnson"; January 19, 1989.

891281; G. Carnevale; NSF; "Experiments and Numerical Studies of Coherent Structures"; January 27, 1989.

891282; J. McClain, J.A. Orcutt; NSF; "The Internal Structure of the Clipperton Transform Fault"; January 24, 1989.

891283; J.L. Hakanson; NSF; "Condition and Growth Rate of Individual Anchovy Larvae in Contrasting Hydrographic Environments"; January 26, 1989.

891284; W.H. Fenical; NSF; "Quantative Aspects of Seaweed Chemistry Defense: Complex Interactions of Environment, Seaweed Chemistry, and Resistance to Herbivory"; January 24, 1989.

891285; J.M. Gieskes; NSF; "Multiple Sampling of Borehole H₂O for Geochemical Studies"; January 25, 1989.

891286; R.F. Weiss; NSF; "A Study of the Equatorial Mid-Depth Circulation, Equatorial Jets, and the Clifich₄ Plume in the Atlantic"; January 26, 1989.

891287; K.L. Smith; NSF; "Active Transport of Particulate Organic Matter by Diel Ventrally Migrating Macrozooplankton and Micronekton in the N Pacific"; January 25, 1989.

891288; R.B. Bacastow; ORNL; "Development of a 3-D Model of the Natural C Cycle in the Oceans and its Perturbation by Anthropogenic CO₂"; March 8, 1989.

891290; G.G. Shor; LGO; "Support Services for Work by D. Fornari: Geochemical and Geophysical Investigations of Small Spreading Centers within the Siqueiros Transform Domain"; January 25, 1989.

891291; A.F. Carlucci; NSF; "The Role of Microbial Populations in the Transformation and Flux of Organic Matter in CA Borderland Benthic Boundary Layer Environments"; February 28, 1989.

891292; J.H. Swift; NSF; "Improvements in Shipboard O₂ Titration"; February 3, 1989.

891294; P.F. Lonsdale; NSF; "Collaborative Project: Structural Geomorphology of the Pacific-Antarctic EPR"; January 30, 1989.

891295; C.S. Cox, S. Webb; NSF; "Geodetic Measurement of Local Uplift of a Thrust Anticline at the Cascadia Subduction Zone (A Collaborative Project)"; January 30, 1989.

891296; L.M. Dorman, J.A. Hildebrand; NSF; "Geophysical Tests of Petrologic Models for the Axial Magma Chamber at the EPR: 9°-10°N (Collaborative Project)"; February 7, 1989.

891298; N.E. Graham; NSF; "Evaluation of the Response of Atmospheric Models to Low-Frequency SST Variability in the Tropical Pacific"; January 1989.

891299; N.E. Graham; NOAA; "Evaluation of the Response of Atmospheric Models to Low-Frequency SST Variability in the Tropical Pacific"; January 23, 1989.

891300; D.K. Lee, P.P. Niiler; INO; "3-D Effects of Strong Wind Forced Events in the E Pacific"; January 30, 1989.

891301; N.A. Bray, C.D. Winant; EGGOS; "Additional Costs in Support of N CA Coastal Circulation Study (UCSD Proposal 86-1464)"; n.d.

891302; R.T. Guza; ONR; "Array Measurements of Surface Gravity Waves during SAXON"; n.d.

891303; P.F. Lonsdale, J.H. Natland; NSF; "Collaborative Project: Structural Study of Fast-Spread Ocean Crust Exposed in the Walls of Hess Deep"; February 7, 1989.

891304; J.H. Swift; NSF; "Technical Improvements in CTD Profiling"; February 10, 1989.

891305; J.L. Reid; NSF; "Joint US-USSR Winter Investigation of Circulation and C Chemistry of the NW Pacific Ocean and the Okhotsk Sea"; January 31, 1989.

891306; A.D. Chave, J.H. Filloux, D.S. Luther; NSF; "EMODE"; February 2, 1989.

891307; P.E. Collard; NASA; "Parallel ADA Benchmarks for the SVMS"; February 14, 1989.

891308; V.C. Anderson; ONR; "Continuation of Evaluation of Diver Lock-Out Submersible"; February 2, 1989.

891310; A.D. Chave, J.H. Filloux; NSF; "Observation of the Variability and Transport of the Boundary Current E of the Bahamas"; February 9, 1989.

891311; J.M. Gieskes; UERG; "Trace Element Studies in Hydrothermal Sediments of Guaymas Basin and the Escanaba Trough"; February 2, 1989.

891314; R.S. Keir; UERG; "Effects of Upper Ocean Circulation on the Uptake of Anthropogenic CO₂: Model Development"; February 8, 1989.

891315; R.E. Garrison, M. Kastner; UERG; "The Origin and Nature of Fluids which Migrated through the Monterey Formation, as Indicated by the Geochemistry and Isotopic Composition of Vein Minerals and Their Fluid Inclusion in Dolomite Breccia"; February 8, 1989.

891316; S.C. Webb; SPAI; "Technical Assistance for SPA Experiment off Coast of OR"; n.d.

891317; J.R. Arnold, K. Nishiizumi; LANL; "Geochronology of the Earth during the Last 1 Million Years Using Cosmo- and Radiogenic Nuclides"; February 13, 1989.

891319R1; F.H. Fisher, J.A. Hildebrand; ONR; "MPL Digital Acoustic Array"; March 17, 1989.

891320; G.K. Vallis; LANL; "Stability of Coherent Vortices in Turbulence"; February 6, 1989.

891321; C. de Moustier; NSF; "Interactive Computer Swath Matching for Multibeam Bathymetric Data"; February 24, 1989.

891322; D. Lal, J.D. Macdougall; LANL; "Study of Neutron Fluxes Underground"; February 13, 1989.

891323; J.R. Arnold, D. Lal, K. Nishiizumi; LANL; "Simulation of Terrestrial Cosmogenic-Nuclide Production Using the Neutron Environment at LAMPF"; February 13, 1989.

891324; M. Kastner; UERG; "Non-Exchangeable H Stable Isotopes in Marine Sedimentary Organic Matter: Distribution and Diagenetic Effects"; February 8, 1989.

891325; L. McFadden; NASA; "Bias Analysis of the Near-Earth Asteroid Population"; February 9, 1989.

891327; J.A. McGowan; WRC; "Long Term Effects of Sewage Discharge in S CA Bight"; February 9, 1989.

891328; D. Cayan, J.O. Roads; LANL; "On the Large Scale Organization of Oceanic Weather"; February 13, 1989.

891329; B.E. Volcani; DOHHS; "Biochemical Studies of Siliceous Skeletal Formation"; February 10, 1989.

891330; A.J. Spivack; NSF; "B Isotope Exchange between Seawater and the Oceanic Crust"; February 14, 1989.

891331; A.J. Spivack; NSF; "B Isotope Paleoceanography"; February 14, 1989.

891332; A.J. Harding, P.M. Shearer, J.A. Orcutt; DOE; "Seismic Imaging of Anisotropy and Cracks in the Upper Oceanic Crust at the EPR"; February 13, 1989.

891334; K.M. Watson; ONR; "Technical Support and Assistance"; February 21, 1989.

891335; K.L. Smith; SNL; "Field Equipment for Instruction and Research in Biological Oceanography"; February 13, 1989.

891336; G. Arrhenius; UCD; "Removal of Organic Contaminants, CN-, and Se from H₂O Sources"; February 10, 1989.

891337; S.A. Jenkins; UERG; "Exploratory Field Investigations of Limitations to Wave Power"; February 15, 1989.

891338; Y. Bock; USGS; "Error Analysis and Network Design in GPS Measurements of Crustal Deformation"; March 22, 1989.

891339; T.D. Herbert; ACS; "An Aptian-Cenomanian Chronostratigraphy Based on 20 and 100 Kyr Cycles in Marine Sediments"; February 16, 1989.

891341; G.W. Lugmair; NASA; "Isotopic, Chemical and Mineralogical Investigations of Extraterrestrial Materials"; February 28, 1989.

891346; E.A. Frieman; ONR; "Ocean Studies Supplementary Ship Time"; February 24, 1989.

891347; A. Kalmijn; DARPA; "Processing Strategies in Lower Marine Vertebrates: Biological Foundations of Theoretical Models"; February 27, 1989.

891348; B. Jähne; ONR; "Optical Slope/Height Measurements of Small Scale Waves within the SAXON- FPN Experiment"; n.d.

891349; R.W. Eppley; NASA; "Support Bio-Optical Measurements on the 2nd Leg of the JGOFS Atlantis II Cruise, 15 May-8 June 1989"; February 24, 1989.

891350; D.C. Agnew; NASA; "Towards a Statistical Description of Tectonic Motions Analysis of Crustal Dynamics Observations"; March 29, 1989.

891351; C.D. Keeling; ORNL; "Continuation of Precise Measurement of Atmospheric CO₂ at MLO"; March 2, 1989.

891353; D. Wirth; ONR; "Air Gun and Explosive Shooting Support for Seismic Sensor Field"; March 6, 1989.

891355; V.C. Anderson, R.J. Seymour; NSF; "RUM III Seafloor Work System Development"; March 10, 1989.

891356; M.J. Tegner; CSLC; "CA Comprehensive Offshore Resource Study"; March 22, 1989.

891359; T.P. Barnett; NASA; "Research on Climate and Ocean Dynamics Using ERS-1 Observations"; March 7, 1989.

891360; O. Holm-Hansen; NSF; "Support for US Scientists to Participate in Workshop on Polar Marine Ecology"; March 14, 1989.

891361; J.S. Jaffe; NSF; "Development of a 3-D Bioacoustic Imaging System"; March 15, 1989.

891361R1; J.S. Jaffe; NSF; "Development of a 3-D Bioacoustic Imaging System"; March 5, 1990.

[Box 52]

891362; J.S. Jaffe, R.J. Seymour; ACE; "Research and Development for a Bedload Sensor"; n.d.

891363; J.L. Bada; NASA; "2-Step LMS: A Future Methodology for Organic Cosmochemical Analyses of Planetary Bodies"; March 8, 1989.

891364; J.L. Bada; NASA; "Organic Cosmochemical Applications of 2-Step LMS"; March 8, 1989.

891366; J.A. McGowan; DOC/NOAA; "Strategic Assessment Map Project: Zooplankton Biomass and Species Groups"; n.d.

891367; F.H. Fisher; ONR; "Modification of AN/SSQ-53B Sonobuoys"; March 14, 1989.

891368; W.S. Hodgkiss; ONR; "SVLA Data Analysis"; March 14, 1989.

891371; R.A. Knox, W.H. Munk, P.F. Worcester; ONR; "Moving Ship Tomography"; March 15, 1989.

891372; N. Graham, C. Tai, W.B. White; ONR; "Center for ESOP"; April 3, 1989.

891373; G.D.F. Wilson; NOAA; "Biological Evaluation of a Preservational Reserve Area and Comparison with Other Areas"; March 15, 1989.

891374; J.A. Orcutt; ONR; "Supplement to Proposal to APL for Instrument Construction and Modification, Field Testing, and Analysis Program"; March 15, 1989.

891375; P.F. Lonsdale; ONR; "Support of USNRL Acoustic Experiments in the N Pacific"; March 24, 1989.

891376; L. Armi; ONR; "Ocean Mixing Processes"; March 21, 1989.

891377; C.D. Keeling; NSF; "A Study of the Abundance and ¹³C/¹²C Ratio of C in the Atmosphere and Oceans in Relation to the Global C Cycle"; March 22, 1989.

891378; J.J. Simpson; CSI; "Improved Parameterization of the Radiative Fluxes and SST over the CA Current Using In Situ and Remotely- Sensed Observations"; March 22, 1989.

891379; C. Constable; NSF; "Statistical Simulations of Geomagnetic Secular Variation and Reversals, or Can Paleomagnetism Help Dynamo Theory?"; May 25, 1989.

891380; V.C. Anderson; DARPA; "Acoustic Properties of Wave Generated Bubble Clouds"; March 29, 1989.

891381; W.S. Hodgkiss; ONR; "Coherence of Transients"; March 22, 1989.

891382; W.S. Hodgkiss; ONR; "Downslope Conversion"; March 22, 1989.

891384; J.D. Macdougall; CSI; "Test of the K-T Boundary Impact Hypothesis"; March 30, 1989.

891386; J.R. Arnold; NASA; "Age and Erosional History of Meteorite Craters Using Cosmogenic Nuclides"; March 29, 1989.

891387; C. de Moustier; ONR; "SeaMarc II Investigation of the Norwegian-Greenland Sea"; April 11, 1989.

891388; C. de Moustier; ONR; "Investigation of 12 kHz Deep Scattering Layers Using SeaBeam"; August 16, 1989.

891389; D. Alexandrou, C. de Moustier, K. Watson; ONR; "Evaluation and Verification of Seafloor Acoustic Scattering Models"; August 16, 1989.

891390; J. Hildebrand; ONR; "Large Aperture Acoustic Arrays in Support of Reverberation Studies"; March 31, 1989.

891391; S. Constable, A. Duba; LLNL; "Electrical Conductivity of Mantle Rocks to 1500°C"; April 4, 1989.

891392; M.M. Mullin; CSI; "Remote Sensing of Flow and Mesoscale Features in the CA Current, Related to Transport Processes"; March 30, 1989.

891393; R. Revelle; NSF; "Support of a Scientific Secretary for the SCOR/IOC CCCO"; March 29, 1989.

891395R; F.H. Fisher; ONR; "Contract N00014-89-D-0412"; n.d.

891396; J. Berger, J. Minster; LLNL; "Quantitative Analysis of High-Frequency Seismic Polarizations"; April 11, 1989.

891397; R.C.J. Somerville; CSI; "Net Solar Irradiance at the Ocean Surface: A Comparison of Satellite Measurements and Global Climate Model Simulations"; March 30, 1989.

891398; L. McFadden; NASA; "Asteroid Surface Processes: Experimental Studies of the Solar Wind on Spectral Reflectance and Optical Properties"; March 31, 1989.

891402; H. Craig; NASA; "Ne Isotope Studies in Terrestrial Diamonds"; April 7, 1989.

891403; S.C. Webb; UW; "Beaufort Sea ULF Experiment"; April 14, 1989.

891406; J.A. Hildebrand, M.A. Zumberge; ONR; "Test of Newtonian Gravity Using DSV Sea Cliff"; August 4, 1989.

891408; L. McFadden; CSI; "Computer Based Visualization: A Tool for Science"; March 31, 1989.

Active Contracts and Grants; March 31, 1989.

891409; J.L. Bada; DOE; "Development of a 2-Step LMS Dedicated to Organic Geochemical Analyses"; April 6, 1989.

891410; A.J. Spivack; NASA; "B Isotope Composition of Chondritic Meteorites"; April 7, 1989.

891411; R.L. Parker, M.A. Zumberge; LLNL; "Ideal Body Analysis of the NTS Tower Experiment"; April 6, 1989.

891414; J. Berger; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; April 25, 1989.

891415; A. Sanfilippo; NSF; "Low and High Latitude Tertiary Radiolarian Evolution: Integral or Separate"; May 8, 1989.

891416; D. Cayan, J.O. Roads; LLNL; "Analysis of Climate Model Hydrological Cycles"; April 11, 1989.

891418; M. Kastner; SAC; "ODP Geochemistry: Progress and Opportunities Workshop to be Held in Fall 1989 or Early 1990 for Approximately 50 Participants"; n.d.

891419; R.J. Seymour; SFCWP; "Operation and Maintenance of Deepwater Wave Measurement Station"; April 17, 1989.

891420; T. Nogami; LCA; "Study of Ocean Engineering Problems in Undersea Pumped Storage of Compressed Air"; April 12, 1989.

891421; C. Gautier; AFOSR; "Automatic Cloud Classification from Multi-Spectral Satellite Data"; April 19, 1989.

891423; F.H. Fisher, W.S. Hodgkiss; ONR; "FLOSS Experiment Scientific Support"; April 21, 1989.

891424; J.J. Simpson; ONR; "Mesoscale and Large Scale Variability in the CA Current System and its Interaction with Both CA Current and CA Undercurrent Flows"; April 19, 1989.

891425; B. Cornuelle, R.A. Knox, W.H. Munk, P.F. Worcester; UW; "Single Slice Tomography"; April 25, 1989.

891426; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic and Trace Element Studies of the Lithospheric Mantle, Petrogenetic Processes and Magma Transport, and the Early Stages of Continental Crust Formation"; May 30, 1989.

891427; R.J. Frouin; NASA; "Study of Atmospheric and Bidirectional Effects on Surface Reflectance and Vegetation Index Time Series. Application to NOAA AVHRR and Preparation for Future Space Missions"; May 18, 1989.

891427R1; R.J. Frouin; NASA; "Study of Atmospheric and Bidirectional Effects on Surface Reflectance and Vegetation Index Time Series. Application to NOAA AVHRR and Preparation for Future Space Missions"; December 18, 1989.

891428; J.S. Jaffe; ONR; "Ocean Optics, Ocean Imaging, and Optical Tomography"; July 11, 1989.

891429; R.F. Weiss; NASA; "N2O Standard Calibrations"; April 25, 1989.

891433; Y. Bock, F. Gilbert, A.J. Harding, T.G. Masters, J.P. Morgan, P.M. Shearer; NSF; "Acquisition of Apollo Computer Workstations"; May 3, 1989.

891434; S.A. Jenkins; WES; "Assessment of Possible Coastal Problems Related to Sediment Trapping by Dams"; April 28, 1989.

891436; J.R. Arnold, D. Lal, K. Nishiizumi; NSF; "Collaborative Project: Study of Ice Ablation Based on In Situ Cosmogenic ¹⁴C"; June 7, 1989.

891437; J.O. Roads; NOAA; "The Experimental Climate Forecast Center at SIO"; May 3, 1989.

891438; Y. Bock, F. Gilbert, A.J. Harding, T.G. Masters, J.P. Morgan, J.A. Orcutt, P.M. Shearer; NSF; "Acquisition of Apollo Computer Workstations"; May 3, 1989.

891439; H. Craig; NSF; "Geochemical and Environmental Studies of 2 Hokkaido Deep Lakes"; May 8, 1989.

891441; A. Kalmijn; ONR; "EM Test Facility: Initial Operation"; May 12, 1989.

891442; B.E. Volcani; NSF; "Diatom Plasmids: Molecular Biology Studies"; May 26, 1989.

891443; B.E. Volcani; ONR; "Diatom Plasmids: Molecular Biology Studies"; May 30, 1989.

891444; S. Constable, R.L. Parker; NSF; "Model Construction, Existence, and Resolution in 2-D EM Sounding"; May 30, 1989.

891445; S. Constable, R.L. Parker; DOE; "Model Construction, Existence, and Resolution in 2-D EM Sounding"; May 9, 1989.

891446; D.T. Sandwell; NSF; "Abrupt Transition of Ridge Axis Gravity with Spreading Rate: The Effect of a Weak Lower Crust"; May 24, 1989.

891447; F.H. Fisher; ONR; "SCAT Concept Prototype Components"; May 11, 1989.

891448; P.F. Lonsdale; ASIPL; "OTC PACRIM Surveys"; May 8, 1989.

891449; T.L. Hayward; CSAI; "Primary Production in the CA Region"; May 9, 1989.

891450; L. Tauxe; NSF; "CRM in Synthetic Fe Oxides"; May 15, 1990.

891451; J.H. Natland; NSF; "Collaborative Research: Geochemistry of the Source Regions of SW Pacific Volcanic Islands: An Approach Using Ultramafic Xenoliths and Host Basalts"; May 30, 1989.

891452; T. Nogami; NSF; "Unified Evaluation Method for Wave-Induced Massive Movement of Slightly Sloping Seafloor"; May 10, 1989.

891453; P.P. Niiler; NSF; "Drifter Measurements of Surface Velocity, SST, and Atmospheric Pressure in WOCE"; June 14, 1989.

891455; D.C. Agnew; NSF; "Continuous Crustal Deformation Measurement: Data Analysis and Instrument Development"; May 26, 1989.

891456; M.A. Zumberge; NSF; "Acquisition of a Relative Gravity Meter"; May 24, 1989.

891457; R.E. Davis; NSF; "Palmer Station Satellite Imaging Capability"; May 11, 1989.

891459; I. Carmichael, J. Mammert; NSF; "The Rivera Plate and Jalisco Block: Marine-Continental Tectonics and Volcanism"; May 26, 1989.

891460; D. Agnew, Y. Bock, J. Minster, M. Zumberge; NOAA; "Establishing a Highly Precise Vertical Reference for Monitoring Sea Level Change"; May 12, 1989.

891461; C. de Moustier; NRL; "Mapping Bathymetric Slopes from Swath Bathymetry Data"; May 17, 1989.

891462; S.C. Constable, J.A. Orcutt; NSF; "A Prototype Suite of Inexpensive OBH"; June 1, 1989.

891464; H. Aref, C. Gibson, W.H. Thomas; NSF; "Further Investigations on the Effects of Small-Scale Turbulence on Marine Phytoplankton"; May 26, 1989.

891465; J.R. Arnold, K. Nishiizumi; NSF; "Terrestrial Age Measurement of Antarctic Meteorites"; May 23, 1989.

891466; R.J. Frouin; USL; "Calibration of AVHRR Solar Channels"; May 15, 1989.

[Box 53]

891467; F. Azam; NSF; "Significance of Bacterial Hydrolases in Particle Degradation and C Flow Pathways in the Ocean's Mesopelagic Zone"; June 7, 1989.

891468; J.R. Arnold, K. Nishiizumi; NSF; "Surface Exposure History of Antarctic Mountains during the Pleistocene"; May 23, 1989.

891469; J.A. Tarduno; NSF; "Paleomagnetic Investigation of the Cretaceous DSDP Record"; May 26, 1989.

891470; R.C.J. Somerville; NOAA; "Diagnosis, Simulation and Prediction of Climate Variations"; May 17, 1989.

891471; J.A. Orcutt; ONR; "SAMSON"; May 17, 1989.

891472; L. McFadden; NSF; "Optical Properties of Asteroid Surface Alterations"; May 26, 1989.

891473; L. McFadden, A.M. Schneider; NASA; "Reconnaissance Tours of Near-Earth Asteroids and Comets Using Multiple Inner Planet Swingbys"; May 30, 1989.

891475; J.B. Graham; NSF; "H₂O-Tunnel Studies with Tuna at the Kewalo Basin, HI"; May 15, 1989.

891476; F. Azam, J.T. Hollibaugh; NSF; "Significance of Bacterial Exoenzymes in Organic Matter Cycling in the Antarctic Ocean"; May 20, 1989.

891477; J.H. Swift; NSF; "Hydrographic Support for the METEOR/SAVE Cruise to the S Atlantic Ocean"; May 23, 1989.

891478; J.W. Hawkins, J.D. Macdougall; NSF; "Crustal Evolution of N Luzon; Transition from Island Arcs to Micro-Continent"; May 26, 1989.

891479; T.D. Herbert, L. Tauxe; NSF; "Anatomy of Eocene/Oligocene Climatic Change: A Detailed Study of Records from DSDP Sites 522 and 523"; May 30, 1989.

891480; H.K. Given; IRIS; "Formation of Digital Archive of Historical Seismograms from the USSR"; May 31, 1989.

891481; J. Hildebrand, H. Staudigel; NSF; "Mantle Source Regions, Ages, and Marine Geology and Geophysics of Seamounts in the Magellan and Marshall Seamount Groups"; June 7, 1989.

891482; B.D. Cornuelle, W.R. Young; NSF; "Tracer Dispersion in Fluid Flows"; May 25, 1989.

891483; G. Arrhenius, L. Tauxe; NSF; "Acquisition of Equipment for Paleomagnetic and Biogeochemical Research"; May 26, 1989.

891484; J.M. Gieskes; NSF; "Studies of Halogens (I and Br) in Deep-Sea Sediments"; May 23, 1989.

891485; S.C. Constable, J.P. Morgan, S.C. Webb; NSF; "Observational Constraints on the Origin of Mid- Ocean Ridge Axial Topography"; June 12, 1989.

891486; D.C. Agnew, Y. Bock, J. Minster; NSF; "GPS Instruments for Crustal Deformation Monitoring in CA"; May 30, 1989.

891487; J.H. Swift; NSF; "Seasonal and Interannual Variability in the Greenland Sea"; May 25, 1989.

891488; H. Craig; UNR; "Geochemical Studies of Antarctic Dry Valley Lakes"; May 20, 1989.

891489; P.M. Shearer; NSF; "Resolving Inner Core Structure Using Body Wave and Normal Mode Seismic Data"; May 24, 1989.

891490; J.L. Bada; NSF; "Collaborative Research: Stable Isotopes and Ecological Interactions in the Isle Royale Ecosystem"; June 14, 1989.

891491; R.C. Smith; UCSB; "O₃ Diminution, UV-B, and Phytoplankton Biology in Antarctic H₂O"; May 18, 1989.

891492; J.O. Roads; USFS; "Use of Numerical Weather Prediction Models for Medium/Extended-Range Fire Weather Forecasting"; May 22, 1989.

891493; M. Tarokh; NASA; "A Study of Robot Redundancy Resolution Using Neural Network Concepts"; May 24, 1989.

891494; N. Graham, C. Tai, W.B. White; NSF; "The Mesoscale Dynamics of the CA Current System: A New Model/Assimilation Effort"; May 25, 1989.

891495; J.L. Reid; NSF; "N Atlantic Geostrophic Circulation and Characteristics"; May 24, 1989.

891496; J.L. Bada; NSF; "Extraterrestrial Amino Acids in Cretaceous-Tertiary Boundary Sediments"; May 25, 1989.

891497; G. Arrhenius; NSF; "Molecular Evolution of PO₄³⁻"; May 26, 1989.

891498; A. Chave, S.C. Webb; ONR; "ONR Workshop: Understanding the Oceanic Environment: Status and Prospects"; May 24, 1989.

891499; J.J. Simpson; NSF; "Satellite Support of Oceanography Experiments"; May 24, 1989.

891500; J.R. Arnold; NASA; "Advanced Transportation Technologies for Manned Space Missions to the Inner Solar System"; May 31, 1989.

891501; A.D. Chave, J.H. Filloux, D.S. Luther; NSF; "Total Transport Measurements in the SW Pacific Basin Using Horizontal Electrometers"; June 1, 1989.

891502; T.L. Hayward; NSF; "Variation in Biogeochemical Properties in the S CA Bight: A Field Test and Deployment of the Pulsed O₂ Probe"; May 25, 1989.

891503; M.D. Ohman; NSF; "Instrumentation for the Analysis of Zooplankton Lipids"; May 31, 1989.

891504; T.K. Chereskin; NSF; "A Model of an ADCP"; May 31, 1989.

891505; A.J. Harding, J.A. Orcutt; NSF; "MCS Reflection/OBS Tomography Study of the Cocos-Nazca Spreading Center 91°W to 95°31'N"; June 6, 1989.

891506; A. Harding, J.A. Orcutt; NSF; "A Seismic Investigation of the S EPR"; May 31, 1989.

891507; D.L. Cutchin, C. Tai, W.B. White; NSF; "Implementation of the WOCE VOS Program in the Pacific High-Resolution Sections: SF-Honolulu- Valdez"; May 26, 1989.

891508; J.H. Natland, E.L. Winterer; NSF; "Geologic and Geophysical Studies of Mesozoic Guyots in the NW Pacific"; May 30, 1989.

891512; L.M. Dorman, J.A. Hildebrand; NSF; "Geophysical Tests of Petrologic Models for the Axial Magma Chamber at the EPR: 9°-10°N (Collaborative Project)"; June 5, 1989.

891513; E. Brinton; NSF; "Small Scale Distribution and Population Dynamics in Spatially Complementary Coastal Zooplankton Species"; May 31, 1989.

891514; O. Holm-Hansen; NSF; "Effects of O3-Related Increased UVB Fluences on Photosynthesis and Viability of Phytoplankton in Antarctic H2O"; June 8, 1989.

891516; P.K. Dayton; NSF; "The Role of In Situ Productivity, Advection, and Microbial Activity Organizing Contrasting Benthic Communities at McMurdo Sound, Antarctica"; June 14, 1989.

891517; M.M. Mullin; OSU; "Photosynthesis and Community Structure of Phytoplankton in Filaments off CA"; n.d.

891518; F.N. Spiess; ONR; "Borehole Supplemental Ship Request and Remainder of FY89 Needs"; June 9, 1989.

891519; J.J. Sullivan; NOAA; "Resource Enhancement Activities in UCSG"; June 2, 1989.

891520; T. Nogami; DOI; "Seismic Response Performance of Offshore Pile Foundations"; June 5, 1989.

891521; D.T. Sandwell; NASA; "Geodynamic Applications of GEOSAT/ERM Altimetry"; n.d.

891524; R.J. Seymour; DBW; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; June 5, 1989.

891525; R.J. Seymour; WES; "Barbers Pt. Harbor Complex"; June 5, 1989.

891526; P.F. Lonsdale; NSF; "Collaborative Project: Structural Geomorphology of the Pacific-Antarctic EPR"; June 14, 1989.

891527; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; June 15, 1989.

891528; H. Staudigel; NGS; "Magnetic Properties of Seamounts: Field Studies in Fuerteventura and Reunion"; June 21, 1989.

891529; H. Craig; NSF; "WHP Section along 88°W and 150°W"; June 20, 1989.

891531; R.T. Guza; DBW; "Coastal Engineering Wave Data Applications to Harbor and Beach Erosion Problems"; n.d.

891532; R.J. Frouin, C. Gautier; NASA; "Studies of the Net Surface Radiative Flux from Satellite Radiances during FIFE's 1989 IFC"; July 11, 1989.

891533; J.H. Swift; NSF; "WHP Sections along 88°W and 150°W"; July 3, 1989.

891534; B. Cornuelle, D. Roemmich; NSF; "WOCE: Observations of the Seasonal Upper-Ocean Thermal Structure between HI and NZ from a Merchant Ship"; June 22, 1989.

Active Contracts and Grants; June 30, 1989.

891536; D.P. Rogers; NSF; "HI Rainband Project The Influence of the Marine Atmospheric Boundary Layer on the Formation and Maintenance of Rainbands"; July 18, 1989.

891537; B.M. Tebo; ONR; "Molecular and Genetic Studies of Mn (II) Oxidizing Hydrothermal Vent Bacteria"; June 22, 1989.

891538; J.J. Simpson; NASA; "Supplement to: Support of Satellite Oceanography Experiments"; June 22, 1989.

891539; J.A. Hildebrand, M.A. Zumberge; NSF; "Construction and Testing of an OBAGM"; June 23, 1989.

[Box 54]

891541; P.P. Niiler; ONR; "Studies of Upper Ocean Circulation"; July 3, 1989.

891542; C.S. Cox; ONR; "Cartesian Diver Observations"; August 18, 1989.

891543; W.R. Young; ONR; "Extremal Energy Flows and Coherent Structures (Geo- and Ageostrophic Instabilities of Fronts and Vortices)"; July 5, 1989.

891545; A.D. Chave, J.H. Filloux, D.S. Luther; ONR; "Horizontal Electrometer Deployments in SYNOP"; June 29, 1989.

891546; W.S. Hodgkiss; ONR; "VAST I Data Distribution and Array Element Localizations"; June 28, 1989.

891546R; W.S. Hodgkiss; ONR; "VAST I Data Distribution and Array Element Localizations"; April 12, 1989.

891548; F. Gilbert; J.A. Orcutt; NSF; "Constrained Optimal Solutions in Seismic Imaging"; July 5, 1989.

891549; R. Pinkel, J. Smith; USNRL; "R/P Flip Measurements of Sea Surface Reverberations"; July 6, 1989.

901000; C. de Moustier; ONR; "Investigation of Regional Seafloor Acoustic Backscatter Characteristics Using HYDROSWEEP"; July 6, 1989.

901001; F.H. Fisher, W.S. Hodgkiss; ONR; "R/P Flip Measurements of Sea Surface Reverberations"; n.d.

901004; F.H. Fisher, J.A. Hildebrand, W.S. Hodgkiss; ONR; "Array Measurements of Bottom Reverberations"; July 28, 1989.

901006; C. Gautier; NASA; "Global Air-Sea Energy and H₂O Exchanges: A Scientific Contribution to WETnet"; July 27, 1989.

901007; B.G. Mitchell; ONR; "Marine Particulate Absorption Techniques and Applications in the Study of Inherent and Apparent Optical Properties of the Ocean"; July 11, 1989.

901008; W.A. Newman; NSF; "Measurement of Genetic Divergence Using DNA Sequence Comparisons: A New Tool for Solving Problems in Barnacle Systematics and Biogeography"; September 14, 1989.

901009; G. Backus, C.G. Constable, R.L. Parker, P. Stark; NASA; "Constructing Core Fields Consistent with Geomagnetic and Geophysical Constraints"; July 18, 1989.

901010; J.J. Simpson; ONR; "Development of Real-Time Image and In Situ Data Analysis at Sea"; July 17, 1989.

901011; R.L. Parker, M.A. Zumberge; ONR; "Potential Field Inversion Using the Method of Ideal Bodies"; July 18, 1989.

901013; F.N. Spiess; JOI; "Supplement to: Development and Operation of a Wireline Re-Entry System"; July 19, 1989.

901014; C.P. de Moustier, G.G. Shor; TAMRF; "Real Time Navigation System for Use in ODP"; July 26, 1989.

901015; H.D.I. Abarbanel; DARPA; "Nonperiodic Broadband Signals: Signal Processing in Chaos"; August 25, 1989.

901016; D.L. Inman; ONR; "Ocean Science Educators Awards"; July 21, 1989.

901017; S.C. Webb; ONR; "Long Transect Seafloor Seismic Array: A Component of SAMSON"; n.d.

901018; M.G. Haygood, B.M. Tebo; ONR; "Molecular and Genetic Studies of Mn (II) Oxidizing Hydrothermal Vent Bacteria"; July 24, 1989.

901019; R.J. Seymour; NASA; "Optimum FTIR System Design"; July 26, 1989.

901020; R.W. Johnson; ONR; "E/O SYS5 Field Unit 9"; August 7, 1989.

901021; R.F. Weiss; WHOI; "WOCE CFC Quality Control"; August 1, 1989.

901022; M.G. Haygood; GRCP; "Investigation of Population Structure in the Harbor Porpoise, *Phocoena phocoena*, Using mtDNA"; July 27, 1989.

901023; K.J. Voss; ONR; "Ship Support for the Investigation of the Closure Problem in Ocean Optics"; July 28, 1989.

901024; B. Cornuelle, R.A. Knox, W.H. Munk, P.F. Worcester; UW; "Single Slice Tomography"; August 8, 1989.

901025; E.D. Goldberg; ONR; "Marine Colloids"; August 8, 1989.

901026; L.M. Dorman, J.A. Hildebrand; ONR; "Studies of the Generation of Low-Frequency Seismic Noise by Ocean Waves"; September 1, 1989.

901027; D.R. Cayan; DBW; "Analysis of Weather and Climate Variability along Coastal S CA"; August 8, 1989.

901028; R.T. Guza; ONR; "Surface Gravity Waves and Ambient Microseismic Noise"; August 7, 1989.

901030; S.A. Jenkins; ONR; "Scattering of Surface Gravity Waves by Arrays of Tetrahedrons"; August 8, 1989.

901031; J. Namias; DWR; "CA Precipitation Forecast Research"; August 11, 1989.

901032; J.W. Hawkins; NSF; "Petrologic-Tectonic Evolution of the Lau Basin"; August 9, 1989.

901033; L. Tauxe; NSF; "Collaborative Project: Chronostratigraphy of the Eureka Sound Group at Strand Fiord, Axel Heiberg Island, NWT, Canada"; August 9, 1989.

901034; R. Smith; NASA; "Bio-Optics, Photoecology, and Remote Sensing"; August 9, 1989.

901035; K.M. Watson; JHU; "Borehole Supplement for the Remainder of FY89 Needs"; August 14, 1989.

901036; Y. Bock; NSF; "Geodetic Investigation of Oblique Plate Convergence in Sumatra"; August 7, 1989.

901037; J. Minster; NASA; "Plate Motions and Deformations from Geologic and Geodetic Data"; August 14, 1989.

901038; T.L. Hayward; ONR; "Filaments in the CA Current: Effects upon Primary Production"; August 15, 1989.

901039; G.G. Shor, J. Williams; NSF; "Shipboard Scientific Support Equipment"; August 31, 1989.

901040; G.G. Shor, J.H. Swift, D. Wirth; NSF; "Oceanographic Instrumentation"; August 31, 1989.

901041; P.E. Collard; NASA; "Parallel ADA Benchmarks for the SVMS"; August 17, 1989.

901042; D. Lal; NSF; "Dynamics of P in the Upper Ocean: Applications of Cosmogenic ³²P and ³³P as Tracers"; August 14, 1989.

901043; R.J. Seymour; WES; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; August 15, 1989.

901045; G.W. Lugmair, J.D. Macdougall; NSF; "Marginal Basin Basalts: Isotopic Studies Bearing on Magma Genesis and Source Evolution"; August 17, 1989.

901046; J.H. Swift; ONR; "Arctic Circulation Studies"; August 18, 1989.

901048; B. Cornuelle, R.A. Knox, W.H. Munk, P.F. Worcester; ONR; "Moving Ship Tomography"; March 30, 1990.

901050; A.J. Harding, J.A. Orcutt; NSF; "Improvements to Seismic Processing Capabilities on the SDSC CRAY and R/V Thomas Washington"; August 31, 1989.

901052; L. Armi; ONR; "Stratified and Rotating Hydraulics"; August 18, 1989.

901053; B.B. Ward, P.M. Williams; DOE; "Role of Dissolved Organic C, N₂ and CH₄ in the Cycling of Organic Matter in S CA Coastal Basins"; August 21, 1989.

901054; J.L. Reid; WHOI; "Quality Control for the WHP"; August 25, 1989.

901055; M.G. Haygood; ONR; "Flashlight Fish Symbiosis"; August 22, 1989.

901056; J.M. Gieskes; NSF; "A Study of the Hydrothermal Alterations of Surface Sediments in Guaymas Basin Gulf of CA"; September 1, 1989.

901057; J.M. Gieskes; NSF; "Multiple Sampling of DSDP/ODP Borehole H₂O for Geochemical Studies"; September 7, 1989.

901058; R.T. Guza; DBW; "Island Sheltering Measurements and Models of Coastal Waves"; n.d.

901059; R.T. Guza; DBW; "S CA Wave Data Analysis: Past and Future"; n.d.

901060; S.A. Jenkins; DBW; "Harbor Breakwater Wave Overtopping"; n.d.

901063; R.J. Seymour; WES; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; n.d.

901064; M. Tarokh; UNM; "Neural Network Algorithms for Redundant Manipulators on Mobile Platforms"; n.d.

901065; P.M. Williams; NSF; "Investigations of the Marine Organic C Cycle in the N Atlantic Ocean"; September 6, 1989.

901066; J.A. Orcutt; ONR; "Seafloor Pressure Array Studies at ULF"; August 31, 1989.

901069; C. Gautier; NASA; "Remote Sensing of Heat and Fresh H₂O Exchanges in the Tropical Pacific"; September 8, 1989.

901071; R.F. Weiss; NGS; "Physical and Chemical Studies of Lake Baikal"; September 7, 1989.

901072; P.P. Niiler; NSF; "TOGA Pan-Pacific Surface Current Study"; September 25, 1989.

901073; C.B. Lange, A. Soutar; NSF; "Seasonal Variability of Particle Flux and Bottom Sedimentation in Relation to Regional Climate: SB Basin"; October 16, 1989.

901074; M. Tarokh; NI; "Neural Net Path Planning and Digital Adaptive Control of Robot Manipulators"; September 12, 1989.

901075; L. McFadden; NASA; "Bias Analysis of the Near-Earth Asteroid Population"; September 18, 1989.

901076; D.T. Sandwell; NSF; "Transition of Ridge Axis Gravity with Spreading Rate: The Effect of a Weak Lower Crust"; September 21, 1989.

901077; D.S. Luther; NSF; "Pacific Island Data Analyses"; September 25, 1989.

901078; E.A. Frieman; ONR; "Administrative Cost and Ship Time for Ocean Studies"; September 14, 1989.

901079; D.S. Luther; NSF; "Dynamical Analysis of Barotropic Oceanic Currents"; September 22, 1989.

901080; H. Craig; NSF; "CH₄, He, and Trace Gases in the Greenland and Antarctic Ice Sheets"; October 23, 1989.

901082; G.G. Shor; NSF; "Ship Operations (1st Year of a 3 Year Grant)"; September 27, 1989.

901083; C.D. Winant; EGGOS; "Additional Current Meter Deployments in Support of N CA Coastal Circulation Study (EG&G #8630)"; n.d.

901084: A.D. Chave, J.H. Filloux; NSF; "EM and Pressure Oceanographic Instrumentation Upgrading and Development"; September 26, 1989.

901085: S. Chen, J.O. Roads; NSF; "Linear Analysis of Nonlinear Models and Large-Scale Numerical Weather Predictions"; September 18, 1989.

901085R1: S. Chen, J.O. Roads; NSF; "Linear Analysis of Nonlinear Models and Large-Scale Numerical Weather Predictions"; March 15, 1990.

901087: K.L. Smith; NSF; "Temporal Variation in Deep-Sea Benthic Boundary Layer Communities: Long Time-Series Measurements"; September 18, 1989.

901088: A.J. Kalmijn; ONR; "Biophysics of Electroreception Workshop"; September 17, 1989.

901089: A.A. Yayanos; NSF; "Marine Environment Levels of DNA Photoproducts and of DNA Repair Capacity as Indices of Spatial and Temporal Variability in Solar UV Damage to Marine Ecosystems"; September 18, 1989.

901090: D. Wirth; NSF; "Technicians"; September 27, 1989.

901091: R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "OAT in the Greenland Sea"; October 9, 1989.

901092: L. Armi; NSF; "The Mediterranean Outflow Seeding Experiment: Meddy Formation"; September 21, 1989.

901093: R.T. Guza; ONR; "Additional Task Support of 'Bathymetric Control of the Nearshore Wave Climate: Field Measurements'"; n.d.

901094: V.D. Vacquier; RISC; "Postgraduate Research"; September 21, 1989.

901095: H. Staudigel, L. Tauxe; NSF; "Seamount Magnetization"; September 27, 1989.

901096: G.W. Lugmair, J.D. Macdougall; NSF; "Marginal Basin Basalts: Isotopic and Chemical Studies in the Lau Basin"; September 27, 1989.

901098: P. Lonsdale, C. de Moustier, G.G. Shor; NSF; "A SeaBeam 2000 Multibeam Echo Sounder for R/V Melville"; September 29, 1989.

901099: L. Armi; NSF; "Lab Experiments on Multilayer and Continuously Stratified Flows"; September 26, 1989.

901100: J.L. Hakanson; NSF; "Condition and Growth Rate of Individual Anchovy Larvae in Contrasting Hydrographic Environments"; September 25, 1989.

901101: A.G. Dickson, J.H. Weare; LLNL; "Development of Models for Use in the Assessment of Waste Repository Performance"; October 13, 1989.

[Box 55]

901102: G.L. Kooyman; NSF; "Diving Behavior of the Leatherback Sea Turtle in Deep H₂O Habitats"; September 26, 1989.

901103: O. Holm-Hansen; NOAA; "Phytoplankton Studies in Support of the US AMLR Program, January-February 1990"; September 26, 1989.

901105: D.P. Rogers; NSF; "A Numerical Study of the Variability of the Cloud-Capped Marine Atmospheric Boundary Layer"; January 5, 1990.

901106: P. Dayton, M. Tegner; NSF; "Patterns of Disturbance, Reproductive Effort and Succession across a Depth Gradient in a S CA Kelp Forest"; September 26, 1989.

901107: C. Gautier; NOAA; "Studies of Surface Solar Irradiance in the Tropical Pacific for TOGA"; October 3, 1989.

901108: V.C. Anderson; LL; "Enhancement of the RUM III Vehicle for Mn Crust Mineral Characterization"; September 25, 1989.

901110: W.H. Berger; NSF; "Application of Kriging to Paleoproductivity Studies"; September 28, 1989.

901111: A.J. Kalmijn; ATTBL; "EM Fields and Shark Bite"; September 28, 1989.

901112: J.A. Orcutt; ONR; "Instrument Construction and Modification, Field Testing, and Analysis Program for LSAP/LFASE"; October 12, 1989.

901113: E. Brinton, J.A. McGowan; NSF; "A Basis for the Study of Ecosystem Structural Changes in the Pelagic Realm"; October 3, 1989.

901114: M. Huntley, B.G. Mitchell; ONR; "Zooplankton Grazers as Transformers of Ocean Optics"; September 27, 1989.

901115: T.P. Barnett; NSF; "Studies of Global Climate Dynamics and Predictability"; October 3, 1989.

901116: J. Berger; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; October 2, 1989.

901118: C. de Moustier, P. Lonsdale, G.G. Shor; ONR; "SeaBeam 2000 Multibeam Echo Sounder for R/V Melville"; October 5, 1989.

901119; P. Lonsdale, C. de Moustier; ON; "SeaBeam 2000 Multibeam Echo Sounder for R/V Melville"; September 28, 1989.
Active Contracts and Grants; September 30, 1989.

901121; R.W. Johnson; ONR; "E/O SYSS Camera, Hardware Implementation, and Development CFLOS Prediction Techniques of Short Term"; October 10, 1989.

901122; D.L. Cutchin, W.B. White; NOAA; "Continuation of the SIO VOS Program"; October 10, 1989.

901122R2; D.L. Cutchin, W.B. White; NOAA; "Continuation of the SIO VOS Program"; April 4, 1990.

901123; S. Constable, A. Duba; NSF; "Electrical Conductivity of Mantle Rocks to 1500C"; October 23, 1989.

901124; D. Wirth; NSF; "Supplement to Technician Support for SIO Ships"; October 30, 1989.

901125; F.H. Fisher, W.S. Hodgkiss; ONR; "FLOSS Experiment Support"; October 25, 1989.

901126; W.S. Hodgkiss; ONR; "VLF Ambient Noise Experiment"; March 9, 1990.

901127; S. Constable; IRIS; "EM Studies in Kirghizia"; October 16, 1989.

901128; W.S. Hodgkiss; ONR; "LVLA Experiment Support and Noise Analysis"; October 18, 1989.

901129; V.C. Anderson, R.J. Seymour; NSF; "RUM III Seafloor Work System Improvements"; November 14, 1989.

901130; D.T. Sandwell; NASA; "Correlation of Elevation and Surface Deformation: Gravitational Sliding of a Thin Lithosphere or Crust?"; October 19, 1989.

901131; D. Agnew, J.A. Orcutt, H. Staudigel; NSF; "Development and Testing of a Submarine Tiltmeter for Deformation Studies at Mid-Ocean Ridges"; October 26, 1989.

901132; J.A. Hildebrand; ONR; "Array Engineering"; October 19, 1989.

901133; C. Tai; NASA; "An Investigation by Satellite Altimetry into the Temporal and Spatial Variability of the Transport of W Boundary Currents and the Antarctic Circumpolar Current"; October 19, 1989.

901135; D.W. Wilkie; IMS; "1990 General Operating Support Grant Funds"; October 23, 1989.

901136; J.L. Bada; NASA; "Cosmogeochemical Studies of Polycyclic Aromatic Hydrocarbons in Meteorites and Cretaceous/Tertiary Boundary Sediments"; October 23, 1989.

901137; J.H. Natland, E.L. Winterer; NSF; "Geologic and Geophysical Studies of Mesozoic Guyots"; October 26, 1989.

901139; C.D. Keeling; DOE; "Oceanic CO2 Measurements for the WOCE Hydrographic Survey in the Pacific Ocean, 1990-91: Shore Based Analyses during Legs 1-3"; November 14, 1989.

901141; H. Staudigel; ACS; "Rb/Sr Isotope Systematics in Pore H2O and Marine Sediments: Alterations of Volcanic Ash and Ionic Exchange with Layer Silicates"; November 8, 1989.

901142; G.G. Shor; ONR; "SeaBeam/SeaMARC II Studies of the EPR: Companion Proposal to One by Dr. K.C. Macdonald"; November 1, 1989.

901143; W.H. Thomas; NSF; "Continuing Lab Studies on the Effects of Small-Scale Turbulence on Marine Dinoflagellates"; November 6, 1989.

901144; T. Nogami; SNL; "Effects of Offshore Environment on Seismic Response of Soil Deposits ad Pile Foundations (Supplement)"; n.d.

901145; A.E. DeBevoise; EFRI; "Effect of Differences in Chemical and Physical Venting on the Physiology and Ecology of Hydrothermal-Vent Symbioses"; October 30, 1989.

901146; R.A. Knox, P.P. Niiler; NSF; "Lagrangian Dynamics and Thermodynamics of Cold H2O Filaments in Tropical Instability Waves"; November 10, 1989.

901148; C. de Moustier; UCSB; "Quantitative Assessment of the Slope Resolution of Seafloor Mapping Systems"; November 22, 1989.

901150; W.B. White; ONR; "Preliminary Analysis of Coupled Mesoscale Air-Sea Interaction in the NW Atlantic"; November 30, 1989.

901151; C.D. Keeling; DOE; "Oceanic CO2 Measurements for the WOCE Hydrographic Survey in the Pacific Ocean, 1990-91: Shipboard Analyses during Leg 3"; November 14, 1989.

901152; P.F. Lonsdale; JOI; "Continental Rifting and Initial Seafloor Spreading at the Mouth of the Gulf of CA"; November 10, 1989.

901153; T. Nogami; CKRP; "Nonlinear Analysis of Soil-Pile System"; November 10, 1989.

901154; N.D. Holland; NSF; "Final Structural Studies of Cephalochordate and Hemichordate Development: Generation of New Characters for Cladistic Analysis of Chordate Relationships"; November 13, 1989.

901155; R.L. Fisher; UTA; "Compilation of Topographic, Magnetic, and Geophysical Data from the Indian Ocean: I. Topography"; January 18, 1990.

901156; J.A. Tarduno; NSF; "Paleomagnetic and Rock Magnetic Tests for 'Inclination-Error' in Atlantic Deep-Sea Sediments"; November 28, 1989.

901157; J.A. Tarduno; NSF; "Magnetostratigraphic Investigation of Mid-Cretaceous Pelagic Limestone Sections from the Umbrian Apennines and Lombardian Basin (N Italy)"; November 28, 1989.

901159; T.G. Masters, P.M. Shearer; NSF; "Global Mantle Structure from Long-Period Body Waves"; November 27, 1989.

901160; J.H. Swift; NSF; "Hydrographic Support for WHP Line P17N"; November 21, 1989.

901162; V. Bhargava, J.B. Graham, R. Shabetai; NSF; "Shark Heart Function and Hemodynamics"; November 21, 1989.

901163; Y. Bock; NSF; "Comparison of GPS and Historical Triangulation Data for Mapping Crustal Strain across the Great Sumatran Fault System"; November 28, 1989.

901164; F. Gilbert, G. Masters; NSF; "Large Scale Aspherical Earth Structure"; November 28, 1989.

901165; J.H. Swift; NSF; "Hydrographic Support for WHP Line P14N"; November 22, 1989.

901168; C.G. Constable, L. Tauxe; NSF; "The Resolving Power of Marine Sediments for Paleosecular Event Studies"; November 29, 1989.

901169; A.J. Spivack, H. Staudigel; NSF; "B Isotopic Composition of the Troodos Ophiolite"; November 22, 1989.

901171; J.A. Hildebrand, W.S. Hodgkiss; ONR; "Acoustic Reverberation Experiment Planning"; November 21, 1989.

901172; A. Sturz; JOII; "Chemical Composition of Interstitial H₂O and Chemical and Mineralogical Composition of Sediments and Basement Vein Filling Materials from the Japan Sea"; November 22, 1989.

901175; M.A. Zumberge; NSF; "Continued Absolute Gravity Measurements in CA"; November 27, 1989.

901176; W.H. Fenical; NSF; "Chemical Defense in Marine Organisms"; January 8, 1990.

901180; J.W. Hawkins, J.D. Macdougall; NSF; "Crustal Evolution of N Luzon; Transition from Island Arcs to Micro-Continent"; November 22, 1989.

901181; T.D. Herbert, E.D. Goldberg; NSF; "Cretaceous-Mid Tertiary Record of Elemental C Deposition at the Gubbio Section"; November 30, 1989.

901182; G. Masters; USGS; "Coherence of Waveforms from Clustered Aftershocks of the Loma Prieta Earthquake"; November 28, 1989.

901183; N. Bray, D. Roemmich; NSF; "The Samoan Passage Experiment WHP Line P21N"; November 27, 1989.

901184; W. Hodgkiss; ONR; "Localization Performance Study"; n.d.

901185; W.S. Hodgkiss; ONR; "Arctic Ambient Noise"; n.d.

901186; W.R. Young; NSF; "Topics in Large Scale Circulation Theory (ABR Proposal)"; December 5, 1989.

901188; V.C. Anderson, G.D.F. Wilson; NOAA; "Mn Nodule Mining Impact Investigations"; November 30, 1989.

901189; P.P. Niiler; ONR; "Large-Scale Mean Convergence in the Mixed Layer of the Canary Basin as Determined from Lagrangian Drifters"; December 5, 1989.

901189R; P.P. Niiler; ONR; "Large-Scale Mean Convergence in the Mixed Layer of the Canary Basin as Determined from Lagrangian Drifters"; December 19, 1991.

901190; A. Soutar; UCR; "Long-Term Perspective on Transboundary Fishery Resources and the Implication for Binational Policy"; November 10, 1989.

901191; G.G. Shor; WHOI; "Seismic Tomography Experiment Support Subcontract"; December 1, 1989.

901192; F.N. Spiess; NASA; "Deep Ocean Benchmarks for GPS Geodesy"; January 12, 1990.

901195; A.J. Kalmijn; ATTBL; "EM Fields and Shark Bite"; December 5, 1989.

901197; W.A. Newman; NSF; "Measurement of Genetic Divergence Using DNA Sequence Comparisons: A New Tool for Solving Problems in Barnacle Systematics and Biogeography"; December 6, 1989.

901199; D.H. Bartlett; NSF; "Pressure Regulation in Deep-Sea Bacteria"; December 6, 1989.

901200; C. Gautier; NASA; "AIRS: Calibration and Ocean Surface Radiation Budget Computations"; December 14, 1989.

901201; W.R. Riedel; NSF; "Expert Systems for Paleontology and Stratigraphy"; December 20, 1989.

901202; J. Berger; TG; "Chinese Seismic Network Continuous Data Archive"; December 12, 1989.

901204; D.P. Rogers, W.B. White; ONR; "Preliminary Analysis of Coupled Mesoscale Air-Sea Interaction in the NW Atlantic"; December 12, 1989.

901205; B.G. Mitchell; ONR; "Supplemental Funds for CEAREX N00014-89-J-1639"; December 15, 1989.

901206; H. Craig; UU; "Continued Studies: ³He as an Indicator of the Terrestrial Exposure Age of Minerals"; December 18, 1989.

901207; M.A. Zumberge; NSF; "A Determination of the Newtonian Gravitational Constant in an Open-Pit Mine: Phase 1"; January 3, 1990.

901208; A. Sanfilippo; JOII; "Micropaleontological Reference Centers: Preparation and Distribution of Radiolarian Microscope Slides"; December 20, 1989.

901209; M. Hendershott; ONR; "Amendment to: 'Finestructure Generation and Decay in the Gulf of CA'"; n.d.

901210; D.T. Sandwell; NASA; "Geodynamic Applications of GEOSAT/ERM Altimetry"; December 20, 1989.

901212; D. Lal; NSF; "Feasibility of Determining Accumulation (and Ablation Rates) of Ice in the Past Using Cosmogenic In Situ ¹⁴C"; December 22, 1989.

901213; J.J. Simpson; NASA; "Support of Satellite Oceanography Experiments"; December 21, 1989.

901214; S. Chen, J.O. Roads; LANL; "Diagnostics of the LANL GCM"; January 10, 1990.

901215; S.C. Webb; ONR; "Constraints on Elastic Structure from Long Period Pressure and Displacement Measurements"; January 6, 1990.

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901216; W. Fenical; BMC; "Marine Microorganism Isolation and Evaluation Program"; December 26, 1989.

Active Contracts and Grants; December 31, 1989.

901217; W.S. Hodgkiss; ONR; "Matched Field Processing"; January 3, 1990.

901218; P. Hennkart; NSF; "Enhancement and Maintenance of the Marine Seismic Processing System SIOSEIS"; January 19, 1990.

901219; D.W. Wilkie; UERG; "Wave Machines and Benthic Grabs: CA Science Project"; n.d.

901220; S.C. Constable, J.A. Orcutt; NSF; "A Prototype Suite of Inexpensive OBH"; January 18, 1990.

901221; D.C. Agnew, Y. Bock, J. Minster; NASA; "PGGA"; February 20, 1990.

901222; J.D. Macdougall; NSF; "Investigation of a Technique for Dating Neovolcanic Ocean Ridge Basalts"; January 26, 1990.

901222R1; J.D. Macdougall; NSF; "Investigation of a Technique for Dating Neovolcanic Ocean Ridge Basalts"; July 11, 1990.

901223; J.P. Barry, P.K. Dayton; NSF; "Long-Term Investigation of Oceanographic Influences on Benthic Community Patterns in McMurdo Sound, Antarctica"; January 29, 1990.

901224; P. Dayton; PRRP; "Investigation of Fur Seal/Fisheries Interaction in the N Pacific"; January 11, 1990.

901226; R.T. Guza; ONR; "Bathymetric Control of the Nearshore Wave Climate Reflected Waves"; January 9, 1990.

901227; D. Bartlett; ONR; "Pressure Regulation in Deep-Sea Bacteria"; January 9, 1990.

901228; J. Minster; JPL; "Present-Day Crustal Motions in the India-Eurasia Collision Zone"; March 8, 1990.

901229; J.A. Orcutt; NSF; "Conference on Mathematical Geophysics, Kibbutz Ramat-Rachel, Israel"; January 10, 1990.

901230; D. Lal; EPRI; "A Critical Study of Factors Controlling Atmospheric pCO₂, Based on Studies of the Time Series of Atmospheric pCO₂, ¹⁴C, ¹³C and the Cosmogenic Nuclide ¹⁰Be"; February 7, 1990.

901231; J. Hildebrand, H. Staudigel; NSF; "Mantle Source Regions, Ages, and Marine Geology and Geophysics of Seamounts in the Magellan and Marshall Seamount Groups"; January 29, 1990.

901232; J.A. Tarduno, L. Tauxe; NSF; "Pacific Plate Motion Using Declination-Only Data from Red Clays: A Feasibility Study"; January 19, 1990.

901234; J.N. Brune, G. Masters, F.L. Vernon; USGS; "Coherence and Empirical Green's Functions from ANZA Data"; January 24, 1990.

901235; C. Gibson, W.H. Thomas; NSF; "Effects of Small-Scale Turbulence on Marine Phytoplankton: Lab Studies"; January 30, 1990.

901236; H. Felbeck; NSF; "Ecophysiological Studies on the Hydrothermal Vent Tubeworm, *Riftia pachyptila*"; January 12, 1990.

901237; Y. Chen; NSF; "Magmatism at Mid-Ocean Ridges: Melt Production beneath the Ridge Axis and its Implications to the Oceanic Crustal Thickness and the Composition and Chemistry of the MORB"; January 22, 1990.

901239; C. Gibson, W.H. Thomas; NSF; "Effects of Small-Scale Turbulence on Marine Phytoplankton: Field Studies"; January 30, 1990.

901241; Y. Bock; USGS; "A Strategy for Obtaining High Spatial Resolution of Crustal Deformation Using GPS and Precise Photogrammetry"; January 16, 1990.

901242; P.M. Shearer; USGS; "Quantitative Analyses of Shear-Wave Polarizations and Inversion for Shear- Wave Splitting Parameters"; January 17, 1990.

901244; S. Constable; USGS; "A Reference Magnetic Observatory near the S San Andreas Fault"; January 17, 1990.

901245; S. Constable; LANL; "The Electrical Conductivity of Olivine and Olivine-Rich Rocks"; January 25, 1990.

901246; J.B. Minster; USGS; "Stability of the M8 and CN Earthquake Prediction Algorithms"; January 17, 1990.

901248; D.C. Agnew; USGS; "Monitoring the S San Andreas Fault A Monument Anchoring Experiment"; January 22, 1990.

901249; D.C. Agnew; USGS; "PFGO: Comparative Studies and Geophysical Investigations"; January 22, 1990.

901250; Y. Bock, D. Rosenblatt; NSF; "Pre- and Postseismic Analysis of GPS and Trilateration Data at Loma Prieta"; January 23, 1990.

901251; R.C. Smith; NASA; "Bio-Optics, Photoecology, and Remote Sensing"; January 23, 1990.

901252; A.J. Harding, J.A. Orcutt; NSF; "MCS Reflection/OBS Tomography Study of the Cocos-Nazca Spreading Center 91°W-95°30'W"; January 31, 1990.

901253; M.M. Mullin; NSF; "Immigration, Emigration, and Population Dynamics of the Planktonic Copepod, *Alanus pacificus*, in the CA Current off S CA"; January 31, 1990.

901254; D. Cayan; UCR; "Sierra Nevada Runoff Fluctuations"; January 22, 1990.

901255; D. Bartlett; ONR; "Pressure Regulation in Deep-Sea Bacteria"; January 18, 1990.

901256; A.J. Harding, J.A. Orcutt; NSF; "A 2-Ship Multichannel Seismic Investigation of the EPR S of the Garret Fracture Zone"; February 9, 1990.

901257; H.D.I. Abarbanel; ONR; "Nonperiodic, Broadband Signals: Signal Processing in Chaos"; February 9, 1990.

901258; G.G. Shor; UW; "Ship Support for Dr. P. Johnson"; January 22, 1990.

901259; F.H. Fisher; ONR; "NOSC: Optical Propagation Experiment"; February 5, 1990.

901260; D.T. Sandwell, E.L. Winterer; NSF; "Geophysical Investigation of the Ontong Java Plateau and its Margins"; January 31, 1990.

901261; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic and Geochemical Investigations of Volcanism in the SW Pacific: Lau Basin and Tonga Arc"; January 30, 1990.

901262; S.C. Webb; SPAI; "Technical Assistance for the ULF/VLF SPAI Experiment off Coast of OR"; February 12, 1990.

901263; J.H. Natland; NSF; "Collaborative Project: Fracture Zone Hot-Spot Interactions along the Marquesas Fracture Zone"; January 26, 1990.

901264; R.L. Fisher; NSF; "Forearc Evolution and Seamount Subduction: Exploration of the Landward Slopes of the Tonga and Kermadic Trenches"; January 25, 1990.

901265; R.L. Parker; LANL; "Geophysical Search for Non-Newtonian Gravity"; January 26, 1990.

901266; C.E. Reimers, K.L. Smith; NSF; "Sediment Community O₂ Consumption and Particulate Organic Matter Flux in the Deep-Sea: Long Time-Series Measurements"; January 24, 1990.

901267; T.L. Hayward; NSF; "A Long-Term, High-Frequency Field Test of the Pulsed O₂ Probe System"; January 26, 1990.

901268; W.B. White; NOAA; "TOGA Indo-Pacific Thermal Data Management Facility (JEDA)"; January 26, 1990.

901269; W.S. Hodgkiss; ONR; "Comparison of VLA Ambient Noise Observations with ANDES Predictions"; January 29, 1991.

901270; J.J. Simpson; NSF; "Optical Disc Archiving and Networked Digital Browse/Ordering System for AVHRR Data"; January 30, 1990.

901271; P.P. Niiler; NSF; "TOGA Pan-Pacific Surface Current Study/Central Pacific Processes and Drifter Calibration"; January 26, 1990.

901272; D.H. Bartlett; DOHHS; "Pressure Regulation in Deep-Sea Bacteria"; January 26, 1990.

901273; G.G. Shor; NSF; "UNOLS Office"; January 30, 1990.

901274; A.D. Chave, J.H. Filloux; NSF; "A Synthesis of EM Soundings from the Pacific Seafloor"; February 1, 1990.

901275; N.E. Graham; NOAA; "Modeling the Tropical Coupled Ocean-Atmosphere System: A TOGA-COARE Pilot Study"; March 19, 1990.

901276; J.H. Swift; NSF; "Large Volume Sampling Equipment"; January 31, 1990.

901277; J.A. Orcutt; NSF; "The Internal Structure of the Clipperton Transform Fault"; February 23, 1990.

901278; A.A. Yayanos; DOHHS; "Role of PUFAs in Membrane Structure, Function, and Damage"; January 30, 1990.

901279; L.M. Dorman, J.A. Hildebrand, S.C. Webb; NSF; "Geophysical Investigations at the Megaplume Site: Seismicity, Seismic Velocity, and Density of Hydrothermal and Volcanic Systems on the S Juan de Fuca Ridge"; February 9, 1990.

901280; D.S. Luther; NSF; "Investigation of Dynamics and Energetics of the Upper Equatorial Pacific Using NORPAX, TROPIC HEAT, and EPOCS Datasets"; February 8, 1990.

901281; J.H. Natland; NSF; "Collaborative Project: Petrological Investigation of the Pacific-Antarctic EPR"; February 2, 1990.

901282; J.A. Orcutt; ONR; "Conference on Mathematical Geophysics, Kibbutz Ramat-Rachel, Israel"; February 1, 1990.

901283; J.A. Orcutt; DARPA; "Conference on Mathematical Geophysics, Kibbutz Ramat-Rachel, Israel"; February 1, 1990.

901284; J.A. Orcutt; NASA; "Conference on Mathematical Geophysics, Kibbutz Ramat-Rachel, Israel"; February 1, 1990.

901285; J.A. Orcutt; DOE; "Conference on Mathematical Geophysics, Kibbutz Ramat-Rachel, Israel"; February 1, 1990.

901286; J.B. Graham; NSF; "H2O-Tunnel Studies with Tuna at the Kewalo Basin, HI"; January 30, 1990.

901287; J.A. Orcutt; AFGL; "Modern Seismic Travel Time Tables and Station Corrections for P and S Waves"; February 16, 1990.

901288; T.D. Herbert; NSF; "Spectral Stratigraphy of DSDP and ODP Cores from the Equatorial Pacific"; February 7, 1990.

901290; F.M. Bingham; NSF; "Supplement to Support 'A Study of the Variability of the Heat Content of the N Pacific'"; March 23, 1990.

901291; M.J. Buckingham; ONR; "Analytic Modeling of Ocean Acoustic Propagation Realistic Sound Speed Profiles"; n.d.

901292; F.I. Tsuji; NSF; "Bioluminescent Systems in Apogonid Fishes from Taiwan"; February 12, 1990.

901293; J.B. Graham; RCO; "H2O Tunnel Studies with Tuna at the Kewalo Basin, HI"; February 8, 1990.

901295; J.L. Bada; RCO; "Stable Isotopes and Ecological Interactions in the Isle Royale Ecosystem"; February 5, 1990.

901296; J.R. Arnold; NASA; "Surface Chemical Composition for the Mars '94 Gamma Ray Experiment"; February 13, 1990.

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901298; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; February 20, 1990.

901299; M. Kastner; UERG; "The Transport of Chemical Components and Heat by Fluid Flow through Fissured and Porous Rocks of the Monterey Formation, CA"; February 22, 1990.

901300; J.M. Gieskes; UERG; "Low Temperature (800-1500C) Alteration of Sediments Caused by Hydrothermal Fluid Percolation"; February 20, 1990.

901301; F.L. Vernon; AFGL; "Analysis of Data Recorded by 3 Component Broadband and High Frequency Arrays"; February 23, 1990.

901302; J. Berger, H.K. Given, J.B. Minster, J.A. Orcutt, P.M. Shearer; AFGL; "Application of IRIS/IDA Stations in the USSR to Seismic Monitoring Research"; February 23, 1990.

901304; M. Moss; WMKF; "Instrumentation for the Mineral 'Green Rust' and its Magnetic Daughter Products"; February 27, 1990.

901305; S. Constable, R.L. Parker; DOE; "Improved EM Imaging for the Mapping of Hazardous Waste Contamination in Groundwater"; March 1, 1990.

901306R1; E.A. Frieman; NSF; "Renovation of Sverdrup Hall, UCSD, SIO"; July 13, 1990.

901307; G.W. Lugmair; NASA; "Isotopic, Chemical, and Mineralogical Investigations of Extraterrestrial Materials"; March 19, 1990.

901309 (UCSG-20); S. Broome, C. Currin, R. Gersberg, R. Langis, L.A. Levin, H. Paerl, G. Thayer, S. Williams, J. Zedler; NOAA; "Accelerating the Development of Ecosystem Function in Restored and Constructed Wetlands"; February 1990.

901310; G.M. Cailliet, J. Harvey, J.S. Oliver; EHRP; "Animal Use of Altered and Natural Salt Marshes: Experiments in Habitat Restoration"; n.d.

901311; R.E. Garrison, M. Kastner; RFI; "The Influence of Fluids on Maturation of Hydrocarbons, Their Trapping and the Origin of Natural Spills in Active Continental Margins"; February 28, 1990.

901314; T.L. Hayward; ONR; "Filaments in the CA Current: Effects upon Primary Production"; March 5, 1990.

901315; R.L. Salmon; ONR; "Progress in Fluid Dynamics: A Symposium Honoring J.W. Miles on his 70th Birthday"; March 8, 1990.

901316; R.S. Alberte; NOAA; "Environmental Control of Eelgrass (*Zostera marina* L.) Production in Natural and Restored Habitats"; n.d.

901317; D.C. Agnew, Y. Bock, J. Minster; NSF; "GPS Instrumentation for Crustal Deformation Monitoring in CA"; April 18, 1990.

901319; G.G. Shor; ONR; "Shiptime on the R/V Thomas Washington for Dr. C. Eriksen"; March 9, 1990.

901320; R.N. Edwards, S.C. Webb; NSF; "A Transient EM System for Seafloor Geologic Mapping"; March 15, 1990.

901321; R.C. Smith; NASA; "Bio-Optics, Photoecology and Remote Sensing"; May 4, 1990.

901322; L.M. Dorman; ONR; "Ambient ULF/VLF Noise Experiment Support"; n.d.

901323; B. Cornuelle, R.A. Knox, W.H. Munk, P.F. Worcester; UW; "Applied Tomography Experiment"; March 14, 1990.

901324; F. Azam; DOE; "Ship Operation in Support of CaBS"; March 30, 1990.

901326; A.G. Dickson, C.D. Keeling; NSF; "The CO₂ System in Seawater: The Certification of Standard Reference Materials for the Quality Control of Oceanic Measurements"; March 20, 1990.

901328; M.M. Mullin; NOAA; "Support of Coastal Seawater Salinity Temperature Measurements"; March 20, 1990.

901329; R.L. Salmon; NSF; "Progress in Fluid Dynamics: A Symposium Honoring J.W. Miles on his 70th"; March 21, 1990.

901331; J. Berger; IRIS; "Eurasian Seismic Studies Program"; March 29, 1990.

901332; N. Graham; CSI; "Modeling the Response of the CA Current System to Global Greenhouse Warming"; March 23, 1990.

901333; D. Lubin; CSI; "Antarctic Clouds and Atmospheric Radiation: A Study Using Satellite and Surface Radiometry"; March 29, 1990.

901334; M. Tarokh; CSI; "Motion Control of Autonomous Robots Using Neural Networks"; March 23, 1990.

901335; L. McFadden; CSI; "Calibration of Thermal IR Images of Comet Austin (1989c1)"; March 28, 1990.

901338; J.J. Simpson; CSI; "Satellite-Derived Estimates of CO₂ and O₂ in the CA Current"; March 23, 1990.

901339; C. Gautier; NASA; "Global Surface Radiation Budget Estimations from Satellite Data"; March 29, 1990.

901340; M. Kastner; UOM; "Construction of a System for the Analysis of ODP Drill Cores Containing Solid Clathrates by the Technique of Isothermal Decompression"; n.d.

901341; C. Gautier; CSI; "Bidirectional Reflectance Functions for Finite and Infinite Clouds"; April 2, 1990.

901343; J.A. Nichols; UCD; "Fluxes of Heavy Metals from Severely Contaminated Marine Sediments"; March 28, 1990.

901344; H. Staudigel; LLNL; "Alteration of MORB Glasses: Mobility of Trace Elements and Radionuclides"; April 10, 1990.

901345; C. Gautier; CSI; "The Origins of the Equatorial 'Dry Zone'"; March 30, 1990.

901346; J. Lancaster; CSI; "A Study of the Response of African Vegetation to Short-Term Climate Variation: Conversion of Decadal Time-Series of AVHRR/NDVI to C Flux"; March 30, 1990.

901347; R. Frouin; CSI; "Optimum Combinations of Visible and Near-IR Reflectances for Estimating the Fraction of Photosynthetically Active Radiation Intercepted by Plants"; April 2, 1990.

901348; R.C.J. Somerville; CSI; "Cloud-Radiation Parameterization for Climate Modeling"; March 30, 1990.

901349; L. Cheng, R.A. Lewin; NSF; "Assimilation and Transfer of N₂ between Prochloron and its Ascidian Hosts"; April 4, 1990.

901350; T. Nogami; UCD; "New Model of Mechanical- Chemical Dispersion for Toxic Contaminant Transport"; n.d.

901351; W.B. White; CSI; "Satellite Determined Height and Strength of Strong Marine Layer Inversions"; March 28, 1990.

901354; J.A. Orcutt; NSF; "Conference on Mathematical Geophysics, Kibbutz Ramat-Rachel, Israel"; March 30, 1990.

901355; D. Lal; LLNL; "Quantitative Age Dating of Soil Minerals Using Cosmogenic ¹⁰Be"; April 13, 1990.

901358; L.M. Dorman, J.A. Hildebrand; ONR; "Test of the New ONR OBS on the Juan de Fuca Ridge"; April 4, 1990.

901359; F.H. Fisher, J.A. Hildebrand, W.S. Hodgkiss; ONR; "Acoustic Reverberation"; n.d.

901360; F.H. Fisher, J.A. Hildebrand, W.S. Hodgkiss; DOE; "Large Aperture Vertical Array for Receiving Signals from Heard Island"; April 12, 1990.

901361; A.J. Kalmijn; ATTBL; "EM Fields and Shark Bite"; April 3, 1990.

901362; J.R. Arnold, K. Nishiizumi; LLNL; "Surface Exposure Age Dating: Applications to Earth Science Problems Using HSMS Techniques at LLNL"; n.d.

901363; S. Constable; LLNL; "Electrical Conductivity of Mantle Rocks to 1500°C"; April 4, 1990.

901364; G. Wu; JOII; "Planktonic Stable Isotope Stratigraphy and Preservation Stratigraphy of the W Equatorial Pacific (Ontong-Java Plateau), Site 805, the Last 3 Million Years"; April 11, 1990.

901365; D.C. Agnew; NASA; "Towards a Statistical Description of Tectonic Motions-Analysis of Crustal Dynamics Observations"; April 6, 1990.

901366; G.G. Shor; TDSI; "Use of R/V Robert Gordon Sproul"; March 5, 1990.

Active Contracts and Grants; March 31, 1990.

901367; R.C.J. Somerville; NSF; "Global Surface Source of Climate Reactive Gases"; April 16, 1990.

901368; D. Alexandrou, C. de Moustier; ONR; "Validation of Seafloor Acoustic Backscattering Models"; July 26, 1990.

901369; P.F. Lonsdale, C. de Moustier; ONR; "Processing and Analysis of SeaMarc II Data: (1) Fieberling Guyot and (2) Raw Phase Experiment in Norwegian-Greenland Sea"; July 26, 1990.

901370; L. McFadden; NASA; "Asteroid Surface Processes: Experimental Studies of the Solar Wind on Spectral Reflectance and Optical Properties of Asteroids"; April 15, 1990.

901371; C. de Moustier; LGO; "SeaMarc II Investigation of the N Norwegian-Greenland Sea"; April 11, 1990.

901372; C.D. Winant; EGGOS; "EG&G Subcontract Proposal: Analysis of Moored Observations Taken for the N CA Coastal Circulation Study"; n.d.

901373; N.A. Bray; EGGOS; "EG&G Subcontract Proposal: Analysis of Hydrographic Observations Taken for the CA Coastal Circulation Study"; n.d.

901374; C.E. Reimers, K.L. Smith; NSF; "Sediment Community O₂ Consumption and Particulate Organic Matter Flux in the Deep-Sea: Long Time-Series Measurements"; April 24, 1990.

901375; C. Lane; JOI; "High-Resolution Diatom Productivity Fluctuations in the W Equatorial Pacific: Ontong Java Plateau, Site 806, the Last 3 Million Years"; April 11, 1990.

901376; W.S. Hodgkiss; ONR; "Downslope Conversion"; July 26, 1990.

901378; J.A. Hildebrand, S.C. Webb; ONR; "Constraints on Crustal Structure from Long Period Pressure and Displacement Measurements on the Deep- Sea Floor"; July 26, 1990.

901381; F.N. Spiess; ONR; "Multi-Scale Studies of Seafloor Topography"; July 26, 1990.

901384; J. Berger, J.B. Minster; LLNL; "Spectral and Polarization of Lg Observed at IRIS/IDA Stations in the USSR"; April 12, 1990.

901385; J.M. Gieskes, S.C. Webb; NSF; "High- Resolution Survey of Escanaba Trough and Middle Valley in the Juan de Fuca Ridge System"; June 5, 1990.

901386; O. Holm-Hansen; NSF; "Photobiological Studies in Lake Tahoe"; June 7, 1990.

901387; D.P. Rogers; NSF; "GAGE Experiment Ocean Atmosphere Interactions in the Vicinity of the Gulf Stream"; April 18, 1990.

901388; L.M. Dorman; UW; "SIO Participation in Cascade WA Transect"; May 23, 1990.

901389; J.S. Jaffe; ONR; "Supplement to Ocean Optics, Ocean Imaging, and Optical Tomography"; April 13, 1990.

901390; J.J. Simpson; NOAA; "Improved Parameterization of the Radiative Fluxes and SST over the CA Current Using In Situ and Remotely- Sensed Observations"; April 24, 1990.

901391; F.H. Fisher; ONR; "R/P Flip Winch Upgrades"; n.d.

901392; F.H. Fisher; ONR; "R/P Flip Deferred Maintenance and Upgrades"; May 23, 1990.

901393; F.H. Fisher; ONR; "Flip II Concept Design"; n.d.

901394; J.R. Arnold; NASA; "Orbital Gamma Ray Experiment for Planetary Observer Missions"; April 16, 1990.

901395; G.D.F. Wilson; NSF; "Comparative and Evolutionary Morphology of Isopod Crustacean Genitalia"; April 14, 1990.

901397; J.R. Arnold, D. Lal; NSF; "Collaborative Research: Nuclear Studies of Continental Erosion Processes and Rates"; April 18, 1990.

901398; J.H. Swift; NOAA; "Large-Volume Sampling on the WOCE P19/16 Expedition"; April 1990.

901399; A.J. Spivack; NASA; "B Isotope Composition of Chondritic Meteorites"; April 19, 1990.

901400; P.F. Lonsdale, J.H. Natland; NSF; "Collaborative Project: Structure of Fast-Spread Ocean Crust Exposed in the Walls of Hess Deep"; April 18, 1990.

901401; J.A. Tarduno; JOII; "Paleomagnetic Investigation of Sediments and Basalts from Sites 803 and 807, Leg 130"; April 18, 1990.

901402; J. Tarduno, L. Tauxe; JOII; "Paleomagnetic Investigation of Plio-Pleistocene Dedicated Cores Sites 803, 805, and 806, Leg 130"; April 18, 1990.

901403; R.F. Weiss; NOAA; "CFC Collaboration and Comparisons in Support of the Freon Tracer Program: The 170°W Section"; April 17, 1990.

901404; J.O. Roads; NOAA; "Prediction and Diagnosis of Atmospheric Moisture and Surface Hydrology Variations over NA"; April 19, 1990.

901407; J.O. Roads; NOAA; "The Experimental Climate Forecast Center at SIO"; April 24, 1990.

901408; D.R. Cayan; NOAA; "N Atlantic Salinity Analysis"; April 25, 1990.

901409; C. Lange, A. Soutar; NOAA; "Regional Climate Change and Marine Biota in the CA Bight: An Approach to Understanding How Info on Interannual Climate Change is Transferred to High Resolution Sediment Records"; April 23, 1990.

901410; B.G. Mitchell; NSF; "Particulate Absorption Analysis in Support of Characterization of the Undersea Photoenvironment at the USJGOFS HI Ocean Time-Series"; April 23, 1990.

901411; J.H. Swift; NOAA; "Large-Volume H2O Sampling Equipment"; April 1990.

901412; A.G. Dickson; NSF; "The Calibration of Indicator Dyes for the Measurement of Oceanic pH"; June 1, 1990.

901414; W.H. Berger; JOI; "Benthic Foraminifera in Sites 805 and 806, Ontong Java Plateau: Abundance and Isotopic Composition in the Last 1 Million Years"; April 25, 1990.

901415; D.L. Cutchin; NOAA; "Operation of the Pacific VOS XBT Program"; April 27, 1990.

901416; A. Miller, W.B. White; NOAA; "Climate Change in the Poleward Transport of Oceanic Heat Content in the Pacific Ocean Associated with ENSO"; May 1, 1990.

901418; D.L. Cutchin, W.B. White; NOAA; "Data Ambassador Project VOS"; April 27, 1990.

901419; C.S. Cox; NOAA; "Seafloor Voltage Monitoring of Ocean Circulation"; April 27, 1990.

901422; T. Baumgartner, A. Soutar; NOAA; "Translation of Proxy Variables from the Gulf of CA Varve Record to Indices of Global Climatic Change"; April 26, 1990.

901423; D.C. Agnew, Y. Bock, J. Minster, M.A. Zumberge; NOAA; "Establishing a Highly Precise Vertical Reference for Monitoring Sea Level Change"; April 27, 1990.

901425; R.J. Frouin, R.C.J. Somerville; NOAA; "Trace Gas Emissions to the Atmosphere by Biomass Burning in the W African Savannas: Annual and Interannual Variability Using SRS and Ecosystem Modeling"; May 2, 1990.

901426; U. Herzfeld; NSF; "Multivariate Geostatistical Analysis and Evaluation of Bathymetrical, Geophysical, and Geological Data"; May 18, 1990.

901427; B. Minster; NASA; "Plate Motions and Deformation from Geologic and Geodetic Data"; May 2, 1990.

901428; A.D. Chave, J.H. Filloux; NSF; "EMOC Trans- Hudson OR and SE Appalachians"; May 25, 1990.

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901429; G. Arrhenius; NSF; "Evolution of Biogenic N2 Compounds under Archaean Conditions"; May 30, 1990.

901430; J.W. Hawkins; NSF; "Evolution of Backarc Basin Crust and Mantle: Lau Basin and Mariana Trough"; May 30, 1990.

901431; F.H. Fisher; ONR; "NAVOCEANO Slack Tensioner Support"; May 7, 1990.

901433; G.G. Shor; NSF; "Seminar at SIO Following Mixed-Commission at UCSD"; May 7, 1990.

901434; R.E. Shadwick; DOHHS; "Molecular Organization in Mutable Collagenous Tissues"; May 4, 1990.

901435; M.A. Zumberge; NSF; "Continued Absolute Gravity Measurements"; May 25, 1990.

901436; M.A. Zumberge; NSF; "Construction and Testing of a New AGM"; May 23, 1990.

901438; H. Staudigel; NGS; "Magnetic Anisotropy of Sheeted Dikes: Mid-Ocean Ridge Tectonic Implications"; May 8, 1990.

901439; J.W. Hawkins; SAC; "Lau Basin Crustal Fabric; Continuation of Synthesis of SeaBeam and Magnetic Data near Proposed ODP Sites LG 9, 10 on Leg 135"; June 4, 1990.

901440; D. Lal; NSF; "Nuclear Studies of Accumulating and Ablation Ice Using Cosmogenic ^{14}C "; May 29, 1990.

901441; K.M. Watson; ONR; "Project 1: Energy Exchange between Surface and Internal Waves. Project 2: Soliton-Like Wave-Packets in the Wake of a Ship"; July 26, 1990.

901442; T. Nogami; NSF; "Countermeasures Against Liquefaction for Designing and Retrofitting Highway Bridge Foundations"; May 11, 1990.

901443; R.J. Frouin; UCSB; "AIRS: Calibration and Global Surface Radiation Budget Computations"; May 14, 1990.

901444; W.R. Riedel; ACS; "Applying Expert System Technology to Assist in Fossil Identifications"; May 14, 1990.

901445; F.N. Spiess; JOII; "Development and Operation of a Wireline Re-Entry System: Phase B Construction"; n.d.

901445R1; F.N. Spiess; JOII; "Development and Operation of a Wireline Re-Entry System: Phase B Construction"; August 2, 1990.

901446; J.A. Tarduno; NSF; "Paleomagnetic Investigation of Fast Oceanic Plate Velocities Recorded in the Cretaceous Rocks of Hokkaido (N Japan)"; May 29, 1990.

901447; C. Constable, L. Tauxe; NSF; "Bootstrap Statistics for Paleomagnetic Data"; May 17, 1990.

901448; J.W. Hawkins; NSF; "Crustal Evolution of N Luzon; Transition from Island Arcs to Micro-Continent"; May 29, 1990.

901449; P. Cessi; NSF; "W Boundary Layer Dynamics and the Closure of the Wind Driven Ocean Circulation"; May 18, 1990.

901450; B. Cornuelle, R.A. Knox, W.H. Munk, P.F. Worcester; ONR; "Moving Ship Tomography"; May 17, 1990.

901451; D.C. Agnew, Y. Bock; NSF; "Measurement and Interpretation of Crustal Deformation in an Active Fault Zone: Integrating Techniques and Analysis"; May 30, 1990.

901452; G.L. Kooyman; NSF; "Foraging Biology of the Leatherback Sea Turtle"; May 23, 1990.

901453; R.E. Shadwick; TWF; "Mechanical Studies on Collagen Fibers: The Relation of Age and Stress History to the Structure and Tensile Properties of Tendons"; June 11, 1990.

901455; H. Felbeck; NSF; "Molecular Phylogeny of Bacterial Symbionts from Hydrothermal Vents"; May 23, 1990.

901456; Y. Chen; NSF; "Magmatism at Mid-Ocean Ridges: Melt Production beneath the Ridge Axis and its Implications to the Oceanic Crustal Thickness and the Composition and Chemistry of the MORB"; May 18, 1990.

901457; W.S. Hodgkiss; ONR; "Downslope Array Data Analysis"; May 21, 1990.

901459; J.R. Arnold, K. Nishiizumi; NSF; "Surface Exposure History of Antarctic Mountains during the Pleistocene"; May 29, 1990.

901460; D. Bartlett, G.N. Somero; NSF; "Molecular Basis of Enzymatic Adaptation to Pressure"; May 23, 1990.

901461; W.H. Berger; NSF; "The Record of Global Change in the W Equatorial Pacific: The Last 3 Million Years"; May 29, 1990.

901462; H. Staudigel; NSF; "Magnetic Anisotropy of Sheeted Dikes in the Troodos Ophiolite"; May 29, 1990.

901463; T.G. Masters, P.M. Shearer; NSF; "Resolving Inner Core Structure Using Body Wave and Normal Mode Seismic Data"; May 29, 1990.

901464; D. Wirth; NSF; "Shipboard Technician Support"; May 23, 1990.

901465; A.J. Harding, J.P. Morgan, J.A. Orcutt; NSF; "Geophysical Study of Hess Deep and the Galapagos Microplate"; June 5, 1990.

901466; R.J. Seymour; DBW; "Calibration of Sand Transport Instruments"; May 21, 1990.

901467; J.P. Morgan; NSF; "3-D Upwelling beneath a Mid-Ocean Ridge"; May 29, 1990.

901469; A.J. Harding, J.A. Orcutt; NSF; "Improved Seismic Imaging of the EPR from Multi-Channel Seismic Data"; May 29, 1990.

901470; A.D. Chave, J.H. Filloux; NSF; "EM and Pressure Oceanographic Instrumentation Upgrading and Development"; May 31, 1990.

901471; A.D. Chave, J.H. Filloux; NSF; "A Synthesis of EM Soundings from the Pacific Seafloor"; May 31, 1990.

901472; C.S. Cox; NSF; "Seafloor Voltage Monitoring of Ocean Circulation"; May 30, 1990.

901473; T. Chereskin, D. Roemmich; NSF; "Analysis of a Trans-Atlantic CTD/Hydrographic Section with ADCP at 11°N "; May 29, 1990.

901474; J.A. Tarduno; NSF; "Paleomagnetic and Rock Magnetic Investigation of Inclination Shallowing in Lithified Atlantic Deep-Sea Sediments"; May 29, 1990.

901475; M. Tegner; AAAS; "ENSO Effects on the Kelp Forests of N Chile"; May 24, 1990.

901477; A.J. Spivack; NSF; "B Isotopic Composition of the Oceanic Crust"; May 30, 1990.

901479; A.F. Carlucci; NSF; "The Role of Microbial Populations in the Transformation and Flux of Organic Matter in Benthic Boundary Layer Environments"; May 29, 1990.

901481; J.L. Hakanson; NSF; "Condition and Growth Rate of Individual Anchovy Larvae in Contrasting Hydrographic Environments"; June 3, 1990.

901482; J.S. Jaffe; TWF; "3-D Ultrasonic Imaging"; June 14, 1990.

901483; J.A. Orcutt; NSF; "The Internal Structure of the Clipperton Transform Fault"; May 30, 1990.

901484; J.A. McGowan; NSF; "Long-Term Temporal Variability of Pelagic Bird Abundance in the CA Current"; June 5, 1990.

901485; B.G. Mitchell; NSF; "Mixing and Phytoplankton Dynamics in an Antarctic Coastal Bloom"; June 14, 1990.

901486; J.A. Hildebrand; CIT; "Development of a He Scalar Magnetic Radiometer Instrument for Space, Airborne, and Deep-Sea Applications"; n.d.

901488; J.A. Orcutt, H. Staudigel; NSF; "Development and Testing of a Submarine Tiltmeter for Deformation Measurements at Mid-Ocean Ridges"; June 26, 1990.

901489; J.O. Roads; USFS; "Use of Numerical Weather Prediction Models for Medium-Extended Range Fire Weather Forecasting"; May 31, 1990.

901490; D. Lal; NSF; "32P and 7Be Radiotracer Studies of P Biodynamics in the Upper Ocean"; June 13, 1990.

901492; J. Berger, J.A. Orcutt; NSF; "Long-Term Observations of ULF/VLF Seismicity Using Broadband OBS's, Buried OBS's and Borehole Seismometers"; June 13, 1990.

901494; B. Jones, L. McFadden; NASA; "Thermal Imaging of Comets: Relationships among Dust, Organics and Gas"; June 12, 1990.

901495; Y. Bock; DT; "Simultaneous Orbit and Network Adjustment of the CA State Reference Network"; June 14, 1990.

901496; J.L. Bada; NSF; "Collaborative Research: Stable Isotopes in Animals: Spatial and Temporal Integration"; June 12, 1990.

901497; D.C. Agnew, Y. Bock, J. Minster; NASA; "PGGA in S CA"; June 13, 1990.

901498; R.J. Frouin, C.H. Gautier; NASA; "Studies of the Net Surface Radiative Flux from Satellite Radiances during FIFE"; June 18, 1990.

901499; M. Vernet; NSF; "Seasonal and Latitudinal Variabilities of Antarctic Phytoplankton UV Action Spectra"; June 21, 1990.

901500; R.D. Vetter; UCD; "The Removal of Toxic H₂S and Recovery as Elemental S₂ from Wastewater and High-S₂ Fuels Via Microbial Bioremediation"; June 18, 1990.

901501; D.L. Distel; ONR; "An Investigation of the Specificity and Evolutionary Origins of Autotrophic Endosymbiosis by Comparison of Homologous Genes in Hosts and Symbionts"; June 19, 1990.

901502; R.D. Vetter; ONR; "Regulation of Bacterial Metabolism in a Thiotrophic Symbiosis"; June 27, 1990.

901503; R.A. Knox, W.H. Munk, P.F. Worcester; NSF; "OAT in the Greenland Sea"; June 21, 1990.

901504; N.E. Graham; NSF; "Evaluation of the Response of Atmospheric Models to Low-Frequency SST Variability in Tropical Pacific"; June 27, 1990.

901505; D.J. Faulkner; ONR; "The Role of Symbionts in the Chemical Defense of Sponges"; June 22, 1990.

901506; O. Holm-Hansen; NSF; "Effect of O₃-Related Increased UV-B Fluences on Photosynthesis and Viability of Phytoplankton in Antarctic H₂O"; June 28, 1990.

901509; R.J. Seymour; DBW; "CDIP Collection, Analysis, Reporting and Storage of Wave Data"; May 23, 1990.

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901510; M.E. Huntley, M. Vernet; NSF; "Fate of Chlorophyll-a during Zooplankton Gut Passage"; June 27, 1990.

901512; M. Kastner; JOII; "Composition and Origin of Fluids and Sediment Diagenesis at the Central Nankai Trough"; July 1, 1990.

911001; J. Largier; DFG; "Hydrodynamics of the Exchange Between SF Bay and the Coastal Ocean"; July 3, 1990.

911002; J. Largier; SFEP; "Fluctuations in H₂O Level and Salinity in the Delta"; July 3, 1990.

911003; A.G. Dickson; BPNL; "Preparation and Certification of Reference Materials for Coulometric Determination of Dissolved Inorganic C in Seawater"; July 5, 1990.

911005; R. Johnson; ONR; "WSMR Data Analysis"; July 10, 1990.

911006; C. Tai, W. White; ONR; "Investigating the Dynamics of Front, Meanders, and Eddies in the Kuroshio Extension"; July 8, 1990.

911007; V.C. Anderson, A.V. Sebald, R.J. Seymour; NSF; "Systems Engineering Investigations of the Dynamics and Stability of a Deep Ocean Floor Work System in Rock Terrains"; July 30, 1990.

911008; K.L. Smith; ONR; "Active Trophic Coupling between Pelagic and Benthic Communities over Seamounts"; n.d.

911009; M.E. Huntley; NSF; "RACER: Development, Growth, and Production of Zooplankton Including Krill"; July 16, 1990.

911010; M.M. Mullin; SFC; "SCALES"; July 10, 1990.

911012; R.E. Davis; ASA; "McMurdo Sound METSAT Station: Upgrade, Maintenance, and ARC Operations"; July 13, 1990.

911013; D.R. Cayan; DBW; "Variability of Coastal Fog along CA"; July 13, 1990.

911014; D.R. Cayan; DWR; "CA Precipitation Forecast Research"; July 13, 1990.

911015; N.E. Graham, C. Tai, W.B. White; NOAA; "Volume Budget Study of the Warm Pool in the W Tropical Pacific Determined from Considerations of Model/Data Assimilation"; July 12, 1990.

911016; J.O. Roads, W.B. White; NOAA; "Mesoscale Ocean/Atmosphere Prediction for CA"; July 11, 1990.

911019; D.L. Inman; ONR; "Crest-Trough Asymmetry in the Fluid-Granular Boundary Layer under Nearbreaking Waves"; n.d.

911020; S.A. Jenkins; ONR; "Excitation of High Frequency Surface Waves by Periodic Boundary Layers on Submerged Obstacles"; n.d.

911021; C.D. Winant; MBCAES; "S CA Bight Observation Workshop"; n.d.

911023; J.L. Largier; DBW; "Boating and Coastal Weather"; n.d.

911024; S.A. Jenkins; DBW; "Development of a Dissipative Breakwater Overtopping Numerical Code"; June 12, 1990.

911026; F. Azam; ONR; "Do Extracellular Hydrolytic Enzymes of Bacteria Prevent Phytoplankton Stickiness?"; July 12, 1990.

911027; R.L. Fisher; NSF; "Compilation of Topographic, Magnetic, and Geophysical Data from the Indian Ocean: I. Topography"; July 16, 1990.

911028; J.R. Arnold, K. Nishiizumi; NSF; "Cosmogenic Radionuclides in the GISP II Ice Core: ^{10}Be , ^{26}Al , and ^{36}Cl "; August 8, 1990.

911029; A.D. Chave, J.H. Filloux, D.S. Luther; ONR; "Horizontal Electrometer Deployments in SYNOP"; July 17, 1990.

911030; D.W. Wilkie; NSF; "Exploring the Blue Planet: The SIO Hall of Oceanography"; July 24, 1990.

911031; C. de Moustier; ONR; "SASS Data Analysis"; July 19, 1990.

911033; R.C.J. Somerville; NIGEC; "Modeling the Response of the CA Current System to Global Greenhouse Warming"; June 27, 1990.

911035; W.B. White; ONR; "The Mesoscale Dynamics of the E Pacific"; July 19, 1990.

911037; D.T. Sandwell; NSF; "REU Supplement to 'Transition of Ridge Axis Gravity with Spreading Rate: The Effect of a Weak Lower Crust'"; July 23, 1990.

911037; B.B. Ward, P.M. Williams; DOE; "Role of Dissolved Organic C, N_2 , and CH_4 in the Cycling of Organic Matter in S CA Coastal Basins"; July 30, 1990.

911038; A.A. Yayanos; NSF; "Culture Collection of Deep-Sea Barophilic Microorganisms"; July 30, 1990.

911040; T.D. Herbert, M. Kastner, J.D. Macdougall; NSF; "Exploring the Use of Barite as a Monitor of Seawater Chemical and Isotopic Composition"; August 6, 1990.

911041; T.D. Herbert, M. Kastner, J.D. Macdougall; NSF; "Barite in the Central Equatorial Pacific: Implications for Marine Chemistry and Reconstructing Productivity and Circulation of Past Oceans"; July 31, 1990.

911042; O. Holm-Hansen; NOAA; "Phytoplankton Studies in Support of the US AMLR Program, January-February 1991"; July 29, 1990.

911043; M.E. Huntley; ONR; "Seasoar Instrumentation"; July 26, 1990.

911044; F. Azam; NSF; "Fe Regulation of the C Pump in the Equatorial Pacific: Role of the Microbial Foodweb"; August 1, 1990.

911046; G.G. Shor; ONR; "Ship Time on Ships Operated by the SIO"; August 6, 1990.

911046R4; G.G. Shor; ONR; "Ship Time on Ships Operated by the SIO"; January 7, 1992.

911047; T.L. Hayward; ONR; "Circulation and Primary Production in the CA Current"; July 27, 1990.

911049; J.H. Swift; NSF; "CTD Sampling across the Arctic Ocean"; August 1, 1990.

911050; F. Azam, A.F. Carlucci; DOE; "Role of Bacteria in the Transformations and Transport of Materials in the SCCZ: A Component of the CaBS Program"; August 7, 1990.

911051; H. Felbeck; ONR; "Ribulose-1,5-Bisphosphate Carboxylase in Symbioses with Chemoautotrophic Bacteria: Sequence Based Phylogeny of the Symbionts and Gene Transfer to the Host Mitochondria"; August 2, 1990.

911052; E.A. Frieman; ONR; "Administrative Cost"; August 7, 1990.

911055; T. Nogami; NSF; "Countermeasures Against Liquefaction for Designing and Retrofitting Highway Bridge Foundations"; August 15, 1990.

911056; G.F. Carnevale; ONR; "Studies of Flow over Topography"; August 20, 1990.

911057; C.S. Cox; ONR; "Horizontal Correlation of Pressure Fluctuations Induced by Double-Frequency Wave-Wave Interactions"; August 17, 1990.

911058; J.J. Simpson; NASA; "Support of Satellite Oceanography Experiments"; August 20, 1990.

911059; V. Ramanathan; NSF; "Cloud-Radiative Forcing, H₂O Greenhouse Effect, and Climate"; August 17, 1990.

911060; H. Craig; NSF; "GISP2: He and Rare Gas Studies"; July 29, 1990.

911061; D. Wirth; NSF; "Shipboard Technician Support"; August 17, 1990.

911062; R.C.J. Somerville; NSF; "Diagnostic Studies and Coupled Air-Sea Modeling for TOGA/COARE"; August 31, 1990.

911063; D.C. Agnew, F.K. Wyatt; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; August 16, 1990.

911064; J. Berger; IRIS; "Eurasian Seismic Studies Program"; October 15, 1990.

911066; W. James, G.G. Shor; NSF; "Shipboard Scientific Support Equipment"; August 30, 1990.

911067; G.G. Shor, J.H. Swift, D. Wirth; NSF; "Oceanographic Instrumentation"; August 29, 1990.

911068; R.E. Davis; ASA; "McMurdo Sound METSAT Station: Upgrade, Maintenance and ARC Operations"; August 21, 1990.

911070; J.L. Reid; ONR; "N Atlantic Circulation"; August 22, 1990.

911071; J. Minster; NASA; "Plate Motions and Deformations from Geologic and Geodetic Data"; August 23, 1990.

911072; S.K. Ride; SAIC; "Global Change Research Initiative Task Support"; September 5, 1990.

911073; N.E. Graham, A.J. Miller; NSF; "Wind- and Precipitation-Forced Response in the Equatorial W Pacific Ocean"; August 27, 1990.

911074; L. Tauxe; NSF; "Support for Paleomagnetic Research at the SIO"; August 27, 1990.

911075; W.B. White; COAP; "Assessment of SST Products and Subsurface Temperature Products in NA"; August 29, 1990.

911076; J.L. Largier; GAISC; "Environmental Impact of Desalination Facility"; n.d.

911077; L.D. Talley; NSF; "FAW: Aspects of Pacific Ocean Circulation"; September 10, 1990.

911078; M. Vernet; NSF; "Organic C and S₂ Cycling During the Spring Bloom in the Barents Sea"; August 31, 1990.

911079; J.A. Orcutt; NSF; "Mantle Control of a Dynamically Evolving Spreading Center"; September 10, 1990.

911082; L. McFadden; NSF; "Optical Properties of Asteroid Surface Alteration"; August 27, 1990.

911083; A.J. Kalmijn; ONR; "Hydrodynamic and Near- Field Acoustic Detection"; September 10, 1990.

911084; C.D. Winant; ONR; "Computer Simulation of Underwater Sediment Transport"; n.d.

911086; R.T. Guza; DBW; "S CA Wave Data Analysis: Past and Future"; n.d.

911086; R.T. Guza; DBW; "Island Sheltering Measurements and Models of Coastal Waves"; n.d.

911087; P. Lonsdale, C. de Moustier, G.G. Shor; NSF; "A SeaBeam 2000 Multibeam Echo Sounder for R/V Melville"; September 7, 1990.

911089; P.M. Williams; NSF; "Investigation of Marine Organic C Cycles in the N Pacific and Atlantic Oceans"; September 26, 1990.

911090: J.A. Orcutt; DARPA; "VLF Seismo-Acoustic Wave Propagation"; n.d.

911091: S.K. Ride; NASA; "Cooperative Research Agreement Proposal to NASA Kennedy Space Center"; September 10, 1990.

911092: M.G. Haygood; GRCP; "Investigation of Population Structures in the Harbor Porpoise, *Phocoena phocoena*, Using mtDNA"; August 29, 1990.

911093: E.D. Goldberg; ONR; "Marine Colloids"; September 14, 1990.

911094: J.J. Sullivan; NOAA; "Sea Grant Marine Advisory Service: Education and Info Transfer for Resource Enhancement"; September 12, 1990.

911095: R.J. Seymour; DBW; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; September 10, 1990.

911096: J.L. Bada; ONR; "Lab and In Situ Laser-Based Instruments for Investigations of Oceanic Fluorescence, the Surface Microlayer, and Particles"; September 20, 1990.

911097: R.C.J. Somerville; NASA; "Theoretical Models for Numerical Weather Prediction"; September 14, 1990.

911098: J.B. Graham; NSF; "H2O-Tunnel Studies with Tuna at the Kewalo Basin, HI"; September 14, 1990.

911099: C. Tai; NASA; "An Investigation by Satellite Altimetry into the Temporal and Spatial Variability of the Transport of W Boundary Currents and the Antarctic Circumpolar Current"; September 19, 1990.

911100: C.H. Gautier; NASA; "AIRS: Calibration and Ocean Surface Radiation Budget Computations"; September 19, 1990.

911102: D. Wirth; NSF; "Technicians"; October 5, 1990.

911103: W.R. Riedel; NSF; "Marine Geological Sample Collections: SIO"; September 27, 1990.

911104: C.B. Lange; NSF; "Temporal Variability of Siliceous Phytoplankton Flux in the CA Current, and its Relationship to the Sediment Record"; October 4, 1990.

911106: B. Cornuelle, R.A. Knox, W.H. Munk, P.F. Worcester; UW; "Applied Tomography Experiment"; October 11, 1990.

911108: G.G. Shor; NSF; "Ship Operations (2nd Year of 3 Year Grant)"; October 5, 1990.

911111: G.L. Kooyman; NSF; "Biology of King and Emperor Penguins While at Sea"; September 27, 1990.

911112: T.P. Barnett; NSF; "Continuation Request and Progress Report on NSF ATM88-14571"; September 29, 1990.

911113: O. Holm-Hansen; SPA-AFEAS; "Effect of Changing UV Radiation on Phytoplankton Trophodynamics"; October 12, 1990.

911117: J. Berger; IRIS; "IRIS/IDA Network Development, Operations, and Maintenance"; October 16, 1990.

911118: J.M. Gieskes; JOII; "Follow-Up Studies on Interstitial H2O Chemistry Leg 131"; October 4, 1990.

911119: S.K. Ride; CALF; "A Spectral IR Monitor for Assessing Global Climate Change in Remote Parts of the World"; October 12, 1990.

911120: M.M. Mullin; NSF; "Mesoscale Variation in Rates of Reproduction of Planktonic Copepods in an Upwelling Region off S CA"; October 2, 1990.

911123: R.J. Frouin; NASA; "Computer Code to Estimate the Daily Downward Solar Irradiance at the Earth's Surface"; October 10, 1990.

911124: R.J. Frouin; NASA; "TRMM and Vegetation Variability in the Tropics"; October 10, 1990.

911125: S.C. Webb; NSF; "EM Survey of Middle Valley"; October 29, 1990.

911126: J.A. Hildebrand, S.C. Webb; NSF; "Geophysics at the Megaplume Site: Seismicity and Crustal Structure at an Active Region of the S Juan de Fuca Ridge"; November 19, 1990.

911127: S. Constable, J.P. Morgan; NSF; "Experimental Design for EM Surveys of Mid-Ocean Ridges"; October 26, 1990.

911128: R.W. Johnson; ONR; "Daytime Image Analysis for ASAT/CFARC Scenarios"; October 15, 1990.

911129: D.W. Wilkie; IMS; "1991/92 General Operating Support Grant Funds"; October 16, 1990.

911130: L. Tauxe; NSF; "Collaborative Project: Chronostratigraphy of the Eureka Sound Group at Strand Fiord, Axel Heiberg Island, NWT, Canada"; October 4, 1990.

911131: D.C. Agnew, F.K. Wyatt; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; October 18, 1990.

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911132: J.G. Sclater; NSF; "Heat Flow and Frictional Stress of Plate Subduction at the Central Mariana Trench"; November 2, 1990.

911133; H. Staudigel; NSF; "The Cretaceous History of the S Pacific Thermal and Isotopic Anomaly: The Magellan Seamounts"; October 26, 1990.

911134; M.M. Mullin; NOAA; "CalCOFI Committee Support"; October 10, 1990.

911135; P.R. Castillo; NSF; "US-Philippines Cooperative Research: Geochemical Investigation of ARC Magmas from Camiguin Island, S Philippines"; October 11, 1990.

911136; P.R. Castillo; NSF; "Detailed Geochemical Investigations of the EPR: 9°16'-9°40'N and 13°30'-15°N"; October 15, 1990.

911137; D. Rogers; NSF; "A Study of the Effect of Ocean-Atmosphere Coupling on the Variability of the Coastal Sea and Marine Atmospheric Boundary Layer"; October 1990.

911138; R.W. Johnson; ONR; "Real Time Analysis for Short Term CFARC Predictions"; October 30, 1990.

911139; R.W. Johnson; AFSC; "An Improved Day and Night Visibility and Cloud Cover System for Multi- Task Applications"; October 30, 1990.

911140; J.M. Gieskes; ACS; "A Study of Hydrothermal Alteration, Oil Generation, and Retrograde Reaction in Marine Sediments Guaymas Basin, Gulf of CA"; October 23, 1990.

911141; J.M. Gieskes; NSF; "Multiple Sampling of DSDP/ODP Borehole H2O for Geochemical Studies"; October 24, 1990.

911142; J. Gieskes; NSF; "Geochemistry of Marine Sediments A Joint US-USSR Program"; October 24, 1990.

911147; J.S. Gee; NSF; "Magnetic Petrology of Ferrobasalts and the Origin of High Amplitude Magnetic Anomalies"; October 30, 1990.

911148; D. Lal; NSF; "32P and 7Be Radiotracer Studies of P Biodynamics in the Upper Ocean"; October 30, 1990.

911149; A.J. Harding, J.A. Orcutt; NSF; "MCS Reflection/OBS Tomography Study of the Cocos-Nazca Spreading Center 91°W-96°30'W"; November 9, 1990.

911150; J.P. Morgan, J.A. Orcutt; NSF; "Seismic Study of Extension in Hess Deep"; November 6, 1990.

911152; J.W. Hawkins; NSF; "Evolution of Backarc Basin Crust and Mantle: Lau Basin and Mariana Trough"; October 22, 1990.

911153; J.H. Natland; NSF; "Igneous Petrology of Upper Crustal Sections of the EPR at Hess Deep"; October 31, 1990.

911154; L. Armi, S. Jenkins; NSF; "The Generation of Cross-Stream Wave Numbers in Lee Wave Fields"; October 25, 1990.

911155; H. Elwany, D. Inman, S. Jenkins, J. Nichols; NSF; "Fisheries Dependence on Wind Driven Thermo- Haline Circulation in a Shallow Egyptian Lagoon"; October 31, 1990.

911156; J. Berger, F.L. Vernon; DOI; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; October 22, 1990.

911157; F.N. Spiess; NASA; "Augmentation to: Deep Ocean Benchmarks for GPS Geodesy"; October 23, 1990.

911158; J.R. Curray, L.M. Dorman; NSF; "Sediment Thicknesses and Structure, Bay of Bengal"; November 8, 1990.

911159; D. Lal; ACS; "Development of Cosmogenic Nuclear Methods for the Study of Soil Erosion and Formation Rates"; October 29, 1990.

911160; J.H. Natland; NSF; "Rock Magnetic Properties and Paleomagnetism of Upper Crustal Sections of the EPR at Hess Deep"; October 30, 1990.

911161; M.E. Huntley; NSF; "The Limits of Growth: Copepods in Equatorial Oceans"; October 29, 1990.

911163; E.L. Winterer; NSF; "Early Cretaceous Guyots in the NW Pacific"; October 31, 1990.

911164; T.L. Hayward; NSF; "Primary Production in the CA Current: Effects of Mesoscale Forcing"; October 25, 1990.

911167; J.J. Simpson; NSF; "Upper Ocean Structure Determined from a Combination of Satellite Data and Coupled Ocean Models (A Cooperative Effort between Dr. X. Yan, UD, and Dr. J. Simpson, UCSD)"; October 26, 1990.

911168; W.S. Hodgkiss; ONR; "HGI Data Analysis and Experiment Support"; October 26, 1990.

911169; W.S. Hodgkiss; ONR; "Near Bottom Data Collection and Analysis"; October 31, 1990.

911170; A.J. Harding, J.A. Orcutt; NSF; "A Piggyback OBS Tomography Study of the EPR S of the Garret Fracture Zone"; October 31, 1990.

911171; P.F. Lonsdale; NSF; "Segmentation of the Mariana Back-Arc Spreading Center"; November 16, 1990.

911172; F.N. Spiess; NSF; "Measurement of Seafloor Strain"; October 31, 1990.

911173; L.M. Dorman, J.A. Hildebrand, P.F. Lonsdale; NSF; "Crustal Structure at the Hess Deep: Geophysical Studies in Support of Deep Crustal Drilling"; November 16, 1990.

911174; J.J. Simpson; NSF; "Satellite-Determined Cloud Variability off the NA W Coast"; October 30, 1990.

911175; R. Frouin, J. Simpson; NASA; "Periodic Calibration of NOAA AVHRR Solar Channels"; October 29, 1990.

911177; T. Nogami; NSF; "Undersea Debris Flow"; October 30, 1990.

911178; R.W. Johnson; ONR; "Nighttime WSI Development"; October 30, 1990.

911179; D.C. Agnew; NASA; "Towards a Statistical Description of Tectonic Motions Analysis of Crustal Dynamics Observations"; November 2, 1990.

911180; L.D. Talley, W.B. White; NSF; "Upper Ocean Circulation in the N Subtropical and Subpolar N Pacific"; November 1, 1990.

911181; V. Ramanathan; NASA; "Using ERBE Measurements to Validate and Improve Radiation Models and General Circulation Climate Models"; October 31, 1990.

911182; R.J. Seymour; CIEE; "Energy Efficiency Improvements for Building Climate Control and Waste H2O Treatment through Use of Cold Seawater"; October 17, 1990.

911185; B.M. Tebo; NSF; "Mn and Fe Cycling in Surface H2O"; November 5, 1990.

911187; J.G. Sclater; NSF; "Heat Flow/Basement Depth Relation for the Ocean Crust in the W Gulf of MX: A Constraint on the Thermal Models of the Oceanic Lithosphere?"; November 9, 1990.

911188; R.J. Van Waasbergen; JOII; "Cenozoic Sedimentation of Shatsky Rise"; November 9, 1990.

911190; J.O. Roads; CIEE; "A Fine Mesh Simulation of the CA Climate"; November 8, 1990.

911191; R. Revelle; NSF; "Support of the Science Officer for the SCOR/IOC CCCO"; November 9, 1990.

911192; R.J. Frouin; NASA; "Study of Atmospheric and Bidirectional Effects on Surface Reflectance and Vegetation Index Time Series"; November 9, 1990.

911196; N. Bray, D. Roemmich; NSF; "The Samoan Passage Experiment Abyssal Transport from the S to the N Pacific Ocean: WHP Line P31"; November 23, 1990.

911197; S. Chen, J.O. Roads; USGS; "A Study of Cool, Warm, and Wet Episodes in the W US"; November 16, 1990.

911197R1; S. Chen, J.O. Roads; USGS; "A Study of Cool, Warm, and Wet Episodes in the W US"; August 6, 1991.

911198; W.S. Hodgkiss; UUVPO; "VLF/LF Measurements with an Array of Freely Drifting Swallow Floats"; November 28, 1990.

911204; R.E. Davis; NSF; "The Samoan Passage Experiment Abyssal Transport from the S Pacific to the N Pacific Ocean: The Float Program"; November 26, 1990.

911206; J.R. Arnold, D. Lal, K. Nishiizumi; NSF; "Collaborative Research: Geomorphological Studies Using Cosmogenic In Situ Nuclides"; November 28, 1990.

911207; F.N. Spiess; NASA; "Augmentation to: Deep Ocean Benchmarks for GPS Geodesy"; March 19, 1991.

911208; D.C. Agnew, F.K. Wyatt; NSF; "Measurement and Interpretation of Crustal Deformation in an Active Fault Zone"; November 27, 1990.

911209; D.C. Agnew; NSF; "PFGO: A Facility for Studies of Crustal Deformation"; November 28, 1990.

911210; W.S. Hodgkiss; ONR; "Analysis of Swallow Float Data Collected during NATIVE 1"; February 13, 1991.

911211; R.J. Frouin, C.H. Gautier; NASA; "AIRS: Calibration and Ocean Surface Radiation Budget Computations"; November 19, 1990.

911212; R.J. Frouin; UCSB; "Calibration Implementation Plan for AIRS Solar Channels"; November 20, 1990.

911213; H. Felbeck; NSF; "Metabolism of C and N2 in Chemoautotrophic Symbioses"; November 23, 1990.

911214; L.M. Dorman, W.S. Hodgkiss; DARPA; "Simultaneous H2O Column and Ocean Bottom Acoustic/Seismic Measurements on the Continental Shelf"; November 21, 1990.

911215; J.A. Orcutt; DARPA/NMRO; "LFASE Data Analysis: Ocean Seismo-Acoustic Noise, Array Studies of 1-50 Hz Signals and Noise, and Geophysical Structure near DSDP Hole 541"; November 20, 1990.

911216; G. Masters, J.P. Morgan, P. Shearer; NSF; "Joint Seismic and Geodynamic Inversion for Whole Mantle Structure"; November 19, 1990.

911217; J.H. Natland; JOII; "Distribution, Composition and Sources of Arc-Derived Volcanic Ash on Shatsky Rise and in the NW Pacific"; November 26, 1990.

911218; J.H. Natland; NSF; "Geochemical Evolution of Samoan Shield Volcanoes"; November 28, 1990.

911219; C. de Moustier; KAEGMBH; "Derivation of Seafloor Acoustic Backscatter Coefficients from Data Recorded with Hydrosweep DS"; December 10, 1990.

911222; A. Miller, C. Tai, W. White; NSF; "Interannual Change in the Poleward Heat Transport in the N Pacific through Model/Data Assimilation"; December 3, 1990.

911223; S. Constable; NSF; "Long Period MT to Test the Starting Plume Hypothesis"; November 27, 1990.

911224; E.L. Winterer; NSF; "Mesozoic Neptunian Dikes: Dissolution vs Dilation"; November 27, 1990.

[Box 61]

911225; L. Tauxe; NSF; "Collaborative Research: Early Miocene Sediments and Vertebrate Fauna on the Indo-Pakistan Plate"; November 28, 1990.

911226; M. Wahlen; DOE; "Feasibility Study on the Use of TDLAS for Real-Time Measurements of Isotope Ratios in CH₄"; November 28, 1990.

911228; R.J. Frouin, C.H. Gautier; NASA; "Studies of the Net Surface Radiative Flux from Satellite Radiances during FIFE"; December 4, 1990.

911229; R.F. Weiss; WHOI; "WOCE CFC Quality Control"; December 3, 1990.

911230; R.J. Seymour; DBW; "CDIP: Collection, Analysis, Reporting, and Storage of Wave Data"; November 29, 1990.

911231; J.H. Swift; NSF; "Hydrographic Support for the WOCE Pacific S-4 Expedition"; December 6, 1990.

911232; M. Kastner; NSF; "Miocene to Recent Sedimentary Conditions on the Peruvian Margin: Apatite Formation, Fluid Circulation, and Diagenesis"; November 27, 1990.

911233; J.L. Reid; WHOI; "Quality Control for the WHP"; December 5, 1990.

911234; R. Revelle; UERG; "Impacts of Global Environmental Change on CA's Coastal Human Ecology"; January 29, 1991.

911235; C.D. Keeling; DOE; "Oceanic CO₂ Measurements for the WOCE Hydrographic Survey in the Pacific Ocean, 1990-91: Shore Based Analyses Legs 1-3 (Request for Supplemental Funding for 2nd Year)"; December 10, 1990.

911236; W.F. Heiligenberg; NSF; "Info Processing in the Diencephalon of Gymnotiform Fish"; December 11, 1990.

911237; N.D. Holland; NSF; "Segmental Homologies among the Protochordates: A Study of Developmental Gene Expression in Developing Nerve Cord and Related Structures"; December 13, 1990.

911238; M.G. Haygood; NSF; "Evolution of the Anomalopid Bacterial Light Organ Symbioses"; December 18, 1990.

911239R1; G.G. Shor; ONR; "Ship Time on the R/V New Horizon and R/V Thomas Washington August-September 1991"; February 6, 1991.

911241; S.C. Chen, J.O. Roads; UCD; "A Study of Hydrological Extremes in CA"; December 18, 1990.

911243; D.T. Sandwell; ONR; "Collaborative Project: Charting the Remote S Oceans with GEOSAT Altimetry"; January 8, 1991.

911244; J.A. Hildebrand; ONR; "Marched Field Tomography Using an Array on R/P Flip"; March 11, 1991.

911245; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic and Trace Element Studies of the Lithospheric Mantle, Petrogenetic Processes and Magma Transport, and the Early Stages of Continental Crust Formation"; December 20, 1990.

911246; B.M. Tebo; UCSB; "Emulsification of Hydrocarbons by Marine Bacteria"; December 20, 1990.

911248; J.H. Swift; NSF; "WHP Section Along 88° (O₂ and Nutrient Analyses on WHP Line P16N)"; January 2, 1991.

911251; G.L. Kooyman; NSF; "Biology of King and Emperor Penguins While at Sea (REU Supplement)"; January 9, 1991.

911252; R.W. Johnson; NIGEC; "Variability of Cloud Cover across the W US as Observed from a WSI Network"; January 9, 1991.

911256; J.A. McGowan; NIGEC; "A Base-Line for the Study of Ecosystem Change in the CA Current"; January 14, 1991.

911257; W.B. White; NOAA; "Network Design of a Global Ocean Observing System for Upper Ocean Temperature and Salinity"; March 28, 1991.

911258; A.J. Miller, W.B. White; NOAA; "Global Climate Change in Upper Ocean Thermal Structure Part 1: The Pacific Ocean"; March 13, 1991.

911259; C.D. Keeling; NIGEC; "Possible Influence of Climate Change on a Recent Increase in Non- Industrial CO₂ Emissions to the Atmosphere"; n.d.

911261; J. Lancaster, R. Revelle; NIGEC; "Impacts of Global Environmental Change in the CA Coastal Zone and Human Ecology: Phase I, Developing Methodology for Comprehensive Assessment and Report to Policy Makers"; January 14, 1991.

911262; H. Craig; NIGEC; "Isotopic Characterization of the Sources of Atmospheric N₂O"; n.d.

911263; M.G. Haygood; ONR; "Symbiont Transmission and Physiological and Genetic Regulation in Fish- Bacterial Light Organ Symbioses"; January 15, 1991.

911264; R.C.J. Somerville; NIGEC; "Modeling the Response of the CA Current System to Global Greenhouse Warming"; January 11, 1991.

911265; D.C. Agnew; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; January 28, 1991.

911266; V.D. Vacquier; ONR; "The Crystal Structure and Species-Specific Recognition of Abalone Sperm Lysin"; January 15, 1991.

911267; D.P. Rogers; ONR; "Air-Sea Exchange Processes in TOGA-COARE"; January 17, 1991.

911268; A.A. Yayanos; NSF; "Detection of Sunlight- Induced Thymine Dimers in Sea Surface Microbial Communities"; January 24, 1991.

911269; M. Wahlen; NASA; "C and H Isotope Composition and ¹⁴C Concentration in CH₄ from Sources and from the Atmosphere: Implications for a Global CH₄ Budget"; n.d.

911270; D.C. Agnew; USGS; "PFGO: Comparative Studies and Geophysical Investigations"; January 29, 1991.

911271; D.C. Agnew; USGS; "Deformation Monitoring of the S San Andreas Fault"; January 29, 1991.

911272; W.B. White; DOC/NOAA/OCAR; "TOGA Indo- Pacific Thermal Data Management Facility (JEDA)"; January 18, 1991.

911274; M.A. Zumberge; USGS; "Absolute Gravity Measurements along the W Coast of the US"; January 29, 1991.

911275; W.R. Riedel; JOI; "(1) Radiolarian and (2) Potential Role of Expert Systems in Sedimentology and Stratigraphy"; January 23, 1991.

911278; Y. Bock; NASA; "PGGA in S CA"; March 14, 1991.

911279; J.N. Brune, T.G. Masters, F.L. Vernon; USGS; "Coherence and Empirical Green's Functions from ANZA Data"; January 28, 1991.

911281; G.D.F. Wilson; NOAA; "Biological Evaluation of a Preservational Reserve Area and Comparison with Other Areas"; January 31, 1991.

911283; P. Castillo; JOII; "Geochemical Investigation of Cretaceous and Jurassic Igneous Rocks from the W Pacific"; January 28, 1991.

911285; J.B. Martin; JOII; "Diagenesis and Hydrology in the New Hebrides Island Arc"; January 28, 1991.

911287; J.H. Filloux; NSF; "EMSOC: Continental Shelf EM Instrumentation"; February 11, 1991.

911288; R.J. Frouin; UCSB; "Deep Tropical Convection and Net Surface Irradiance in the W Tropical Pacific"; February 12, 1991.

911289; V. Ramanathan; UCH; "A Study of Cloud Radiative Forcing and Feedback"; January 29, 1991.

911290; J.J. Simpson; UCR; "Improved Predictability of Anomalous CA Precipitation Patterns Using Image Segmentation and Radiative Transfer Models"; January 30, 1991.

911291; B.M. Tebo; ONR; "Metal-Binding Proteins from Marine Bacteria"; January 31, 1991.

911292; H.D.I. Abarbanel ONR; "Topics in Pattern Formation and Chaotic Dynamics"; March 13, 1991.

911292R1; H.D.I. Abarbanel ONR; "Topics in Pattern Formation and Chaotic Dynamics"; May 8, 1991.

911294; J.L. Largier; UCD; "Physical Forcing of Spatially Distributed, Meroplanktonic Populations"; n.d.

911295; Y. Bock; NSF; "US-Indonesia Cooperative Research: Geodetic Investigation of Oblique Plate Convergence in Sumatra"; April 26, 1991.

911297; R.E. Garrison, M. Kastner; UERG; "The Transport of Chemical Components and Heat by Fluid Flow through Fissured and Porous Rocks of the Monterey Formation, CA"; February 12, 1991.

911298; G.L. Kooyman; NSF; "Foraging and Distribution Patterns of Breeding Emperor Penguins in the W Ross Sea"; February 21, 1991.

911299; S. Constable; LANL; "Modeling EM Exploration of Marine Hydrothermal Fields"; February 13, 1991.

911300; P. Cessi; ONR; "An Inertial Theory of E Boundary Undercurrents"; March 11, 1991.

911303; R.L. Parker; LANL; "Geophysical Search for Non-Newtonian Gravity"; February 13, 1991.

911304; J.H. Filloux; ONR; "EMSOC: Continental Shelf EM Instrumentation"; February 20, 1991.

911305; M.E. Huntley; NSF; "Fate of Chlorophyll-a during Zooplankton Gut Passage (REU Supplement)"; February 25, 1991.

911306; C. de Moustier; KAEGMBH; "Supplement to Derivation of Seafloor Acoustic Backscatter Coefficients from Data Recorded with Hydrosweep DS"; February 21, 1991.

911307; M.C. Hendershott; ONR; "Analysis of Data from Finestructure and Circulation Studies in the Gulf of CA"; n.d.

911309; R.E. Davis; WHOI; "Autonomous Lagrangian Profilers"; February 15, 1991.

911310; P.P. Niiler; WHOI; "Meteorological, H2O Following (MET) Drifter for P-3 Deployment"; February 22, 1991.

911312; W. Fenical; NSF; "Possible Supplemental Funding for a Summer Student, P.I. Tsai, under the REU Program (Supplemental to CHE90-08621)"; March 3, 1991.

911313; W.S. Hodgkiss; ONR; "MDA-1 and MDA-2 Planning and Support"; February 28, 1991.

911315; T. Drake, D.L. Inman; ONR; "Visualization of Sediment Transport Processes"; n.d.

911317; C.E. Reimers; NOS; "Pore H2O Chemistry in Sinclair Inlet"; n.d.

911319; B.J. Javor; ONR; "Regulation of Bacterial Metabolism in a Thiotrophic Symbiosis"; April 9, 1991.

911320; C.E. Reimers, A. Schimmelmann; DOE; "D/H Ratios and SEM Imaging of Fossil Organic Matter from CA's Monterey Formation"; April 4, 1991.

911321; M. Wahlen; NASA; "C and H Isotope Composition and 14C Concentration in CH4 from Sources and from the Atmosphere: Implications for a Global CH4 Budget"; n.d.

911322; D. Wirth; NSF; "Shipboard Technician Support (Support of Antarctic Diving Operations)"; March 15, 1991.

911323; R.R. Hessler; NOAA; "Biological Evaluation of a Preservation Reserve Area and Comparison with Other Areas"; n.d.

911324; J. Krolik; ONR; "Wideband Beamforming for a Sparse Nonuniformly-Spaced Sensor Array"; March 19, 1991.

911325; F. Azam; NSF; "Significance of Bacterial Biomass and Production in Organic Matter Cycling in the Arctic: The Trans-Polar Sovetskiy Soyuz"; March 14, 1991.

911325R1; F. Azam; NSF; "Significance of Bacterial Biomass and Production in Organic Matter Cycling in the Arctic: The Trans-Polar Sovetskiy Soyuz"; May 17, 1991.

911327; J.H. Filloux, D.S. Luther; NOAA; "Observations of the Deep W Boundary Current and its Recirculation E of the Bahamas"; March 14, 1991.

911328; J.J. Simpson; NOAA; "Improved Cloud Classification and Radiative Flux Estimates Using Remotely-Sensed and In Situ Data"; March 15, 1991.

911330; W. Fenical; GI; "Medicinal Chemistry Investigation of the Pseudopterosins"; March 11, 1991.

911331; B. Jähne; ONR; "Optical Slope/Height Measurements of Small Scale Waves within the SAXON- FPN Experiment"; March 8, 1991.

911332; R.G. Peterson; NOAA; "A Pilot Program for the Long-Term Monitoring of the Antarctic Circumpolar Current"; March 28, 1991.

911333; H. Given; DARPA; "Funds to Purchase a Xerox 2511 Engineering Copying System"; March 8, 1991.

911334; J.S. Jaffe; NSF; "REU Support"; March 19, 1991.

911335; G.W. Lugmair; NASA; "Isotopic, Chemical, and Mineralogical Investigations of Extraterrestrial Materials"; March 29, 1991.

911336; M. Vernet; NSF; "Phytoplankton Organic C and S2 Cycling at the Marginal Ice Edge Zone"; March 14, 1991.

911340; L.A. McFadden; NASA; "Asteroid Surface Processes: Experimental Studies of the Solar Wind on Reflectance and Optical Properties of Asteroids"; March 19, 1991.

911341; L. McFadden; NASA; "Education and Research The Productivity Cycle"; March 22, 1991.

911342; L. McFadden; CSI; "Thermal Imaging of Comet Faye Nucleus"; March 22, 1991.

911343; R.J. Frouin; CSI; "Ocean Color Remote Sensing from Space: Improvement of Atmospheric Corrections Using Polarization and Bidirectionality Properties of the Ocean-Atmosphere Reflectance"; March 19, 1991.

911344; M. Ba; CSI; "Rainfall and Vegetation Variability in Tropical Africa"; March 14, 1991.

911349; D.R. Cayan; NOAA; "Climate Forcing and Surface Feedback in Continental Watersheds"; March 15, 1991.

911350; J.B. Minster; NASA; "Reimbursement for Expenses for V. Velikhov"; March 14, 1991.

911352; J.B. Graham, R.H. Rosenblatt; NOAA; "Potential Impacts of Global Change on the Fishery Resources of MX and CA with Recommendations for Future Research"; March 20, 1991.

911353; C. Tai, W.B. White; NOAA; "Mapping the Gyre- Scale Variability of the Pacific Ocean Based on Geosat Altimetry"; March 21, 1991.

911354; D.L. Cutchin, W.B. White; NOAA; "ADCP Development"; March 22, 1991.

[Box 62]

911356; B.T. Werner; ARO; "Micromechanics of Eolian Sand Dune Development: Computer Simulations and Experiments"; March 21, 1991.

911357; D. Lubin; CSI; "A Michelson FTIR Spectroradiometer for Atmospheric Global Change Research at Remote Geographic Locations"; March 18, 1991.

911358; D.L. Cutchin, W.B. White; NOAA; "Global Upper Ocean Thermal Structure Data Watch Pilot Project"; March 28, 1991.

911359; M.M. Mullin; NOAA; "Simulation Modeling of Climate Effects on the Ecology of the CA Current"; March 21, 1991.

911360; A.G. Dickson; NOAA; "Unattended, Automated, Shipboard Measurement of pH Using a Photodiode Array Spectrophotometer: Application of CO2 Measurements in JGOFS"; March 21, 1991.

911363; J.D. Macdougall; LLNL; "Trace Element Studies of Mantle Materials Using the Ion Microprobe"; March 29, 1991.

911365; E. Brinton, M.D. Ohman; NOAA; "Global Climate Change: Impacts on Planktonic Populations of the CA Current System"; March 27, 1991.

911367; Y. Bock; NASA; "Establishment of a Geodetic Crustal Dynamics Network in E Indonesia Using the GPS"; March 20, 1991.

911368; Y. Bock; NASA; "GPS Study of Horizontal Mass Transfer in Papua, New Guinea"; March 20, 1991.

911369; J.P. Morgan; NSF; "A Geophysical and Geological Investigation of the Australian-Antarctic Discordance"; March 26, 1991.

911370; M.A. Zumberge; NASA; "Absolute Gravity Measurements in the CA PGGA"; March 26, 1991.

911372; S. Chen, J.O. Roads; CSI; "Global Transport of CH4"; March 29, 1991.

911373; M.A. Zumberge; NSF; "SIO as Host to Dr. A. Brodscholl as a Visiting Scientist from the AWI in Bremerhaven, Germany"; March 21, 1991.

911376; J.J. Simpson; CSI; "Improved Estimates of the NDVI Index: Applications to Global Change Studies"; March 22, 1991.

911377; J.J. Simpson; NOAA; "An On-Line Digital Browse and Automatic Ordering System for Diverse Satellite-Derived Data Sets"; March 26, 1991.

911378; J. Lancaster; CSI; "Using Satellite Data for FIFE to Improve Estimates of APAR and Rainfall/APAR Transfer Functions for Use in Bioclimatic General Circulation Models"; March 29, 1991.

911379; C.K. Tai; CSI; "Mapping the Gyre-Scale Variability of the Pacific Ocean Based on GEOSAT Altimetry"; March 29, 1991.

911380; J.A. Orcutt, H. Staudigel; NSF; "Development and Testing of a Submarine Tiltmeter for Deformation Measurements at Mid-Ocean Ridges"; March 29, 1991.

911382; A. Soutar; NOAA; "Coastal Pelagic Ecosystem Response to Hydrologic, Climatic, and Environmental Change: Quasi-Continuous Observation Through Serial Accumulation of Bioparticles"; March 27, 1991.

911383; M. Vernet; NOAA; "Long-Term Response of Antarctic Phytoplankton to Enhanced UV Radiation"; March 29, 1991.

911384; J.R. Arnold; CSI; "Advanced Space Transportation Using Tethers"; March 26, 1991.

911384; A. Pares-Sierra; CSI; "ENSO Events across the Pacific from 1530-1820: Documented from the Logs of Old Spanish Trading Vessels"; March 29, 1991.

911385; M.G. Haygood; ONR; "Symbiont Transmission and Physiological and Genetic Regulation in Fish- Bacterial Light Organ Symbioses"; March 28, 1991.

911386; P. Castillo, P.F. Lonsdale; NSF; "Geology of the Pacific-Antarctic Plate Boundary; A Collaborative Project"; April 15, 1991.

911387; K. Nishiizumi; LLNL; "Relation between Global Climate and the History of Desert Formation as Studied Using In Situ Produced 10Be, 26Al, and 21Ne in Quartz"; n.d.

911390; Y. Bock; NSF; "GPS Study of Horizontal Mass Transfer in Papua, New Guinea"; April 2, 1991.

911391; D. Lal; CSI; "Search for 14C and Other Radionuclides in Solar Wind"; March 29, 1991.

911393; D. Lal; LLNL; "Development of Cosmogenic 10Be Method for the Study of Soil Formation Rates"; April 3, 1991.

911394; F.N. Spiess; NSF; "Measurement of Seafloor Strain"; April 2, 1991.

911395; D. Agnew, Y. Bock, J.B. Minster, M.A. Zumberge; NOAA; "Establishing a Highly Precise Vertical Reference for Monitoring Sea Level Change"; March 29, 1991.

911396; J.P. Morgan, J.A. Orcutt; NSF; "The Seismic Anisotropy and 3-D Axial Structure of an Ultrafast Spreading Center"; March 29, 1991.

911397; K. Nilsson; JOII; "Petrogenesis of Basaltic Andesites and Andesites from ODP Leg 135"; April 2, 1991.

911397R1; K. Nilsson; JOII; "Petrogenesis of Basaltic Andesites and Andesites from ODP Leg 135 (Lau Basin)"; June 19, 1991.

911398; P.F. Lonsdale, C. de Moustier; NSF; "Segmented and Unsegmented EPR"; April 24, 1991.

911399; D. Agnew, L.M. Dorman, J.A. Hildebrand, S.C. Webb; NSF; "Broadband and Long Duration Seismic Observatories in Support of Ridge Studies"; April 11, 1991.

911400; H. Staudigel; LLNL; "Alteration of Natural Silicate Glasses: Mobility of Trace Elements and Radionuclides"; April 3, 1991.

911401; A.J. Spivack; NASA; "B Isotope Composition of Chondritic Meteorites"; April 3, 1991.

911402; C.E. Reimers; NSF; "C Dynamics on the Seafloor of the Monterey Deep-Sea Fan: A Collaborative Study"; May 14, 1991.

911403; J.A. Tarduno; NSF; "Fast Absolute Motion of the Manihiki Plateau and its Relationship to Aptian Mantle Plume Volcanism"; April 25, 1991.

911403R1; J.A. Tarduno; NSF; "Fast Absolute Motion of the Manihiki Plateau and its Relationship to Aptian Mantle Plume Volcanism"; September 24, 1991.

911405; J.W. Hawkins; JOII; "Petrology of Lau Basin, Leg 135, Magma Types"; April 15, 1991.

911407; D.C. Agnew, J. Rundle; LLNL; "Inferring Earth Rheology from GPS Data"; April 3, 1991.

911408; J. Berger, J. Minster, F.L. Vernon; LLNL; "Local Structure Effects on Regional Phases at Broadband IRIS/IDA Single Stations and 3-Component Broadband Small Aperture Arrays"; April 3, 1991.

911409; R.R. Hessler; NOAA; "Biological Evaluation of Preservational Reserve Area and Comparison with Other Areas"; April 10, 1991.

911411; J.O. Roads; NOAA; "The Experimental Climate Forecast Center at SIO"; April 4, 1991.

911413; P.P. Niiler; SAIC; "Effects of Tropical Rainfall on Upper Ocean Dynamics, Air-Sea Coupling and Hydrologic Cycle"; April 11, 1991.

911414; G. Backus; NASA; "Hydromagnetic Conditions near the Core-Mantle Boundary"; April 10, 1991.

911414; G. Backus; NASA; "Hydromagnetic Conditions near the Core-Mantle Boundary (Progress Report)"; December 4, 1992.

911415; K.L. Smith; NSF; "A Bottom-Transecting Instrument for Making Long Time-Series Measurements of Sediment Community O₂ Consumption and Other Parameters to Abyssal Depths"; April 12, 1991.

911416; F.H. Fisher, W.S. Hodgkiss, K.M. Watson; WHOI; "Tactical Oceanography Research Program"; n.d.

911417; H. Staudigel; JOII; "Volcanic History of Allison and Heuvo Guyots: Site Augmentation to ODP Leg 143"; April 12, 1991.

911419; T.D. Herbert, M. Kastner; NSF; "Barite in the Central Equatorial Pacific: Implications for Marine Chemistry, Productivity, and Circulation of the Modern and Past Oceans"; April 29, 1991.

911420; E.L. Winterer; NSF; "Geophysical Investigation of the Ontong Java Plateau and its Margins"; April 25, 1991.

911421; R.J. Seymour; DBW; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; April 11, 1991.

911422; C.P. de Moustier; ONR; "Modification of Sound Source Synchronizers for the NOO"; April 12, 1991.

911424; J. Tarduno, L. Tauxe, A.J. Spivack; NSF; "Controls and Applications of Magnetic Susceptibility Data on Cores from the Ontong-Java Plateau, W Equatorial Pacific"; April 18, 1991.

911425; F. Azam, A.A. Yayanos; NSF; "Upgrading Autoclave Facility for Marine Biology"; April 15, 1991.

911428; D. Lal; NSF; "³²P, ⁷Be, and ²³⁴Th Radiotracer Studies of P Biodynamics in the Upper Ocean"; April 26, 1991.

911431; M.E. Huntley; NSF; "GLOBEC: New Technologies for Zooplankton: Sampling and Bioenergetics"; April 25, 1991.

911432; R.G. Peterson; NSF; "Spreading of H₂O Masses in the S Atlantic Ocean Inferred from Volumetric Analysis"; April 30, 1991.

911433; D. Cutchin, W.B. White; NSF; "ADCP Development"; April 22, 1991.

911434; J. Hakanson; NSF; "GLOBEC: Nutritional Condition of Cod Larvae and Copepods from Lipid Component Analysis"; April 25, 1991.

911436; R. Revelle; NSF; "Support of a Scientific Secretary for the SCOR/IOC CCCO"; April 18, 1991.

911437; C.E. Reimers; NOAA; "Trace Metal and Organic Compound Accumulation Histories in the S CA Bight"; April 25, 1991.

911438; W.H. Berger, C.B. Lange; NSF; "The Record of Productivity in the W Equatorial Pacific: The Last 3 Million Years"; April 25, 1991.

911440; J. Mammerickx; NSF; "Printing of a New Chart of the S Pacific: 120°W-180°W/3°N-53°S"; April 26, 1991.

911441; J.M. Gieskes; NSF; "Gems Geochemistry of Marine Sediments, a Joint US-USSR Program"; April 26, 1991.

911442; J.M. Gieskes, A.J. Spivack; NSF; "Systematics of B and Be in Subduction Zone Sediments"; April 29, 1991.

911444; L.R. Haury; NSF; "Zooplankton Vertical Migration and C Transport Using the Radiotracers 32P and 234Th"; May 1, 1991.

911445; A.M. Barone; NSF; "Submarine Erosion and Subsidence of Guadalupe Island"; April 29, 1991.

911446; C.G. Constable, R.L. Parker; NASA; "Geomagnetic Field Models Incorporating Physical Constraints on the Secular Variation"; April 25, 1991.

911448; R.E. Davis; ASA; "McMurdo Sound METSAT Station: Upgrade, Maintenance, and ARC Operations"; May 6, 1991.

911449; T.D. Herbert; NSF; "Collaborative Research: Microfossil Assemblage, Stable Isotopic and Sedimentologic Studies of Short Time Scale Variations in Maastrichtian Oceans"; April 29, 1991.

911450; P.R. Castillo; NSF; "Geochemical Investigation and 40Ar/39Ar Dating of Basaltic Rocks from DSDP Sites 169, 170, and 462 in the W Pacific"; April 29, 1991.

911451; J. Minster; NASA; "Toward an Airborne Geophysical Observatory: A Technique Development and Field Research Program"; April 29, 1991.

911452; M.M. Mullin; NSF; "GLOBEC: Topography, Stratification, and Variation in Growth and Reproductive Rates of Calanus around Georges Bank (Compared to S CA Bight)"; April 29, 1991.

911454; R.A. Knox, P.P. Niiler; NSF; "Lagrangian Dynamics and Thermodynamics of Cold H2O Filament in Tropical Instability Waves"; May 8, 1991.

[Box 63]

911455; A. Pares-Sierra; NASA; "Use of AVHRR Data to Constrain an Ocean Model"; April 30, 1991.

911457; B.M. Tebo; NSF; "Mn and Fe Cycling in Surface H2O"; May 2, 1991.

911458; J.N. Brune, J.R. Curray, L.M. Dorman; NSF; "A Seismic Refraction Study in the Bay of Bengal: The World's Thickest Sediment Section or Anomalous Crustal Structure?"; May 6, 1991.

911459; M.M. Mullin; NSF; "Variation in Natality and Mortality in Pelagic Copepod Populations in the S CA Sector of the CA Current"; May 1, 1991.

911460; F. Azam; NSF; "Significance of Bacterial Hydrolases in Particle Degradation and C Flow Pathways in the Ocean's Mesopelagic Zone"; May 2, 1991.

911461; P.F. Lonsdale; NSF; "Origin and Adjustment of Transform Offsets"; May 8, 1991.

911462; W.B. White; NSF; "Interannual Change in Global Upper Ocean Thermal Structure from 1979-88"; May 13, 1991.

911463; F.N. Spiess; ONR; "Multi-Scale Studies of Seafloor Topography"; May 17, 1991.

911464; J.P. Morgan, J.A. Orcutt; NSF; "Seismic Study of Extension in Hess Deep"; May 7, 1991.

911465; J.R. Arnold; NASA; "Orbital Gamma Ray Experiment for Planetary Observer Missions"; n.d.

911466; A. Soutar; TAMRF; "Historical Contamination of S CA Bight Sediments"; April 11, 1991.

911469; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic and Trace Element Studies of the Lithospheric Mantle, Petrogenetic Processes and Magma Transport, and the Early Stages of Continental Crust Formation"; May 10, 1991.

911472; T. Nogami; MMS; "Seismic Response of Offshore Pile Foundations: Phase 2"; n.d.

911473; B.J. Javor; NSF; "Regulation of Bacterial Metabolism in Thiotrophic Symbiosis"; May 16, 1991.

911474; B.M. Tebo; ONR; "Metal-Binding Proteins from Marine Bacteria"; May 20, 1991.

911477; F.H. Fisher; ONR; "NOSC Optical Propagation Experiment Augmentation"; n.d.

911479; J.O. Roads; USFS; "Use of Numerical Weather Prediction Models for Medium-Range Fire Weather Forecasting"; May 29, 1991.

911480; A.G. Dickson; BPNL; "Preparation and Certification of Reference Materials for Coulometric Determination of Dissolved Inorganic C in Seawater"; May 16, 1991.

911482; W.B. White; NOAA; "Assessment of SST Products and Subsurface Temperature Products in NA"; May 10, 1991.

911483; J. Berger, J.A. Orcutt, F.L. Vernon; NSF; "A Prototype OSN Deep-Sea Borehole Seismograph"; May 21, 1991.

911484; H. Craig; NSF; "WHP Section along 88°W and 150°W"; May 14, 1991.

911485; J.G. Sclater; NSF; "Heat Flow/Basement Depth Relation for the Ocean Crust in the W Gulf of MX: A Constraint on Thermal Models of the Oceanic Lithosphere"; May 15, 1991.

911486; M. Kastner; NSF; "Composition and Origin of Fluids in Convergent Margins, Their Hydrologic Evolution, Role in Diagenesis, and Implications for Oceanic Geochemical and Heat Fluxes"; May 21, 1991.

911488; P.M. Shearer; NSF; "Imaging Earth Structure by Stacking Global Seismograms"; May 24, 1991.

911489; J.A. Tarduno; NSF; "Paleomagnetic and Rock Magnetic Tests for Inclination Shallowing in Lithified Marine Sediments"; May 29, 1991.

911491; J.A. Tarduno; NSF; "Paleomagnetic and Rock Magnetic Stratigraphy of the Mid-Cretaceous"; May 29, 1991.

911492; M. Wahlen; NSF; "Measurements of Gases in the Vostok Ice Cores"; May 28, 1991.

911494; W.S. Hodgkiss; ONR; "Low Power Digital Recorder Development"; May 24, 1991.

911496; R.J. Frouin; NASA; "Rainfall and Vegetation Variability in the Tropics"; June 4, 1991.

911498; M.I. Latz; ONR; "Bioluminescence Source Emission Characterization"; August 2, 1991.

911499; J. Hakanson; NSF; "Interannual Differences in Condition and Growth Rates of Anchovy Larvae"; May 28, 1991.

911500; C. Stepien; NSF; "Evolutionary Relationships of Blennioid Fishes, Based on DNA Sequence Data"; June 12, 1991.

911502; G. Masters, J.P. Morgan, P. Shearer; NSF; "Joint Seismic and Geodynamic Inversion for Whole Mantle Structure"; May 20, 1991.

911504; G.G. Shor; NSF; "Ship Operations Supplement"; May 22, 1991.

911506; J.R. Arnold, K. Nishiizumi; NSF; "Evidence for Recent Climate Change and Cretaceous Thermal Event in S Victoria Land"; May 31, 1991.

911507; M.G. Haygood, B.M. Tebo; ONR; "Molecular Probes for Biogeochemical Processes"; July 26, 1991.

911508; W.S. Hodgkiss; ONR; "Broadband Shallow H₂O Vertical Array Experiment"; May 31, 1991.

911509; W.S. Hodgkiss; ONR; "VLF Ambient Noise Experiment"; May 31, 1991.

911510; A.J. Magenheimer; JOII; "Follow-Up Studies of Borehole Fluid Composition: Hole 504B, Leg 137"; May 28, 1991.

911511; L. Tauxe; NSF; "Paleomagnetism of Early Miocene Sediments on the Indo-Pakistan Plate"; May 29, 1991.

911512; C. de Moustier; UW; "Acquisition and Processing of Hydrosweep Bathymetric Data Aboard R/V Thomas Thompson"; May 28, 1991.

911516; A.J. Harding, J.A. Orcutt; NSF; "A Piggyback OBS Tomography Study of the EPR S of the Garret Fracture Zone"; June 7, 1991.

911517; U.C. Herzfeld; UAF; "Geostatistical Structure Analysis and High Resolution Mapping"; June 5, 1991.

911518; K.L. Smith; NSF; "Trophic Coupling Between Mesopelagic and Sea-Ice Communities in the Weddell Sea"; June 7, 1991.

911519; M.M. Mullin; DOE; "Production, Horizontal Advection, and Fecal Flux of Particulate Organic C in H₂O of High Mesoscale Variability off Pt. Conception"; June 19, 1991.

911520; J.B. Graham; NSF; "Experimental Studies with Swimming Tunas Using the SIO's Sea-Going H₂O Tunnel"; June 5, 1991.

911521; D. Wirth; NSF; "Technicians"; June 13, 1991.

911522; G.G. Shor; ONR; "Supplemental Ship Funding under SIO Ship Grant N00014-89-J-1219"; June 11, 1991.

911526; O. Holm-Hansen; NSF; "Effects of Solar UV Radiation on Phytoplankton and Productivity of Lakes"; June 10, 1991.

911527; R.J. Frouin, R.C.J. Somerville; NASA; "Trace Gas Emissions to the Atmosphere by Biomass Burning in the W African Savannas"; June 14, 1991.

911528; J.L. Largier; DBW; "Hydrodynamic Flushing of Small-Boat Harbors"; September 19, 1991.

911532; F. Azam, A.F. Carlucci; DOE; "Bacterial Transformation and Transport of Organic Matter in the Ocean Margins"; June 20, 1991.

911533; K.L. Smith; DOE; "A Bottom-Transection Instrument for Making Long Time-Series Measurements of Sediment Community O₂ Consumption and Other Parameters on the Continental Margin"; June 17, 1991.

911534; E.L. Venrick; DOE; "Physical and Biological Dynamics of a Major Frontal System off Baja CA"; June 14, 1991.

911536; D. Wirth; WHOI; "Comparative Field Test of WHOI H₂O Sampler"; June 14, 1991.

911357; P. Cessi; ONR; "Separation of W Boundary Currents"; June 14, 1991.

911538; D.R. Cayan; NOAA; "Variability of Surface Salinity over the N Atlantic Ocean"; June 14, 1991.

911540; D. Lal; NSF; "Collaborative Research: Nuclear Studies of Continental Erosion Processes and Rates"; June 21, 1991.

911543; B. Cornuelle, P.F. Worcester; UW; "Single Slice Tomography"; June 18, 1991.

911545; M. Vernet; DOE; "Bio-Optics Modeling of Phytoplankton Production and Vertical C Flux in Coastal H₂O"; June 20, 1991.

911546; F.H. Fisher; ONR; "Visitor Support"; June 21, 1991.

911547; G. Masters; NSF; "Gilbert Symposium on Global Seismology: The Current Status and Future Directions"; June 24, 1991.

911548; J.J. Simpson; ONR; "(1) Support of ADI E1 Experiment and (2) Wrap-Up of the SIO Component of the ADI Project in the CA Current"; June 26, 1991.

921001; J.S. Jaffe; ONR; "Ocean Imaging and the In Situ Remote Sensing of Ocean Optical Parameters"; July 3, 1991.

921005; R.T. Guza, R.J. Seymour; DOD; "Waves and Wave-Driven Circulation"; July 8, 1991.

921006; W.S. Hodgkiss; ONR; "MDA-1 and MDA-2 Experiment Support"; July 18, 1991.

921008; J.M. Gieskes; NSF; "A Geochemical Study of Mud Volcanoes on Taiwan"; July 11, 1991.

921009; M.M. Mullin; NOAA; "Cooperative Fishery Oceanography Research"; July 16, 1991.

921010; D.T. Sandwell; NASA; "Correlation of Elevation and Surface Deformation: Gravitational Sliding of a Thin Lithosphere or Crust?"; July 11, 1991.

921013; D.T. Sandwell; NASA; "Geodynamic Applications of GEOSAT/ERM Altimetry"; July 12, 1991.

921014; J.B. Minster, F.L. Vernon; PL; "Studies of Sources, Structure, and Signal Propagation in S Eurasia"; July 15, 1991.

921015; O. Holm-Hansen; NOAA; "Phytoplankton Studies in Support of the US AMLR Program, January-March 1992"; July 24, 1991.

921018; B. Jähne; ONR; "Local Measurements of the Transfer Rate of Gases across the Ocean Surface"; July 26, 1991.

921021; T. Drake, D.L. Inman; ONR; "Basic Studies of High-Concentration Bedload Transport"; August 7, 1991.

921022; S.A. Jenkins; ONR; "Waves over Rough Obstacles: The Generation of Transverse Wave Numbers with Blue-Shifts"; August 15, 1991.

921023; Y. Bock, C. Constable, J.F. Gilbert, A. Harding, T.G. Masters, J.P. Morgan, J.A. Orcutt, P.M. Shearer; NSF; "Acquisition of Computing and Networking Equipment"; July 26, 1991.

921025; D. Lal; ACS; "Development of Cosmogenic Nuclear Methods for the Study of Soil Erosion and Formation Rates"; July 24, 1991.

921028; G. Carnevale; NSF; "Stability of Circular Vortices"; August 1, 1991.

921030; F.H. Fisher; ONR; "Initial R/P Flip Overhaul Planning/Contingency Support"; August 2, 1991.

921031; J.A. Hildebrand; ONR; "Grad Student Support"; n.d.

921032; R.L. Parker; ACS; "A Study of the Crustal Structure of the Gulf of MX Using Terrain Corrected Satellite Gravity Data"; July 26, 1991.

921033; F.H. Fisher; ONR; "Continuation of AUSS and ATV Support Services"; August 9, 1991.

921037; J.H. Swift; ONR; "Arctic Circulation Studies"; August 16, 1991.

921038; O. Holm-Hansen; SPA-AFEAS; "Effect of Changing UV Radiation Regimes on Photoplankton Trophodynamics"; August 15, 1991.

921039; A.G. Dickson, C.D. Keeling; NSF; "Supplement to: The CO₂ System in Seawater: The Certification of Standard Reference Materials for the Quality Control of Oceanic Measurements"; August 14, 1991.

921040; M. Wahlen; NASA; "The Origin of Stratospheric H₂O: Quantitative Source Budget from Measurements of D/H Ratios in Stratospheric H₂O, CH₄ and H₂"; n.d.

921041; J.P. Morgan; NASA; "The Thermal and Dynamic Effects of the Asthenosphere-Lithosphere System on the Global Topography of Earth and Venus"; August 15, 1991.

921042; H.D.I. Abarbanel; ONR; "Nonperiodic, Broadband Signals: Signal Processing in Chaos"; August 28, 1991.

921045; H. Felbeck; NASA; "Molecular Phylogeny of Bacterial Symbionts from Hydrothermal Vents"; August 14, 1991.

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921047; G. Carnevale; ONR; "Stability of Circular Vortices"; August 16, 1991.

921048; G. Carnevale; AFOSR; "Stability of Circular Vortices"; August 16, 1991.

921051; S.A. Jenkins; DBW; "Extreme Event Analysis of the Integrity of the Redondo Harbor Breakwater"; August 16, 1991.

921052; T.P. Barnett; NASA; "Research on Climate and Ocean Dynamics Using ERS-1 Observations"; August 20, 1991.

921053; J. Krolik; ONR; "Matched Field Source Location in a Random Ocean Channel"; August 27, 1991.

921054; J.H. Swift; ONR; "Arctic Circulation Studies"; August 19, 1991.

921056; C.P. de Moustier, G.G. Shor, J.H. Swift, D. Wirth; NSF; "Oceanographic Instrumentation"; September 13, 1991.

921057; G.G. Shor, J. Williams; NSF; "Shipboard Scientific Support Equipment"; August 30, 1991.

921059; J.A. Tarduno; NSF; "Collaborative Research: A Late Cretaceous and Paleogene Arctic Paleoclimatic Record: The Sedimentary Sequence at Strand Fiord, Axel Heiberg Island, NWT, Canada"; August 30, 1991.

921060; T.D. Herbert; JOII; "JOI/USSAC Summer Research Program for Undergraduates at SIO"; August 28, 1991.

921061; D.L. Inman, R. Lowe; WES; "Development of a Bedload Sensor for Wave and Current Regimes"; September 13, 1991.

921062; M.J. Buckingham; ONR; "3-D Ocean-Acoustic Propagation Modeling"; September 5, 1991.

921063; D.S. Luther; WHOI; "EM and Pressure Oceanographic Instrumentation Upgrading and Development"; August 30, 1991.

921064R1; W.S. Hodgkiss; ONR; "Acoustic Reverberation"; February 28, 1992.

921065; J. Berger; IRIS; "IRIS/IDA Network Operations and Maintenance"; September 5, 1991.

921066; P.P. Niiler; ONR; "CA Current Moored Array"; September 9, 1991.

921068; W.S. Hodgkiss; ONR; "MDA-1 Experiment Support"; September 20, 1991.

921069; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; September 11, 1991.

921070; W.H. Munk; DARPA; "Acoustic Monitoring of Global Ocean Variability"; October 24, 1991.

921071; R.A. Knox, G.G. Shor; NSF; "Ship Operations"; October 1, 1991.

921073; W.S. Hodgkiss; ONR; "MDA-1 Analysis and FSX Planning"; September 23, 1991.

921074; W.S. Hodgkiss; ONR; "Spatial/Temporal Signal and Noise Analysis and Site Specific Experiment Support"; October 7, 1991.

921076; R.T. Guza; WSU; "Nonlinear Interactions in Ocean Surface Waves"; September 17, 1991.

921077; F.N. Spiess; NSF; "OSN-1 Wireline Re-Entry"; October 21, 1991.

921078; R.T. Guza; DBW; "S CA Wave Data Analysis: Past and Future"; September 16, 1991.

921079; R.T. Guza; DBW; "Island Sheltering Measurements and Models of Coastal Waves"; September 19, 1991.

921081; A.A. Yayanos; NSF; "Hydrothermal Alteration of Organic Matter"; September 30, 1991.

921083; P.R. Castillo, J.H. Natland; NSF; "Petrological Investigation of the Pacific-Antarctic EPR"; October 1, 1991.

921084; J. Miles; NSF; "Mathematical Sciences: Geophysical Fluid Dynamics"; September 25, 1991.

921085; D. Wirth; NSF; "Technicians"; September 27, 1991.

921086; R. Attiyeh, R.H. Rosenblatt; NSF; "REU"; September 26, 1991.

921087; J.P. Morgan, J.A. Orcutt; NSF; "The Australian-Antarctic Discordance: A Natural Lab to Study Mid-Ocean Ridge Processes"; September 26, 1991.

921088; L. McFadden; NASA; "Observational Bias Analysis of the Near-Earth Asteroid Population"; September 26, 1991.

921091; S. Constable, J. Orcutt, H. Staudigel; NSF; "Development and Deployment of Seafloor Tiltmeters"; September 30, 1991.

921092; G.G. Shor; ONR; "Partial Funding of SeaBeam 2000 Multibeam Echo Sounder for R/V Melville"; October 1, 1991.

921094; E.A. Frieman; ONR; "Ocean Studies"; October 2, 1991.

921097; S.K. Ride; SAIC; "Global Change Research Initiative Task Support"; September 27, 1991.

921099; W.S. Hodgkiss; ONR; "Array Development"; October 7, 1991.

921101; K.M. Watson; ONR; "Upgrading the Day/Night WSI from Manual/Interactive to Full Automatic Control"; October 15, 1991.

921105; F.L. Vernon; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; October 15, 1991.

921108; R.J. Frouin; NASA; "Study of Atmospheric and Bidirectional Effects on Surface Reflectance and Vegetation Index Time Series: Application to NOAA AVHRR and Preparation for Future Space Missions"; October 15, 1991.

921109; A.P. Klimley; NSF; "Automated Electronic System for Global-Scale Monitoring of the Movements of Marine Animals"; October 24, 1991.

921110; M.G. Haygood; DOD; "Symbiont Transmission and Physiological and Genetic Regulation in Fish- Bacterial Light Organ Symbioses"; October 28, 1991.

921112; L.A. Levin; DOD; "Effects of Topography- Induced Flow Variation on Benthic Invertebrate Growth and Foraminiferal Community Structure"; October 9, 1991.

921114; C.E. Reimers; NSF; "Diffusion Coefficients of Dissolved CO₂- Species and CaCO₃ Dissolution in Deep-Sea Sediments"; October 24, 1991.

921115; A.J. Harding, J.P. Morgan, J.A. Orcutt; NSF; "Seismic Study of Extension in Hess Deep"; November 1, 1991.

921116; J.A. Hildebrand; DOD; "Seafloor Seismo- Acoustic Noise"; October 25, 1991.

921117; J.N. Brune, J.R. Curray, L.M. Dorman; NSF; "A Seismic Refraction Study in the Bay of Bengal: The World's Thickest Sediment Section or Anomalous Crustal Structure?"; November 1, 1991.

921119; C.E. Reimers; NIU; "Linking Marine Organic C Flux and Sediment Pore H₂O Chemistry to Benthic Foraminiferal Assemblages: A Paleoceanographic Tool"; October 23, 1991.

921121; J.H. Swift; NSF; "Support for a Deep W Boundary Current Cruise"; October 29, 1991.

921122; H.E. Given, J.B. Minster; DOD; "Crust and Upper Mantle Structure beneath the IRIS/IDA Seismic Stations in Eurasia"; October 24, 1991.

921123; T.P. Barnett; NSF; "(1) ENSO Problem and (2) Interdecadal Variability and Predictability in the Ocean"; October 8, 1991.

921124; R.E. Flick, R.J. Seymour; DBW; "CDIP Collection, Analysis, Reporting, and Storage of Wave Data"; October 25, 1991.

921125; S.C. Webb; NSF; "A Conductivity Survey of Middle Valley"; November 6, 1991.

921128; S.A. Jenkins; NSF; "The Behavior of Dynamic Shear Stress in Flocculating Cohesive Sediments"; October 31, 1991.

921130; T.L. Hayward; NSF; "Environmental Variability in the Central N Pacific near HI"; October 31, 1991.

921132; M.M. Mullin; NSF; "Vertical and Horizontal Distribution of Calanus pacificus around the Pt. Conception, CA, Upwelling Site, and its Relation to Seasonal Population Dynamics"; November 1, 1991.

921133; L.R. Haury, T.L. Hayward, M.M. Mullin, E.L. Venrick; NSF; "Physical and Biological Dynamics of a Major Frontal System off Baja CA"; October 31, 1991.

921134; L.M. Dorman, J.A. Hildebrand, S.C. Webb; NSF; "Microseismicity of the EPR 9°50'N"; November 8, 1991.

921135; J.A. Orcutt; DOD; "Synthetic Aperture Studies of Heterogeneity Using Small Coherent Seismic Arrays"; October 28, 1991.

921136; T.D. Herbert, J. Tarduno, L. Tauxe; NSF; "Controls and Applications of Magnetic Susceptibility Data on Cores from the Ontong-Java Plateau, W Equatorial Pacific"; October 31, 1991.

921138; J.B. Graham; AHA; "Applications for the Shark Heart Model of Cardiac Physiology"; October 29, 1991.

921139; F. Azam; NSF; "Bacteriophage Production in the Sea: Implications for Bacterial Processes and Material Flux Pathways"; November 18, 1991.

921140; R.E. Shadwick; NSF; "Research Training in Biomechanics of Marine Organisms"; October 30, 1991.

921141; J.A. Orcutt; DOD; "Quantitative Prediction of Seafloor Noise at Low Frequencies"; October 29, 1991.

921142; J.A. Orcutt; DOD; "The Determination of Source and Propagation Path Properties from Eurasian Broadband Stations and Array"; October 30, 1991.

921143; J.A. Orcutt; DOD; "Global Travel Time Tables for an Aspherical Earth"; October 30, 1991.

921145; F.H. Fisher; NOSC; "Ship Support and Technical Services Support"; October 31, 1991.

921146; J.H. Filloux, D.S. Luther; NSF; "US- Australian Cooperative Study of the N Branch of the Circumpolar Current"; November 12, 1991.

921149; D.W. Wilkie; IMS; "1992 General Operating Support Grant Funds"; October 31, 1991.

921150; A.P. Klimley; SW; "Telemetry Tracking of Juvenile White Sharks"; November 4, 1991.

921151; A.J. Spivack; NSF; "B Paleocyanography"; November 5, 1991.

921152; R. Frouin; NASA; "SRS and Analysis of the Surface Radiation Budget and its Components during FIFE, with Particular Emphasis on Surface Albedo, Longwave Irradiance, and the Effect of Broken Clouds on Shortwave Irradiance"; November 4, 1991.

921153; A.A. Yayanos; GRCP; "Culture Collection of Deep-Sea Barophilic Microorganisms"; November 4, 1991.

921154; P.F. Lonsdale, D. Sandwell; NSF; "The Geology of the Pacific-Antarctic Plate Boundary; A Collaborative Project"; November 10, 1991.

921155; V. Ramanathan; NSF; "CEPEX: An Airborne Experiment to Address Issues Concerning the Role of Cloud-Radiation Feedbacks in ENSO and Global Warming"; November 11, 1991.

921156; J.S. Jaffe, R. Seymour; WES; "Development of an Acoustic Bedload Sensor"; November 15, 1991.

921157; J.W. Hawkins; NSF; "Petrologic-Geochemical Study of Crustal Evolution of N Luzon: From Island Arcs to Micro-Continent"; November 25, 1991.

921160; J.R. Arnold, D. Lal, K. Nishiizumi; NSF; "Collaborative Research: Geomorphological Studies Using Cosmogenic In Situ Nuclides"; November 25, 1991.

921162; W.H. Berger; NIGEC; "History of Sea Surface Temperature and ENSO Intensities off S CA on an Annual to Bi-Annual Scale, A.D. 1450-1910"; n.d.

921166; W.S. Hodgkiss; ONR; "Neurorecognition Support"; November 26, 1991.

921167; J.J. Simpson; USGS; "Improved Estimates of NDVI for Land-Based Global Change Studies (40, 179, 195)"; November 14, 1991.

921168; D.T. Sandwell; NASA; "Geodynamic Applications of GEOSAT/ERM Altimetry"; n.d.

921170; R.C. Smith; NASA; "Bio-Optics, Photoecology, and Remote Sensing"; October 18, 1991.

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921172; Y. Bock, S. Wdowinski; NSF; "Deformation of Continental Lithosphere at Oblique Convergence Margin"; November 21, 1991.

921173; Y. Bock; NSF; "Precise GPS Ephemerides for Crustal Deformation Surveys"; November 21, 1991.

921174; T.G. Masters; NSF; "Global Mantle Structure from Long-Period Body Waves"; November 15, 1991.

921174R1; T.G. Masters; NSF; "Global Mantle Structure from Long-Period Body Waves"; May 6, 1992.

921175; C. Constable, L. Tauxe; NSF; "Paleointensity of the Earth's Magnetic Field Using Basaltic Glass"; November 27, 1991.

921180; H. Craig; NIGEC; "Isotopic Characterization of the Sources of Atmospheric N₂O"; December 15, 1991.

921184; B.M. Tebo; NSF; "Biochemical and Molecular Analysis of Metal-Precipitating Spores of a Marine Bacillus sp."; November 27, 1991.

921185; J.A. Orcutt; NSF; "Conference on Mathematical Geophysics, Taxco, MX"; December 10, 1991.

921186; J.R. Arnold, K. Nishiizumi; NSF; "Cosmogenic Radionuclides in the GISP II Ice Core: 10Be, 26Al, and 36Cl"; December 16, 1991.

921189; D.E. Hagan, D.P. Rogers; NSF; "Airborne High Precision Multichannel IR 'Window' Measurements of SST during TOGA COARE"; November 27, 1991.

921191; T.G. Drake, D.L. Inman, R. Lowe; WES; "Development of a Bedload Sensor for Wave and Current Regimes/Phase II"; November 1991.

921192; N.D. Holland; NSF; "Phylogenetic Analysis of Higher Deuterostomes Based on the Structure and Expression of Pattern-Controlling Genes during Development"; December 11, 1991.

921194; S.C. Chen, J. Roads; NIGEC; "A Study of Hydrological Extremes in CA"; December 6, 1991.

921195; J.B. Graham, R.H. Rosenblatt; NIGEC; "Predicting Global Change Impacts on Coastal and CA Current Ecosystems, Including a Conference to Assess Effects on the Societal Infrastructure of MX and CA"; n.d.

921197; J. Berger, H.K. Given; IRIS; "IRIS/IDA Network Development, Operations, and Maintenance"; December 12, 1991.

921198; A. Pares-Sierra, R.C.J. Somerville; NIGEC; "Modeling the Response of the CA Current System to Global Greenhouse Warming"; December 11, 1991.

921200; K.M. Watson; NIGEC; "Application of CFLOS to Surface Energy Balance Issues"; December 11, 1991.

921201; J.A. McGowan; NIGEC; "A Baseline for the Study of Ecosystem Change in the CA Current"; n.d.

921203; D.T. Sandwell; NSF; "Transition of Ridge Axis Gravity with Spreading Rate: The Effect of a Weak Lower Crust"; December 18, 1991.

921204; B.G. Mitchell; ONR; "Methods and Models for Marine Optics Sources and Sinks"; December 20, 1991.

921205; P.F. Lonsdale; ONR; "Geostatistical Traverse of EPR Natural Lab"; January 28, 1992.

921206; A.A. Yayanos; NSF; "Decomposition of Organic Matter by Bacteria of Cold and Warm Deep-Seas"; December 19, 1991.

921209; D. Wirth; NSF; "Shipboard Technician Support"; n.d.

921211; J.J. Simpson; UCR; "Improved Predictability/Anomalous CA Precipitation Patterns Using Image Segmentation, Radiative Transfer Technology, and Geophysical Info System"; January 29, 1992.

921214; C. de Moustier; ONR; "Processing and Analyses of SEAMARC II Data: An Expansion"; January 14, 1992.

921216; J.O. Roads; NOAA; "Prediction and Diagnosis of Atmospheric Moisture and Surface Hydrology"; December 27, 1991.

921217; L.M. Dorman; BRU; "Proposed Measurements of Seismic Noise and Earthquake Activity on the S EPR"; July 7, 1992.

921222; G.G. Shor; ONR; "Provision of 4 Days of Use of the R/V Thomas Washington, Plus Associated Technician Services, SeaBeam Work, and Reflection Profiling, for the USNRL"; January 7, 1992.

921222R1; G.G. Shor; ONR; "Provision of 4 Days of Use of the R/V Thomas Washington, Plus Associated Technician Services, SeaBeam Work, and Reflection Profiling, for the USNRL"; February 5, 1992.

921223; G.G. Shor; ONR; "Ship Time for C.S. Cox and S.C. Webb"; January 9, 1992.

921224; J.J. Simpson; NASA; "Satellite Support of Global Change Studies and Oceanographic Experiments"; January 29, 1992.

921226; J.J. Simpson; NOARL; "A Textural, Markov Random Field, Neural Network Approach to Cloud Classification of Satellite Data"; January 31, 1992.

921227; F.L. Vernon; SAIC; "Kislovodsk Mini-Array"; January 15, 1992.

921228; D. Wirth; UH; "Support of October 1992 Cruise"; January 13, 1992.

921229; P.K. Dayton; NSF; "Long-Term Investigation of Oceanographic Influences on Benthic Community Patterns in McMurdo Sound, Antarctica"; January 16, 1992.

921230; D. Wirth; NSF; "Science Vans for USCG Ship"; January 21, 1992.

921233R1; F.N. Spiess; JOII; "Supplement to: Development and Operation of a Wireline Re-Entry System"; May 14, 1992.

921234; D.P. Rogers; NSF; "A Study of the Variability of the Coastal Marine Atmospheric Boundary Layer"; March 9, 1992.

921236; G.W. Lugmair, J.D. Macdougall; NSF; "Isotopic and Trace Element Studies of the Lithospheric Mantle, Petrogenetic Processes and Magma Transport, and the Early Stages of Continental Crust Formation"; January 24, 1992.

921237; J. Bada; NSF; "Stable C and N₂ Isotopes in High-Arctic Muskox: Climate Change and Ecological Responses"; February 6, 1992.

921241; A.A. Yayanos; UCD; "Biological Systems for Assessing the Impact of Xenobiotics in the Coastal Deep-Sea"; January 27, 1992.

921244; D. Wirth; USF; "Shipboard Technical Support"; January 30, 1992.

921245; M.E. Huntley; NSF; "RACER: Development, Growth and Production of Zooplankton Including Krill"; February 2, 1992.

921247; J.J. Sullivan; NOAA; "UCSG"; February 3, 1992.

921248; A.A. Yayanos; UERG; "PUFA-Containing Bacteria as Systems for Assessing Peroxidative Damage by Atmospheric Contaminants"; February 10, 1992.

921250; J.H. Swift; UW; "ODF Services During the 1st 2 Field Phases of the 1992 US JGOFS Equatorial Pacific Project on the R/V Thomas Thompson"; January 6, 1992.

921251; H. Staudigel; NSF; "REU: The Cretaceous History of the S Pacific Thermal and Isotopic Anomaly: The Magellan Seamounts"; February 12, 1992.

921252; K.M. Watson; SNL; "Acquisition of Daytime Cloud Field Imagery with 2 WSI"; February 10, 1992.

921253; W. Wei; NSF; "Correlation of Upper Pliocene- Lower Pleistocene Nannofossil Datums with O2 Isotope Stratigraphy"; February 20, 1992.

921256; D.R. Cayan, R.C.J. Somerville; UCR; "Climate Variability and Snow Pack in the Sierra Nevada"; March 3, 1992.

921257; C. de Moustier; NASA; "Geostatistical Structure Analysis and High Resolution Mapping"; April 21, 1992.

921258; K.L. Smith; ONR; "Active Trophic Coupling between Pelagic and Demersal/Benthic Communities Over Seamounts"; n.d.

921261; K.M. Watson; ONR; "Upgrade of the LIMDAS Day/Night WSI"; February 26, 1992.

921263; K.M. Brown; JOII; "Influence of Diagenesis and Lithology on the Permeability of Accretionary Wedge Materials in the Region of the Chile Triple Junction"; February 21, 1992.

921267; W. Young; CSI; "Inelastic Collapse"; March 23, 1992.

921270; P.R. Castillo, J.W. Hawkins; NSF; "Renovation and Replacement of Analytical Facility Equipment"; February 27, 1992.

921273; D. Wirth; UTD; "Shipboard Technical Support"; March 11, 1992.

921274; J.T. Enright; NSF; "Eye Movements and Perception"; March 13, 1992.

921277; M. Wahlen; CSI; "CO2 and 13CO2 and Reactive Greenhouse Gases in the Lower Atmosphere"; March 9, 1992.

921279; W.S. Hodgkiss; ONR; "Engineering Sea Test"; n.d.

921281; L. Levin; EPA; "Opportunistic Polychaetes as Indicators of Estuarine Pollution: Development of a Tri-Species Index"; March 8, 1992.

921282; A.A. Yayanos; NASA; "Hydrothermal Alteration of Organic Matter: Possible Prebiotic Synthesis and the Upper Temperature Limit for Life Processes"; March 11, 1992.

921283; K. Nishiizumi; CSI; "H-Chondrite Parent Break-Up 7 Million Years Ago: 1 or 2 Events?"; n.d.

921284; J.R. Arnold, K. Nishiizumi; LLNL; "Preparation of 41Ca AMS Standard"; n.d.

921285; J.R. Arnold, K. Nishiizumi; LLNL; "Relation between Global Climate and the History of Desert Formation as Studies Using In Situ Produced 10Be, 26Al, and 21Ne in Quartz"; March 27, 1992.

921286; C.D. Keeling; NSF; "A Study of the Abundance and 13C/12C Ratio of Atmospheric CO2 and Oceanic C in Relation to the Global C Cycle"; March 13, 1992.

921287; K. Nishiizumi; LLNL; "Relation between Global Climate and the History of Desert Formation as Studied Using In Situ Produced 10Be, 26Al, and 21Ne in Quartz"; March 27, 1992.

921290; L. McFadden; CSI; "Interpretation of Thermal IR Images of Comets Austin and Faye"; March 17, 1992.

921291; P.M. Williams; LLNL; "14C Signature of Soluble and Particulate Organic C Pools as Tracers of Seasonal C Cycling in the NE Pacific Ocean"; March 17, 1992.

921293; S.C. Webb; NSF; "Upgrade of the MPL Fleet of Multi-Purpose Oceanographic Instruments"; April 1, 1992.

921295; L.M. Dorman, J.A. Hildebrand, P.F. Lonsdale; NSF; "Crustal Structure at the Hess Deep: Geophysical Studies in Support of Deep Crustal Drilling"; March 20, 1992.

921296; W.S. Hodgkiss; SDSU; "Fiber Optic Telemetry Receive System"; May 14, 1992.

921299; D.H. Bartlett; ONR; "High Pressure Adaptation of DNA Gyrase in Deep-Sea Bacteria"; n.d.

921300; S. Constable, C.P. Seabern, M.A. Zumberge; LLNL; "The Electrical Properties of a Mantle Rock"; March 19, 1992.

921301; D. Lal; NASA; "Solar Wind Implanted 14C in Lunar Regolith"; March 31, 1992.

921302; D. Lal; LLNL; "A Critical Test of the Applicability of 10Be/9Be Ratios in Authigenic Minerals for Determining Soil Formation Rates"; March 31, 1992.

921303; D. Lal; LLNL; "Investigations of the Variability of 10Be/9Be Ratios in Biogeochemical Reservoirs: Studies of the Ratio as a Dating Tool"; March 31, 1992.

921304; D. Lubin; CSI; "A Michelson FTIR Spectroradiometer for Atmospheric Global Change Research at Remote Geographic Locations"; March 19, 1992.

921307; J.H. Filloux; NSF; "Development of Rapidly Deployable, 3 Axis Tiltmeters: A Cooperative Proposal"; April 9, 1992.

921312; M.J. Buckingham, W.S. Hodgkiss; ONR; "MDA-1 Analysis and Propagation Modeling"; March 20, 1992.

921313; J.P. Morgan; NASA; "The Thermal and Dynamic Effects of the Asthenosphere-Lithosphere System on the Global Topography of Earth and Venus"; March 25, 1992.

921314; F.H. Fisher, R.W. Johnson; BPNL; "Provide 2 Day/Night WSI, with Software and Documentation, to ARM Program with Options for Additional Units"; n.d.

921316; J. Berger, J. Minster, F.L. Vernon; LLNL; "Determination of Detailed Crust and Upper Mantle Structure Beneath a 3-Component Broadband Small Aperture Array"; March 27, 1992.

921317; G.G. Shor; LGO; "Use of the SeaBeam 2000 Echo Sounding System Aboard the R/V Melville"; March 26, 1992.

921318; A.J. Kalmijn; ONR; "A Workshop and 2 Meetings on Research and Instruction in Sensory Biophysics"; March 31, 1992.

921323; C.H. Gibson, W. Thomas; NSF; "Effects of Small-Scale Turbulence on Non-Dinoflagellate Marine Phytoplankton"; April 23, 1992.

921324; B.T. Werner; ARO; "Micromechanics of Eolian Sand Dune Development: Computer Simulations and Experiments"; March 30, 1992.

921325; J.O. Roads; CSI; "Interannual Variation in the Tropical Hydrologic Cycle"; March 31, 1992.

921326; J.A. Orcutt; NSF; "Mantle Control of a Dynamically Evolving Spreading Center: Data Analysis"; April 1, 1992.

921328; J.A. Orcutt; NSF; "Seafloor Recording of Teleseismic Events in the Pacific"; April 3, 1992.

921330; M.M. Mullin; NSF; "A Study of the Mechanisms of Outbreaks of Red Tides in the Open Coastal H₂O of S CA"; April 16, 1992.

921331; M.M. Mullin; UCR; "Management of the Recovery of the Pacific Sardine Population: A Binational Workshop on Shared Pelagic Resources across the US-MX Border"; April 6, 1992.

921332; H. Staudigel, A.A. Yayanos; LLNL; "Microbial Mediation of Glass Alteration: Rates and Mechanisms"; April 3, 1992.

921334; B.M. Tebo; SINC; "Biomagnetic Separation Processes for Priority Pollutants"; April 3, 1992.

921335; W.H. Munk, P.F. Worcester; ONR; "OAT Monography Preparation"; April 8, 1992.

921336; W.S. Hodgkiss; LLNL; "Seismo-Acoustic Regional Wave Propagation"; April 16, 1992.

921337; J.G. Sclater; NSF; "Modeling of Large-Offset Fracture Zones in Slowly-to-Medium-Spreading Ocean Crust in the Indian Ocean"; May 5, 1992.

921344; W.H. Fenical; NSF; "Biological and Chemical Studies of Estuarine Marine Bacteria"; April 7, 1992.

921345; R.C.J. Somerville; NOAA; "Theoretical Models for Numerical Weather Prediction"; April 8, 1992.

921346; D. Cayan, R.C.J. Somerville; PGEC; "Climate Variability vs Snowpack and Streamflow in the Central and N Sierra Nevada and Coast Ranges"; April 16, 1992.

921347; J. Gieskes; NSF; "Fluid Flow Paths in the CR Rift Accretionary Wedge"; May 8, 1992.

921348; J. Gieskes, A.J. Spivack; NSF; "The Systematics of B and Be in Subduction Zone Sediments"; April 28, 1992.

921352; W.H. Berger; NSF; "Quaternary Record of Diatom Sedimentation in the W Equatorial Pacific"; April 27, 1992.

[Box 66]

921353; M.G. Haygood; ONR; "Growth Control in Bacterial Symbionts"; April 15, 1992.

921354; F.N. Spiess; LGO; "Collaboration in Deep Towed Magnetometer Survey of Anomalies in the SW Pacific"; April 20, 1992.

921355; J.A. Hildebrand, M.A. Zumberge; NSF; "A Gravity and Bathymetry Survey of the HI Depth Anomaly"; April 30, 1992.

921357; J. Miles; NSF; "Wind-Generated Waves"; April 20, 1992.

921358; P. Cessi, W. Young; NSF; "Thermohaline Dynamics"; April 28, 1992.

921359; B. Palenik; NSF; "Assaying the Genetic Diversity of Photosynthetic Prokaryotes in the Marine Environment"; April 24, 1992.

921361; G. Carnevale; NSF; "Quasi-, Semi- and Ageostrophic Dynamics and the General Circulation of the Ocean"; April 28, 1992.

921362; B. Cornuelle, P.F. Worcester; NSF; "N Atlantic Current Tomography Experiment"; April 22, 1992.

921364; B. Cornuelle, P.F. Worcester; ONR; "N Atlantic Current Tomography Experiment"; April 27, 1992.

921365; W.H. Berger; NSF; "Quaternary Record of CO₂- Saturation in the Deep Pacific: Ontong Java Plateau"; May 1, 1992.

921366; D. Wirth; UW; "Geomagnetic Field Behavior in the Jurassic; A Deep-Tow Magnetometer Study of Old Atlantic and Pacific Crust"; April 21, 1992.

921370; J.J. Simpson; NASA; "Accurate Change Detection in the Boreal Forest Based on Mathematically Rigorous Analysis of Satellite and Ground Observations"; April 22, 1992.

921371; L.A. Levin; NSF; "OMZI: Processes Affecting Community Structure at the Lower OMZ Boundary"; April 24, 1992.

921376; M. Wahlen; NASA; "C and H Isotope Composition and ¹⁴C Concentration in CH₄ from Sources and from the Atmosphere: Implications for a Global CH₄ Budget"; May 5, 1992.

921378; A.F. Carlucci; NSF; "Microbial Response to Sinking Organic Matter in the Benthic Environment of a Deep-Sea Station in the NE Pacific Ocean"; May 14, 1992.

921379; G. Backus; NSF; "Global Inversion for 3-D Mantle Electrical Conductivity"; May 5, 1992.

921381; Y. Bock, S. Wdowinski; NSF; "Deformation of Continental Lithosphere at Oblique Convergence Margin"; May 8, 1992.

921383; T. Barnett, N. Graham, J. Roads, R. Somerville; NOAA; "The Experimental Climate Forecast Center at SIO"; April 30, 1992.

921384; W.H.F. Smith; NSF; "Observational Constraints on Dynamic Topography and Asthenosphere Flow from Ship Depth and Magnetic Data in the SE Indian Ocean"; April 27, 1992.

921385; P.F. Lonsdale; NSF; "EPR Studies"; May 6, 1992.

921386; R.A. Knox; ONR; "Deactivation of R/V Thomas Washington (AGOR 10)"; April 28, 1992.

921387; C.E. Reimers; UAF; "The Seasonal Fluctuations on the Gulf of AK Continental Shelf"; April 29, 1992.

921388; D.M. Checkley; NSF; "Storm-Induced Spawning of the Atlantic Menhaden"; May 12, 1992.

921389; T.D. Herbert, L. Tauxe; NSF; "Building a Global Data Base for Refining the Astronomically Calibrated Plio/Pleistocene Magnetic Time Scale"; May 4, 1992.

921389R; T.D. Herbert, L. Tauxe; NSF; "Building a Global Data Base for Refining the Astronomically Calibrated Plio/Pleistocene Magnetic Time Scale"; August 27, 1992.

921390; J.P. Morgan; NSF; "The Genesis of Oceanic Crust: Magma Injection, Hydrothermal Circulation, and Crustal Flow"; April 29, 1992.

921391; A.G. Dickson; NSF; "The Calibration of Indicator Dyes for the Measurement of Oceanic pH: REU Supplement"; May 1, 1992.

921394; J.A. Orcutt; NSF; "The Internal Structure of the Clipperton Fracture Zone"; May 5, 1992.

921395; A.A. Yayanos; NSF; "Decomposition of Organic Matter by Bacteria of Cold and Warm Deep-Seas"; May 11, 1992.

921399; F.L. Vernon; USGS; "Coherence and Empirical Green's Functions from ANZA Data"; May 18, 1992.

921400; C. de Moustier; ONR; "Backscatter Data Acquisition for Hydrosweep DS Aboard R/V Ewing"; May 7, 1992.

921402; F. Azam; NSF; "Development of a Method to Measure In Situ Phage Production Rates in the Sea"; June 1, 1992.

921404; D.C. Agnew; USGS; "Deformation Monitoring of the S San Andreas Fault"; May 21, 1992.

921405; P.P. Niiler; NSF; "Global Drifter Measurements of Velocity, SST and Sea-Level Pressure"; May 5, 1992.

921406; B. Cornuelle, P.F. Worcester; ONR; "Acoustic Mid-Ocean Dynamics Experiment Analysis"; May 21, 1992.

921408; J.S. Jaffe; NSF; "Development of a 3-D Bioacoustic Imaging System"; June 17, 1992.

921410; R.A. Lewin; ONR; "Pure Culture of Micromonas"; May 13, 1992.

921411; M.I. Latz; NSF; "Physiological Mechanisms in the Control of Bioluminescent Countershading"; June 1, 1992.

921412; A.P. Klimley; UH; "Automated Monitoring of Yellowfin Tuna at HI FADs and Relationship to H₂O Mass Dynamics Based upon Satellite Imagery"; July 2, 1992.

921415; R. Pinkel; NSF; "A Coded Pulse Doppler Sonar on WOCE Line 13"; May 22, 1992.

921418; D. Cayan, R.C.J. Somerville; NOAA; "Climate Forcing and Surface Feedback in Continental Watersheds"; May 26, 1992.

921419; W. Thomas; NSF; "NZ Snow Algae: Distribution and Relationships to Microheterotrophs"; May 28, 1992.

921423; D. Roemmich, L. Talley, W. White; "VOS High Resolution XBT/XCTD Transects"; May 27, 1992.

921424; L. Tauxe; NSF; "Collaborative Research: Establishing Chrono- Framework for the Litho- Biostratigraphy of the Terrestrial and Marine Sediments of Latest Cretaceous Age in the W Interior US"; May 28, 1992.

921425; A.J. Harding; NSF; "Quantitative Analysis of Crustal Reflections"; May 27, 1992.

921426; J.A. McGowan; NOAA; "Ecosystem Variability in the CA Current System 1949-92: The Biological Response to Physical Changes"; May 22, 1992.

921427; M.M. Mullin; NOAA; "Interannual Variability in Winter-Spring Reproduction of a Dominant Source of Larval/Juvenile Fish Food in CA Current"; May 22, 1992.

921431; S. Constable; NSF; "SIO Facility for Electrical Conductivity Measurements"; May 26, 1992.

921432; J.H. Filloux, D.S. Luther; NOAA; "N Atlantic Current Transport and Frontal Variability"; May 29, 1992.

921433; J.H. Filloux, D.S. Luther; ONR; "N Atlantic Current Transport and Frontal Variability"; June 5, 1992.

921434; J.S. Jaffe; ONR; "Bio-Optical Imaging System"; June 26, 1992.

921435; K.M. Watson; ONR; "Project 1: Energy Exchange between Surface and Internal Waves; Project 2: Excitation and Generation of Short Capillary Waves by Longer Waves"; June 23, 1992.

921338; T.D. Herbert, J.A. Tarduno; NSF; "Cyclostratigraphic Calibration of the Barremian: Constraints on the Rates of Cretaceous Volcanism and Environmental Change"; May 29, 1992.

921440; J. Kendall; NSF; "Constraints on Subduction- Zone Structure and Anisotropy from Teleseismic Waveform Analysis"; May 28, 1992.

921441; B. Cornuelle, P.F. Worcester; NOAA; "N Atlantic Current Topography Experiment"; May 27, 1992.

921443; A.A. Yayanos; DOHHS; "DNA Damage by Sunlight in the Environment"; June 1, 1992.

921444; J.H. Filloux, D.S. Luther; NSF; "N Atlantic Current Transport and Frontal Variability"; May 29, 1992.

921447; M.A. Zumberge; NOAA; "AGM Research and Development"; May 29, 1992.

921450; W.D. Collins, W.B. White; NOAA; "Info Management System for Distributed Databases in Support of Climate and Global Change Studies"; May 29, 1992.

921454; D. Wirth; NSF; "Processing of Bathymetry for NGDC"; June 15, 1992.

921457; S.A. Jenkins; ONR; "Waves over Rough Obstacles: The Generation of Transverse Wave Numbers with Blue-Shifts"; June 5, 1992.

921458; S.A. Jenkins; ONR; "The Effects of Suspensions of Cohesive Sediments on Surge Propagation through Breakwaters and Channels"; June 6, 1992.

921459; J.R. Arnold; NASA; "Surface Chemical Composition Determination from the Mars '94 Gamma Ray Experiment"; June 3, 1992.

921461; F.H. Fisher, W.S. Hodgkiss; USNRL; "In Situ Tactical Environmental Assessment"; June 1992.

921463; C.D. Charles; NOAA; "Modeling O2 Isotopes in Precipitation Using the NASA/GISS GCM"; June 10, 1992.

921465; L. Levin; NCSU; "A Tri-Species Indicator of Organic Enrichment in Estuaries: Individual, Population, and Community Approaches"; June 9, 1992.

921466; H.K. Given; DARPA; "Path Effects on Regional Magnitude in Eurasia"; June 10, 1992.

921470; R.T. Guza; DBW; "Island Sheltering Measurement and Models of Coastal Waves"; June 11, 1992.

921472; S. Ride; NASA; "Ulysses Project"; June 12, 1992.

921473; D. Wirth; NSF; "Supplement to Technician Support for SIO Ships"; June 22, 1992.

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921474; M. Vernet; NSF; "The Synthesis and Excretion of Intra- and Extracellular UV-Absorbing Compounds in Antarctic Phytoplankton"; July 1, 1992.

921475; O. Holm-Hansen; SPA-APEAS; "Adaptation of Phytoplankton to Increased Fluences of UVB Radiation"; June 30, 1992.

921480; L.D. Talley; NSF; "Presidential Young Investigator's Award"; June 23, 1992.

921481; D.P. Rogers; ONR; "Workshop on EC-130Q Hercules Aircraft"; n.d.

921482; W. Collins, D. Lubin; SAIC; "A Study of Spectral Cloud Radiative Forcing and Greenhouse Effect Using ERBE and HIRS Data"; June 23, 1992.

921483R1; W. Wei; ACS; "Global Calibration of Paleogene Calcareous Nannofossil Datums with Magnetostratigraphy"; July 6, 1992.

921486; W. Collins; NASA; "Study of Coupled Ocean/Atmosphere Interactions Using ERBE and SAGE Data"; June 24, 1992.

921487; D. Lubin; NASA; "Global Surface UV Radiation Climatology from TOMS and ERBE Data"; June 24, 1992.

921488; P.P. Niiler; NOAA; "Drifter Arrays in the Atlantic Climate Change Program from TOMS and ERBE Data"; June 26, 1992.

921489; L.A. Levin; NSF; "Development of Rare Earth Tracer Techniques for the Study of Larval Dispersal"; June 30, 1992.

921490; J. Filloux, D. Luther; NOAA; "Observations of the Deep W Boundary Current and Recirculation E of the Bahamas"; June 29, 1992.

921492; R.L. Parker; NASA; "Regularization and Resolution of Downward Continuation of Satellite Magnetic Data"; June 29, 1992.

931001; R.A. Knox; NSF; "Ship Operations"; July 3, 1992.

931006; D.L. Inman; ONR; "Boundary Ventilation"; July 9, 1992.

931010; F.N. Spiess; UW; "Fine Scale Investigation of the Intersection of the Kane Fracture Zone and the Mid-Atlantic Ridge"; July 9, 1992.

931011; R.C. Smith; UCSB; "Bio-Optics, Photoecology, and Remote Sensing Using SeaWiFS"; July 1992.

931012; J.O. Roads, R.C.J. Somerville; NASA; "Theoretical Models for Numerical Weather Prediction"; July 7, 1992.

931015; F.N. Spiess; ONR; "Deep Tow Search Operation"; July 9, 1992.

931017; R.A. Knox; ONR; "Ship Time for ONR-Funded Investigators under the SIO Omnibus Programs"; July 31, 1992.

931018; F. Azam; ONR; "Role of Bacteria in Particle Aggregation in the Sea"; July 10, 1992.

931020; L.M. Dorman, J.A. Hildebrand, P.F. Lonsdale; NSF; "Hess Deep Transponder Replacement"; July 15, 1992.

931022; R. Frouin, J.J. Simpson; NSF; "Satellite Determined Oceanic Cloud Variability: Impact on Surface Radiation Budget and Teleconnections"; July 17, 1992.

931025; J.A. Hildebrand, W.S. Hodgkiss; ONR; "Bottom Reverberation Experiment"; July 20, 1992.

931030; D.T. Sandwell; NASA; "Correlation of Elevation and Surface Deformation: Gravitational Sliding of a Thin Lithosphere or Crust?"; July 22, 1992.

931034; J.J. Simpson; NASA; "Quantative Determination of Alternate Biogeochemical Pathways in the Ocean Using SeaWiFS, AVHRR, and In Situ Data"; July 23, 1992.

931042; B. Jähne; ONR; "Local Measurements of the Transfer Rate of Gases across the Ocean Surface"; July 28, 1992.

931044; R.A. Knox; NSF; "Ship Operations"; July 29, 1992.

931047; R.A. Knox, C. de Moustier, J.H. Swift, D. Wirth; NSF; "Oceanographic Instrumentation"; August 31, 1992.

931048; R.A. Knox, J. William; NSF; "Shipboard Scientific Support Equipment"; August 21, 1992.

931049; K.M. Watson; ONR; "Automation of the LIMDAS Day/Night WSI Data Acquisition"; August 5, 1992.

931049R1; K.M. Watson; ONR; "Automation of the LIMDAS Day/Night WSI Data Acquisition"; September 10, 1992.

931050; A.U. Kerr; NOAA; "Support for Long-Term Planning of NOAA's Earth System Data and Info Management Program"; August 7, 1992.

931051; M.E. Huntley; NSF; "GLOBEC: Population Dynamics of Calanus finmarchicus on NW Atlantic Coastal Shelves, Including Georges Bank"; September 14, 1992.

931052; E.A. Frieman; ONR; "Ocean Studies"; August 12, 1992.

931053; A.P. Klimley; NSF; "Development of Sensors and Algorithms for Accurate Position-Determination by Archival Tag"; August 19, 1992.

931054; E.D. Goldberg; ONR; "Marine Organic Colloids"; August 11, 1992.

931055; J.L. Bada; ONR; "Investigations of Oceanic Organic Chemistry Using State-of-the-Art Laser-Based Analytical Techniques"; August 17, 1992.

931058; A.A. Yayanos; ONR; "Sources and Sinks of Volatile Fatty Acids along O2 Gradients in the Upper Ocean"; August 17, 1992.

931059; M.I. Latz; ONR; "Bioluminescence Source Emission Characterization"; August 19, 1992.

931061; T. Nogami; NSF; "Second Order Subgrade Model for Dynamic Response Analysis of Pile Foundations"; August 19, 1992.

931062; T. Nogami; NSF; "Second Order Subgrade Model for Dynamic Response Analysis of Pile Foundations"; August 19, 1992.

931063; L.M. Dorman; ONR; "Seafloor Shear Velocity Measurements in the Atlantic Acoustic Reverberation Corridor"; August 26, 1992.

931064; R.E. Flick, R.J. Seymour; DBW; "CDIP"; August 13, 1992.

931065; S.K. Ride, V.D. Shapiro, V.I. Shevchenko; NRA; "Large Amplitude Alfvénic and Whistler Waves in Magnetospheric and Solar Wind Plasmas"; August 18, 1992.

931066R1; J.A. Orcutt, F.L. Vernon; NSF; "The Design and Construction of a Broadband OBS"; April 9, 1994.

931067; W. Fenical, P.R. Jensen; NCRI; "Development of New Coastal Fermentation Technologies"; August 31, 1992.

931071; A.J. Kalmijn; ONR; "Hydrodynamic and Near- Field Acoustic Detection"; September 9, 1992.

931072; G. Arrhenius; NSF; "Archean Mineralogy and Paleontology of PO43-"; November 23, 1992.

931074; W. Young; ONR; "The Large Scale T-S Structure of the Mixed Layer"; August 27, 1992.

931078; A.P. Klimley; WCNURC; "Long-Term Automated Monitoring of Pelagic Fish Assemblage 'Indicator' Species at Seamounts Related to Physical Processes with Satellite Imagery"; August 25, 1992.

931083; J.P. Morgan; NSF; "The Genesis of Oceanic Crust: Magma Injection, Hydrothermal Circulation, and Crustal Flow"; September 29, 1992.

931084; T.D. Herbert, M. Kastner; NSF; "Barite in the Central Equatorial Pacific: Implications for Marine Chemistry, Productivity, and Circulation of the Modern and Past Oceans"; September 14, 1992.

931091; M.A. Zumberge; NSF; "Supplement to: Construction and Testing of an OBAGM"; September 17, 1992.

931092; O. Holm-Hansen; NSF; "Effects of Solar UV Radiation on Primary Production in Arctic H₂O"; September 22, 1992.

931095; J.A. Hildebrand; NSF; "Microseismicity of the Juan de Fuca Ridge Cleft Segment"; October 1, 1992.

931097; D.H. Bartlett; DOHHS; "Pressure Regulation in Bacteria"; September 29, 1992.

931098; J.D. Macdougall; NSF; "Modeling Magma Generation and Transport at the Ridge Crest"; September 28, 1992.

931100; J. Arnold; GD; "Launch Site Processing and Facilities for Future Launch Vehicle"; September 23, 1992.

931101; D. Wirth; NSF; "Technicians"; September 28, 1992.

931103; E.A. Hemmingsen; DOHHS; "Studies of Cavitation in Biological Systems"; September 23, 1992.

931104; J.A. Orcutt; NSF; "Mantle Control of a Dynamically Evolving Spreading Center: Data Analysis"; September 25, 1992.

931105; P.J. Flatau; NASA; "Scattering and Radiative Properties of Aerosol Particles"; September 28, 1992.

931106; J.P. Morgan, J.A. Orcutt; NSF; "A Geophysical Investigation of the Australian- Antarctic Discordance"; September 29, 1992.

931109; D. Lal; ACS; "Studies of Cosmogenic ¹⁰Be, and Trace Elements Be, Sr and Mg in Marine Calcareous Sediments to Determine Their 'Ages' and to Study Diagenetic Processes/Rates"; September 29, 1992.

931111; S.C. Cande; NSF; "A High Resolution Plate Kinematic Flowline of the Pacific-Antarctic Ridge (Originally Awarded to LGO under Grant OCE 91-03573)"; October 1, 1992.

931114; W.S. Hodgkiss; ONR; "MDA-1 Data Analysis and Report"; October 9, 1992.

931115; W.S. Hodgkiss; ONR; "SSE and SPINNAKER Experiment Support"; October 9, 1992.

931116; R.E. Davis; NSF; "McMurdo Sound Metsat Station: Upgrade, Maintenance, and ARC Operations"; January 26, 1993.

931120; D.C. Agnew; UNAVCO; "Partial Support for PFGO through FY93"; October 13, 1992.

931124; D.C. Agnew, F.K. Wyatt; NSF; "Year-2 Support for PFGO"; October 7, 1992.

931125; J.A. Orcutt; NSF; "Seismicity of the Nordic Mid-Ocean Ridges: New Constraints from Norwegian Seismic and SOSUS Hydrophone Arrays"; October 12, 1992.

931126; D.C. Agnew; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; October 9, 1992.

931127; S.C. Cande; NSF; "Tectonic Erosion along the S Chile Margin"; September 30, 1992.

931128; S.C. Cande, J.A. Hildebrand, R.L. Parker; NSF; "Collaborative Project: A Mid-Tow Survey of the Central Magnetic Anomaly on the EPR near 190S"; October 20, 1992.

931129; G.R. Ierley; NSF; "The General Circulation of Ocean: Quasi-Geostrophy and Beyond"; November 1, 1992.

931133; S.C. Cande; NSF; "Collaborative Project: The Source of Short Wavelength Variations within the Central Magnetic Anomaly on the EPR at 19°30'S"; October 20, 1992.

931134; W. Fenical; NSF; "Chemical Defense in Marine Organisms"; November 19, 1992.

931135; C. Gibson, W. Thomas; NSF; "Toward a Model of the Effect of Small-Scale Turbulence on Marine Phytoplankton"; November 3, 1992.

931139; T. Collins; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Seismic Gap"; October 20, 1992.

931143; S.C. Webb; NSF; "Rayleigh Wave Study of the Upper Mantle near the EPR"; November 2, 1992.

931145; J.R. Curray, L.M. Dorman; NSF; "A Seismic Refraction Study of the Thick Sediment Section in the Bay of Bengal"; October 29, 1992.

931146; P.R. Castillo, J. Mammerickx; NSF; "Tectonic Setting, Petrology and Age of the Foundation Seamounts, a Newly-Discovered Seamount Chain in the S Pacific"; November 2, 1992.

931149; C.S. Cox; NSF; "Structure and Dynamics of Capillary Waves"; October 23, 1992.

931150; D.P. Rogers; NSF; "The Marine Atmosphere in the Vicinity of the Gulf Stream"; October 22, 1992.

931151; R.A. Knox; NSF; "Ship Operations"; October 30, 1992.

931152; P. Cessi; NSF; "Thermohaline Dynamics on the Planetary Scale"; October 23, 1992.

931155; V. Ramanathan; NSF; "CEPEX"; October 20, 1992.

931156; J.O. Roads, W.B. White; NSF; "Coupling between Ocean, Atmosphere, and Land in the Low Latitude W Boundary of the N Pacific on ENSO Time Scales"; October 28, 1992.

931158; M.D. Ohman; NSF; "Relocation of the SIO Planktonic Invertebrates Collection"; October 26, 1992.

931159; V. Ramanathan; NASA; "Collaborative between C4, UCLA, and NASA Ames on Cloud Microphysics and Chemistry"; January 22, 1993.

931160; A. Pares-Sierra, W. White; NSF; "The Mesoscale Dynamics of the E Pacific"; October 27, 1992.

931161; T. Chereskin, R. Peterson; NSF; "The CA Ocean Time Series A Pilot Program"; October 27, 1992.

931162; L.J. Burdick; PL; "Path-Specific Crustal Phases in the CIS and a Complete Model for Seismic Source Behavior of Peaceful Nuclear Explosions"; October 26, 1992.

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931164; M.M. Mullin; NSF; "Production of Calanus (Copepod) nauplii and Use by Zooplanktivores in the Pt. Conception-SB Channel Region"; October 28, 1992.

931167; D.K. Blackman; NSF; "The Evolution of Ridge- Transform Plate Boundaries"; October 28, 1992.

931168; R. Frouin; WHOI; "Long-Term Monitoring of Aerosols in the NW Atlantic: Relation to Oceanic (CH₄)₂S"; December 5, 1992.

931170; P.R. Castillo; NSF; "Detailed Petrological Investigation of Cretaceous Oceanic Basalts from the W Pacific"; November 2, 1992.

931171; J.G. Sclater; NSF; "Modeling of Large-Offset Fracture Zones in the Slowly-to-Medium-Spreading Ocean Crust in the Indian Ocean"; October 29, 1992.

931174; F.N. Spiess; JOII; "Supplement to Development and Operation of a Wireline Re-Entry System"; May 27, 1993.

931176; J.J. Sullivan; NOAA; "UCSG: National Sea Grant Fellowships"; November 5, 1992.

931178; B. Palenik; NSF; "Assaying the Genetic Diversity of Photosynthetic Prokaryotes in the Marine Environment"; November 5, 1992.

931179; R.A. Knox; NSF; "Ship Operations"; November 3, 1992.

931180; J.R. Curray, L.M. Dorman; NSF; "Sediment Thickness by a Modified Werner Deconvolution Method: Bay of Bengal and Other Sedimentary Basins"; November 6, 1992.

931181; J.P. Morgan, G. Staudigel; NSF; "A Geophysical and Geochemical Investigation of the SE Indian Ridge and the Evolution of the Macquarie Triple Junction"; November 11, 1992.

931183; G. Carnevale; UCSC; "Investigation of Persistent and Coherent Structures in Geophysical and Turbulent Flow"; November 6, 1992.

931187; D.S. Luther; NSF; "Feasibility of Observing N Atlantic W Boundary Currents with HEM/IES (A Cooperative Proposal)"; November 13, 1992.

931189; F.N. Spiess; NSF; "Atlantic Salt Domes and CO₂- Escarpments: Geomorphology, Geochemical Processes, and Geological Consequences"; November 12, 1992.

931190; J.A. Hildebrand, S.C. Webb; NSF; "Broadband Seafloor Seismic Observations at the OSN-1 Borehole Site"; November 12, 1992.

931191; B.T. Werner; DOD; "Development and Evolution of Nearshore Topography"; November 17, 1992.

931194; D. Lal; NIGEC; "Exploring Use of Cosmogenic ¹⁰Be and ³⁶Cl as Tools for Delineating Extreme Natural Prehistoric Variability in the Polar Stratosphere, Related to Volcanic Aerosols, Cl and O₃ Chemical Reactions"; December 1, 1992.

931196; A.A. Yayanos; DOE; "Physiological Signatures of Deep Subsurface Microorganisms Goal 1: Research Priority Areas: 1.1 & 1.2. Overall Scope: Lab; General Content: Microbiology; Scope: Microbial Ecology, Physiology, Adaptation"; November 13, 1992.

931197; J.A. Smith; DOD; "Observations of Directional Surface Wave Evolution"; November 25, 1992.

931201; A.J. Harding; NSF; "Quantitative Analysis of Crustal Fabric: Stochastic Modeling of Seismic Reflections and Fine-Scale Velocity Structure"; November 25, 1992.

931203; G. Masters; NSF; "Surface Wave Polarization and Global Upper Mantle Structure"; November 24, 1992.

931205; T.D. Herbert, J.A. Tarduno; NSF; "Cyclostratigraphic Calibration of the Barremian: Constraints on the Rates of Cretaceous Volcanism and Environmental Change"; November 24, 1992.

931206; J.P. Morgan; NSF; "The Role of Rheology in the Development of Rock Layering"; November 18, 1992.

931208; R.C.J. Somerville; NSF; "The Hydroclimatology of the Continental US Boundary Flow"; November 24, 1992.

931209; T.P. Barnett; NSF; "Model Structure of Variations in the Tropical Climate System Part II: Origins of the Low-Frequency Mode"; November 20, 1992.

931210; R.C.J. Somerville; NIGEC; "Winter and Spring Climate Variability and River Outflow from the W US"; November 24, 1992.

931211; S.C. Chen, J.O. Roads; NIGEC; "Variability and Predictability of the CA Atmospheric Hydrologic Cycle"; November 25, 1992.

931212; S.C. Chen, J.O. Roads, K. Ueyoshi; UH; "Regional Climatologies of CA and HI"; December 1, 1992.

931213; R.A. Knox; ONR; "ONR Ship Time for CY 92-93"; December 4, 1992.

931214; C.S. Cox, S.C. Webb; ONR; "The EMP Device for Environmental Measurements"; December 1, 1992.

931216; D. Bartlett; NSF; "High Pressure Function In Vivo in Enzymes of Deep-Sea Bacteria"; November 13, 1992.

931217; A.A. Yayanos; NSF; "Utilization of Organic Matter by Deep-Sea Bacteria of Cold and Warm Deep- Seas"; November 25, 1992.

931218; D. Bartlett; NSF; "High Pressure Function In Vivo and In Vitro in Enzymes from Deep-Sea Bacteria"; November 27, 1992.

931219; M. Wahlen; SUNY; "Acquisition of a Time Series of Vertical Profiles of ²²²Rn and ⁸⁵Kr for Use in the Development and Validation of GCM"; November 25, 1992.

931221; T. Barnett; NASA; "Research on Climate and Ocean Dynamics Using ERS-1 Observations"; December 2, 1992.

931224; L.D. Talley; NSF; "WHP Section along 135°W: The Tropics"; December 3, 1992.

931228; J. Bada; DOD; "Investigation of Oceanic Organic Chemistry Using State-of-the-Art Laser-Based Analytical Techniques"; n.d.

931229; D.H. Bartlett; DOD; "Pressure Regulation In Vivo and In Vitro in DNA Gyrases of Deep-Sea Bacteria"; December 4, 1992.

931238; W. Thomas; NSF; "Relationships of Snow Algae to Microheterotrophs"; December 15, 1992.

931240; M. Crosser; USGS; "Earthquake Prediction Experiments in the Anza-Coyote Canyon Seismic Gap"; December 15, 1992.

931246; E. Goldberg; UNU; "Asia-Pacific Phase of the International Mussel Watch Programme"; December 16, 1992.

931250; J.J. Simpson; NASA; "Analytical Procedures for Pre-Processing and Analyzing SeaWiFS Data"; December 23, 1992.

931251; Y. Bock; NSF; "Coseismic GPS Measurements in Response to Maumere Earthquake, Flores, Indonesia"; December 29, 1992.

931252; J.A. Orcutt; NSF; "Supplement to an Existing Grant To be Determined by Program Manager"; January 10, 1993.

931254; W. Wei; ACS; "Global Calibration of Paleogene Calcareous Nannofossil Datums with Magnetostratigraphy"; January 3, 1993.

931256; L. Tauxe; NSF; "Paleointensity of the Earth's Magnetic Field Using Basaltic Glass"; January 8, 1993.

931260; D.J. DeMaster, L.A. Levin, C.R. Smith; NSF; "Control of Bioturbation and Benthos by O₂ and Seasonal C Flux in the Arabian Sea"; January 13, 1993.

931261; Y. Bock; DT; "SOPAC Tracking Network Project"; November 25, 1992.

931263; L. McFadden; UMD; "IUE Observations of Comets and Related Bodies"; n.d.

931264; W.S. Hodgkiss; ONR; "Supplemental Funding for Use of R/V Robert Gordon Sproul"; January 20, 1993.

931265; F.I. Tsuji; DOHHS; "Imaging of Luciferase in Transformed Mammalian Cells"; January 21, 1993.

931268; D.H. Bartlett; ONR; "Pressure Regulation in Bacteria"; January 26, 1993.

931269; R. Pinkel; SAIC; "Implementation of Acoustic Doppler Sensor System"; January 29, 1993.

931270; B.M. Tebo; ONR; "Abiotic Oxidation of Organic Pollutants by Biologically Produced Oxidants"; January 25, 1993.

931271; R. Frouin, J.J. Simpson; NSF; "Cloud and Solar Irradiance-Cryosphere Interactions in the Antarctic"; January 26, 1993.

931278; B.M. Tebo; NSF; "JGOFS: Mn and Fe Cycling in the OMZ of the Arabian Sea"; February 1, 1993.

931281; E.D. Goldberg; UCR; "The Colloidal State in Ecotoxicology"; February 3, 1993.

931286; M.G. Haygood; ONR; "Physiological Regulation in Light Organ Symbioses"; February 9, 1993.

931287; K. Brown, M. Kastner; UERG; "The Monterey Formation as a Hydrocarbon Source Rock and Reservoir: An Experimental Study of the Changes in Volume and Hydrogeologic Properties Occurring during Silica Diagenesis"; n.d.

931289; E.A. Frieman; NOAA; "JIMO-TASK II The LGO/SIO Consortium for Climate Research"; March 5, 1993.

931290; S. Constable; LANL; "A Workshop on the Electrical Properties of Mantle Rocks"; February 19, 1993.

931297; P.M. Williams; NSF; "Investigation of Marine Organic C Cycles in the N Pacific and Atlantic Oceans"; March 9, 1993.

931300; T. Nogami; CKRP; "Evaluation of Off- and Nearshore Deep Foundation Response to Storm Wave Loading"; February 25, 1993.

931303; D.H.B. Bartlett; ONR; "Emergency Grad Student Support for Pressure Regulation in Deep-Sea Bacteria"; March 1, 1993.

931303R1; D.H.B. Bartlett; ONR; "Emergency Grad Student Support for Pressure Regulation in Deep-Sea Bacteria"; May 27, 1993.

931306; D.P. Rogers; ANL; "Provide 1 Day-Only WSI on a Temporary Basis to the S Great Plains ARM Field Site"; July 15, 1993.

931307; V. Ramanathan; NSF; "CEPEX"; February 8, 1993.

931308; P.R. Castillo; NSF; "Detailed Petrological Investigation of Cretaceous Oceanic Basalts from the W Pacific"; March 9, 1993.

931313; J.S. Jaffe; NSF; "REU Support"; March 12, 1993.

931314; L.A. Levin; DOD; "Response of Benthic Foraminifera to Topography-Induced Variation in Benthic Boundary Layer Flow and Particle Dynamics"; February 11, 1993.

931316; R.A. Knox; ONR; "Ship and Technician Time for J.F. Gettrust of NRLSSC for Work on R/V New Horizon"; March 12, 1993.

931317; P.R. Castillo; NSF; "Collaborative Research: Petrology and Sr, Nd, and Pb Isotope Geochemistry of Volcanic Rocks from Mts. Mayon and Pinatubo, Philippines"; March 19, 1993.

931319; P. Flatau; CSI; "Cirrus Clouds and Mesoscale Convective Systems"; March 23, 1993.

931321; A.J. Harding, J.P. Morgan, J.A. Orcutt; NSF; "A Combined MCS/OBS Study of the Juan de Fuca and Gorda Ridges: A Test of the Relationship between Axial Morphology and Crustal Thickness"; April 22, 1993.

931322; J.O. Roads; CSI; "Verification of SSM/I and Numerical Weather Prediction Analyses of Precipitable H₂O"; March 16, 1993.

931323; E. Goldberg; REPSFBD; "Pollutant Behavior and Physico-Chemical States"; March 23, 1993.

931327; S. Constable; LLNL; "Point-Defect Diffusion and Intrinsic O₂ Fugacity of Olivine Rock"; April 1, 1993.

931328; F.N. Spiess; WHOI; "OSN-1 Wireline Re-Entry"; April 13, 1993.

931330; J.L. Bada; CSI; "Plant DNA in Polar Ices: A New Potential Tool in Paleoclimate Research"; March 25, 1993.

931331; M. Vernet; CSI; "Contribution of Phycoerythrin-Containing Phytoplankton to Remotely Sensed Signals in the Ocean"; March 25, 1993.

931332; G.E. Backus; NSF; "Stochastic Aspects of the Geomagnetic Field"; March 31, 1993.

931333; R. Frouin; CSI; "Discrimination of Snow/Ice from Clouds Using Polarization of Reflected Sunlight"; March 26, 1993.

931334; S.F. Iacobellis, R.C.J. Somerville; CSI; "Estimating the Effects of CO₂ Sources and Sinks Resulting from African Biomass Burning Using a 3-D Atmospheric Transport Model"; March 25, 1993.

931337; L. McFadden; CSI; "Relationships between Comets and Asteroids"; March 26, 1993.

931338; W.B. White; CSI; "Classification of the Mesoscale Structures in the CA Current System in Terms of its Lagrangian Diffusivity Signatures and Other Indexes"; n.d.

931341; J.W. Hawkins; NSF; "Evolution of Backarc Basin Magmas: Trace Element Study"; March 30, 1993.

931342; V.D. Vacquier; NSF; "Molecular Characterization of Tegula Sperm Lysin"; March 30, 1993.

931343; J.P. Morgan; LLNL; "Modeling Small-Scale Asthenosphere Convection under CA"; March 23, 1993.

931344; S.C. Cande; NSF; "Support of US/India Geomagnetism Symposium, Colaba, Bombay, India, March 7-11, 1994"; March 31, 1993.

931345; L. Dorman; NSF; "Crustal Structure and VLF Ambient Noise at the OSN Pilot Hole"; April 26, 1993.

931346; G.L. D'Spain; LLNL; "Character of Ocean Acoustic Signals Generated by Continental Seismic Events"; April 5, 1993.

931347; E.A. Frieman; NSF; "Renovation of Scholander Hall, UCSD, SIO"; March 2, 1993.

931354; B. Brahamsha; NSF; "A Genetic Approach to the Study of Swimming Motility in Synechococcus"; May 25, 1993.

931355; M. Haygood, B. Tebo; DOE; "Molecular Probes for Bacterial Chemoautotrophic C Fixation"; n.d.

931356; F. Azam, R. Frouin, M. Huntley, G. Mitchell; NSF; "Cryosystem Flux Experiment"; May 21, 1993.

931358; D. Lal; NASA; "Solar Wind Implanted ¹⁴C in Lunar Regolith"; April 14, 1993.

931359; D. Lal; LLNL; "Studies of Soil Dynamics and Loess Paleoclimate Records Using Cosmogenic Nuclide ¹⁰Be"; April 8, 1993.

931361; J. Filloux; NSF; "Transport Variability of Malvina Current A 5 Year Cooperative Proposal"; May 7, 1993.

931365; Y. Bock; UCB; "SIO Participation in N CA Permanent GPS Network"; April 15, 1993.

[Box 69]

931369; S.C. Cande, J.A. Hildebrand, R.L. Parker; NSF; "Understanding Crustal Magnetization: The Origin of Tiny Wiggles"; April 28, 1993.

931370; F. Vernon; DOAF; "An Evaluation of Seismic Array Capabilities Using Modern 3-Component Broadband Instrumentation"; April 26, 1993.

931372; F. Vernon; USGS; "The Anza Seismic Network: Data Collection and Analysis"; April 29, 1993.

931373; D.C. Agnew; USGS; "PFGO: A Facility for Studies of Crustal Deformation"; April 27, 1993.

931376; P. Cessi; NSF; "Thermohaline Dynamics on the Planetary Scale"; April 23, 1993.

931377; J.D. Macdougall; NSF; "Modeling Magma Generation and Transport at the Ridge Crest"; April 27, 1993.

931378; J.P. Morgan, D.T. Sandwell; NSF; "Active and Past Ridge Propagation S of 30°S: A Combined Geosat/Bathymetric Investigation"; April 27, 1993.

931379; R.A. Knox; ONR; "Acquisition and Installation of a Powered Cargo Hoist in the Existing Hoist Trunkway on R/V Melville"; April 15, 1993.

931380; J.A. Tarduno; NSF; "Temporal Change of Magnetic Dissolution: Gauging Pacific Paleoproductivity"; April 29, 1993.

931384; J.G. Sclater; NSF; "Inconsistency between Depth and Heat Flow in the Vicinity of Shatsky Rise, NW Pacific"; April 22, 1993.

931386; E.A. Frieman, M.M. Mullin; NOAA; "Shore Station Data Collection Program JIMO TASK II"; April 20, 1993.

931387; W.B. White; NSF; "Interannual Changes in Global Upper Ocean Heat Storage from 1979-92"; April 20, 1993.

931389; D. Wirth; NSF; "Technicians (Supplemental Proposal)"; April 22, 1993.

931393; L.A. Levin; NOAA; "Habitat and Trophic Linkages in Salt Marshes: Geographic and Developmental Comparisons"; April 23, 1993.

931394; L.A. Levin; NSF; "OMZI: Effects of the OMZ on the Fate of Particulate Organic Matter"; April 26, 1993.

931397; J.A. Hildebrand, M.A. Zumberge; NSF; "Vertical Deformation Measurement at the Juan de Fuca Ridge Observatory Site"; April 28, 1993.

931400; B. Palenik; NSF; "Cell-Surface Proteins as Markers of the Physiological State of Phytoplankton"; April 28, 1993.

931401; J.B. Graham, R.E. Shadwick; NSF; "Physiology and Biomechanics of Tuna Swimming"; April 29, 1993.

931402; P.R. Castillo, J. Mammerickx, J.P. Morgan; NSF; "Tectonic Setting, Petrology and Age of the Foundation Seamounts, A Newly-Discovered Seamount Chain in the S Pacific"; May 3, 1993.

931404; A. Pares-Sierra, W.B. White; NSF; "Eddies and Jets in the E Boundary along the Coast of N CA"; April 27, 1993.

931407; T. Nogami; NSF; "Wave-Induced Critical Behavior in Cohesionless Seafloor for Initiation of Seafloor Dynamics"; May 3, 1993.

931408; D. Wirth; ONR; "Support for Arctic Large Volume Sampling"; April 26, 1993.

931413; R. Goericke; NSF; "Pigment-Based Isotopic Food Web Studies in the N Atlantic"; April 15, 1993.

931414; R. Goericke; NSF; "Pigment Labeling, Pigment Synthesis, Rates of Growth, and Photoadaptation in Marine Phytoplankton"; April 15, 1993.

931415; L.A. Levin; ONR; "O₂ Controls on Benthic Biological Processes in the Arabian Sea"; April 26, 1993.

931416; L.A. Levin; EPA; "Opportunistic Polychaetes as Indicators of Estuarine Pollution: Development of a Tri-Species Index"; April 26, 1993.

931421; C.D. Charles; NSF; "Evolution of Late Quaternary Thermohaline Circulation Patterns in SE Atlantic Ocean"; May 10, 1993.

931422; J.R. Curray, L.M. Dorman; NSF; "Sediment Thickness by a Modified Werner Deconvolution Method"; April 28, 1993.

931423; S.C. Cande; NSF; "A Quantitative Test of the Fixed Hotspot Hypothesis"; April 30, 1993.

931425; L.M. Dorman; NSF; "OBS Experiments at the Eltanin Fault System"; May 11, 1993.

931429; G.R. Ierley; NSF; "The Limits of Quasi-geostrophy"; April 26, 1993.

931431; M. Mullin; NSF; "Food Supply and Reproduction of the Copepod, Pleuromamma, off S CA"; April 28, 1993.

931432; R.A. Knox; ONR; "Additional Ship Time for ONR-Funded Investigators"; May 3, 1993.

931433; S.C. Cande, J.P. Morgan; NSF; "A Geophysical and Geochemical Investigation of the SE Indian Ridge and the History of the Aus-Ant-Pac Spreading System"; April 29, 1993.

931434; J.P. Morgan; NSF; "Theoretical Modeling of the Genesis of Oceanic Crust"; April 29, 1993.

931436; H. Craig, J.J. Irwin; NSF; "LMMS Analysis of Mantle Volatiles in Fluid Inclusions"; April 29, 1993.

931437; D. Wirth; UH; "Shipboard Technical Support"; April 29, 1993.

931438; M.G. Haygood; ONR; "Luminous Bacteria in the Arabian Sea: Molecular Probes for Direct Assessment of Dynamics"; April 30, 1993.

931439; T. Chereskin, R. Peterson; NSF; "The CA Ocean Time Series"; April 30, 1993.

931441; N.A. Bray; NSF; "Indonesian Throughflow Fluctuations from Cross-Strait Sub-Surface Pressure, Temperature, and Salinity Observations"; May 3, 1993.

931443; H. Craig; NSF; "Ocean Basalts: Rare Gases and Isotopic Studies"; October 29, 1993.

931445; D. Lubin; NSF; "Long-Term Atmospheric Research on the Antarctic Plateau: Coordination of Satellite and Surface Measurements"; May 31, 1993.

931449; D. Wirth; WHOI; "SeaBeam 2000 Data Collection and Processing, Gravity Data Collection and Merging These Data with Navigation"; May 6, 1993.

931453; S. Constable; NSF; "PFMO"; May 25, 1993.

931454; A.J. Spivack; NSF; "B Isotope Paleoceanography"; May 10, 1993.

931455; J.G. Sclater; NSF; "US-Japan Cooperative Research: Depth and Heat Flow Anomalies in the Vicinity of Shatsky Rise, NW Pacific"; May 12, 1993.

931456; B.T. Werner; NSF; "Micromechanics of Eolian Sand Dune Development: Computer Simulations and Field Experiments"; May 24, 1993.

931463; W.K. Melville, P.P. Niiler; ONR; "A Compact, Meteorological, H₂O Following (MET) Drifter for Aircraft Deployment"; May 17, 1993.

931464; A.A. Yayanos; NSF; "Utilization of Organic Matter by Deep-Sea Bacteria of Cold and Warm Deep- Seas"; May 21, 1993.

931466; R. Frouin, J.J. Simpson; NASA; "Optimized Cloud-Detection Algorithms to Quantitatively Analyze Spatial and Temporal Changes in the Bio-Physical Structure of the Land Surface"; March 8, 1993.

931472; S.C. Cande; NSF; "Collaborative Research: A Geophysical Survey of the Enderby Basin and Adjacent Antarctic Margin"; May 19, 1993.

931474; M.G. Haygood; ONR; "Fundamental Principles of Stabilization and Control in Bacterial Light Organ Symbioses"; May 19, 1993.

931476; T. Drake, D.L. Inman; ONR; "Basic Studies of High-Concentration Bedload Transport (Supplement)"; May 19, 1993.

931479; R.C.J. Somerville; NSF; "The Hydroclimatology of the Continental-US Boundary Outflow"; May 20, 1993.

931482; Y. Bock, S. Constable, H. Given; NSF; "A Global Core Network of Geophysical Observatories Based on the IDA Seismic Network"; May 26, 1993.

931483; T.D. Herbert; NSF; "Development of an Energy Dispersive X-Ray Fluorescence Device for Elemental Scanning of Split Sediment Cores"; June 11, 1993.

931484; J.J. Irwin, M. Kastner; NSF; "Acquisition of a Heating/Freezing Stage for the Study of Fluid Inclusions in Geological Systems"; May 28, 1993.

931486; J.R. Arnold; NASA; "Orbital Gamma Ray Instrument for Planetary Missions"; May 27, 1993.

931487; F. Vernon; NSF; "Analysis of Broadband Recordings of Anomalous Earthquakes from the 1992 Landers Sequence"; May 25, 1993.

931489; B. Palenik; NSF; "Localization and Characterization of Attachment (of a Cell-Surface L- Amino Acid Oxidase)"; May 25, 1993.

931490; B.P. Palenik; DOHHS; "Localization and Characterization of Attachment"; May 25, 1993.

931493; S. Constable; NASA; "PFMO"; May 26, 1993.

931498; Y. Bock, S. Constable, H. Given; NASA; "A Global Core Network of Geophysical Observatories Based on the IDA Seismic Network"; June 2, 1993.

931499; Y. Bock; NSF; "Collaborative Research: Geodetic Investigations of Oblique Plate Convergence in Sumatra (Supplement for Y5 Funding)"; June 22, 1993.

931500; R.S. Burton; NSF; "Evolutionary Consequences of Restricted Gene Flow in a Marine Copepod"; June 7, 1993.

931502; M.E. Huntley; NSF; "RACER: Development, Growth, and Production of Macrozooplankton, Including Krill Supplement: RACER Workshop"; June 8, 1993.

931516; Z. Garcia-Esquivel, H. Felbeck; USMFS; "Understanding the Near-Bottom Effect on Rack Cultured Oysters"; n.d.

931517; J.R. Arnold; NASA; "Surface Chemical Composition Determination from the Mars '94 Gamma Ray Experiment"; June 17, 1993.

931520; P. Flatau; NASA; "Multidimensional Numerical Modeling of Cirrus Clouds" June 23, 1993.

931525; M. Vernet; NSF; "The Synthesis of Excretion of Intra- and Extracellular UV-Absorbing Compounds in Antarctic Phytoplankton"; June 23, 1993.

931526; W. Collins; SAIC; "A Generic Database Interface for IDL, A Commercial Scientific Visualization Tool"; June 25, 1993.

931530; B. Jackson; NASA; "An Interactive Display, Visualization and Interpretation System for Remotely-Sensed NASA Data Sets"; June 24, 1993.

931531; D.H. Bartlett; DOHHS; "High Pressure Adaptation in Photobacterium SS9"; June 16, 1993.

931536R1; D. Wirth; BSU; "ODP Site Surveys around the Mendocino Triple Junction"; January 21, 1994.

941003; V. Ramanathan; NSF; "CEPEX"; July 12, 1993.

941006; S.K. Ride; GDESI; "Defense Conversion Partnerships"; July 7, 1993.

941011; R.A. Knox, D. Wirth; NSF; "Oceanographic Instrumentation"; July 12, 1993.

941012; J.R. Arnold, S.K. Ride; NASA; "NSGC and Fellowship Program Research and Educational Database of Earth Images from the Space Shuttle"; July 14, 1993.

941013; R. Goericke; ACS; "Isotopic Studies of Phytoplankton-Derived Biomarkers in SB Basin Sediments"; July 7, 1993.

941015; F.N. Spiess; ONR; "Multi-Scale Studies of Seafloor Topography"; July 19, 1993.

941021; B.D. Cornuelle, D.S. Luther; NOAA; "Pilot Study for Monitoring the N Atlantic Current System E of the Grand Banks"; July 28, 1993.

941024; M.I. Latz; NSF; "Physiological Mechanisms in the Control of Bioluminescent Countershading"; July 26, 1993.

941025; E.A. Frieman, R.C.J. Somerville; NOAA; "JIMO-TASK 4-Climate Forcing and Surface Feedback in Continental Watersheds"; July 28, 1993.

[Box 70]

- 941026; W.H. Berger; USMFS; "High Resolution Reconstruction of Temperatures and Primary Productivity in the Current and the Gulf of CA for the Last 250 Years"; n.d.
- 941027; E.A. Frieman, R.G. Shelly; NOAA; "JIMO-Task I Climate and Global Change Education: A Focus on the Blue Planet"; July 30, 1993.
- 941030; A.G. Dickson, E.A. Frieman; NOAA; "JIMO-TASK II Underway Chemical Instrumentation for the Study of Upper Ocean Variability, with Particular Emphasis on the CO₂ System along 110°W"; July 30, 1993.
- 941031; J.A. Hildebrand; NEH; "Subsistence Adaptation in Prehistoric S CA"; October 15, 1993.
- 941033; E.A. Frieman, R.F. Keeling; NOAA; "JIMO-TASK 2 Remote Sensing of Ocean Heat Storage Based on Measurements of Atmospheric Inert Gas Ratios"; July 30, 1993.
- 941034; C.P. de Moustier; ONR; "Error Analysis for Bathymetric Surveys in Shallow H₂O"; July 29, 1993.
- 941035; N.A. Bray; NOAA "Monitoring the Indonesian Throughflow, Module A: The Basic Shallow Pressure Array"; August 2, 1993.
- 941036; J.B. Minster; LLNL; "Influence of Near- Source Non-Linear Wave Propagation on Nuclear Monitoring"; July 28, 1993.
- 941037; E.A. Frieman, W. White; NOAA; "JIMO-TASK II Study of the Biological-Physical Linkages of the CA Current System"; August 4, 1993.
- 941038; E.D. Goldberg; ONR; "The Isolation and Characterization of Marine Organic and Inorganic Colloids"; July 29, 1993.
- 941041; P. Flatau; NOAA; "SSM/T-2 Derived Vertical Distribution of H₂O Vapor"; July 30, 1993.
- 941042; E.A. Frieman, P.P. Niiler; NOAA; "JIMO-TASK II S Hemisphere Drifting Buoy Program"; August 5, 1993.
- 941044; J.J. Simpson; NOAA; "A Remotely Browsed Data Archiving and Analysis System for Atlantic Rim Cod- Global Warming Studies"; August 2, 1993.
- 941045; N.A. Bray; NOAA; "Monitoring the Indonesian Throughflow, Module B: Additional Shallow Pressure Sensors"; August 4, 1993.
- 941046; N.A. Bray; NOAA; "Monitoring the Indonesian Throughflow, Module C: Deep Pressure Sensor Pairs"; August 4, 1993.
- 941047; N.A. Bray; NOAA; "Monitoring the Indonesian Throughflow, Module D: Autonomous Meteorological Stations"; August 4, 1993.
- 941049; N.A. Bray; NOAA; "Monitoring the Indonesian Throughflow, Module F: Moored Current Meter Observations"; August 4, 1993.
- 941050; N.A. Bray; NOAA; "Monitoring the Indonesian Throughflow, Module G: Training of Indonesian Scientists"; August 4, 1993.
- 941051; T.S. Althouse, R.A. Knox; NSF; "Shipboard Scientific Support Equipment"; August 23, 1993.
- 941052; S.K. Ride; MDA; "Partnerships for Launch Vehicle Systems"; n.d.
- 941054; K.L. Smith; NSF; "A Vertically-Profiling Pump Sampler for Making Long Time-Series Collections of Zooplankton and Micronekton under the Pack Ice: Development and Long-Term Deployment in the NW Weddell Sea"; August 6, 1993.
- 941059; P.K. Dayton, L.A. Levin; WCNURC; "Relative Effects of Organic Enrichment, Reef Structure and Microtopographical Relief on Continental Shelf Benthos"; September 1, 1993.
- 941061; L.R. Haury; NSF; "Near-Surface Nutrient Enrichment"; October 14, 1993.
- 941066; M.D. Ohman; NSF; "Relocation of the Planktonic Invertebrates Collection of SIO"; September 2, 1993.
- 941070; B.P. Palenik; ONR; "Assaying the Genetic Diversity of Marine Primary Producers"; September 9, 1993.
- 941074; R.T. Guza, R.J. Seymour; NWS; "A Proposal for the Improvement of Meteorological and Wave Forecasting around Pt. Conception"; September 13, 1993.
- 941075; R.F. Keeling; ONR; "Remote Sensing of Large- Scale Air-Sea Heat Fluxes Based on Ultra Precise Measurements of the Atmospheric Kr/N₂ Ratio"; September 13, 1993.
- 941081; O. Holm-Hansen; SAI; "Sensitivity of Antarctic Phytoplankton to Solar UV Radiation"; September 14, 1993.
- 941082; J.J. Simpson; CCPP; "Integration of OLS and SSM/I Data into Operational Weather Forecasting"; September 15, 1993.
- 941084; R.T. Guza, W.O. O'Reilly; ONR; "Propagation of Surface Waves across the Continental Shelf"; September 28, 1993.
- 941086; S. Constable, T.G. Masters; NSF; "Joint EM and Seismic Study of the N EPR"; October 26, 1993.
- 941090; D. Wirth; TAMU; "Support of Cruise Aboard R/V Thomas Thompson in 1994"; October 20, 1993.

941095; S. Constable; NSF; "Joint US/UK Controlled Source EM Experiment over the Reykjanes Ridge"; October 27, 1993.

941097; P.R. Castillo, J. Mammerickx; NSF; "Collaborative Research: Tectonic Setting, Petrology and Age of the Foundation Seamounts, a Newly-Discovered Seamount Chain in the S Pacific"; October 11, 1993.

941098; J.W. Hawkins; NSF; "Evolution of Backarc Basin Magmas: Trace Element Study"; October 22, 1993.

941099; R. Goericke; NSF; "The Pigment-Labeling Method The Effects of Nutrient-Limited and Unbalanced Growth on the ¹⁴C-Labeling Kinetics of Pigments in Microalgae"; October 13, 1993.

941105; J.L. Largier; NSF; "Physical Biological Determinants of Estuarine Dungeness Crab Recruitment"; October 15, 1993.

941115; A. Harding, J.P. Morgan, J.A. Orcutt; NSF; "The Seismic Structure of the Juan de Fuca Ridge"; October 27, 1993.

941116; J.A. Orcutt; NSF; "Migration of the Pacific- Indian Isotopic Boundary and the Origin of the Australian-Antarctic Discordance: A Drilling Site Survey"; October 11, 1993.

941118; W. Fenical; CHASSF; "New Anti-Inflammatory Drugs from Marine Organisms: Development of New Drugs for Arthritis"; October 8, 1993.

941122; J.H. Swift; NSF; "Hydrographic Support for WHP Line I3"; October 21, 1993.

941124; J.H. Swift; NSF; "Large-Volume Sampling Support for the US WHP Indian Ocean Program"; October 21, 1993.

941125; J.H. Swift; NSF; "Shipping Support for the US WHP Indian Ocean Program"; October 21, 1993.

941126; M.E. Huntley; NSF; "Development of Bio- Continuum Theory and Modeling of Krill Patches"; October 17, 1993.

941128; J.S. Jaffe; NSF; "Combined Acoustic and Optic Imaging of Crustacean Macrozooplankton"; October 28, 1993.

941129; A. Pares-Sierra, W. White; NSF; "Eddies and Jets in the E Boundary along the Coast of N CA"; October 25, 1993.

941131; D. Lal; ACS; "Marine Beryllium Geochemistry, Ages and Diagenesis of Marine Calcite Using Cosmogenic ¹⁰Be"; October 15, 1993.

941134; D. Wirth; UW; "Support of Research Onboard R/V Melville in 1995"; October 15, 1993.

941135; D. Wirth; UTA; "Support of Research Onboard R/V Melville in 1995"; October 15, 1993.

941139; R.C. Smith; NASA; "Bio-Optics, Photoecology, and Remote Sensing Using SeaWiFS"; October 18, 1993.

941144; J.D. Macdougall; NSF; "Field and Geochemical Studies of the Siberian Traps, Russia"; October 19, 1993.

941145; P.R. Castillo; NSF; "Collaborative Research: Detailed Geochemical Investigations of Arc Magmas from W Central and S Philippines"; November 23, 1993.

941151; J.H. Swift; NSF; "Hydrographic Support for WHP Line I7N"; October 21, 1993.

941152; T. Nogami; NSF; "Second Order Subgrade Model for Dynamic Response Analysis of Pile Foundations: Phase 1"; n.d.

941153; T. Nogami; NSF; "Second Order Subgrade Model for Dynamic Response Analysis of Pile Foundations: Phase 1"; n.d.

941154; T. Nogami; NSF; "Wave-Induced Critical Behavior in Cohesionless Seafloor for Initiation of Seafloor Dynamics"; October 27, 1993.

941155; D.K. Blackman, J.P. Morgan; NSF; "Investigation of the Relationship between Mantle Flow, Seismic Anisotropy and Teleseismic Wave Propagation"; October 26, 1993.

941156; M. Kastner; NSF; "SGER: Acquisition of In Situ Borehole Fluid Samplers"; October 27, 1993.

941160; J.P. Morgan; NSF; "Modeling 3-D Ridge Dynamics"; n.d.

941161; D.H. Bartlett; ONR; "Genetic Analysis of Piezoadaptation in the Deep-Sea Bacterium Photobacterium SS9"; October 29, 1993.

941164; L. Talley; NSF; "WHP Sections 13°N and 15°E (8°E and 35°S): The Tropical and Subtropical Central Indian Ocean"; October 22, 1993.

941169; J.B. Minster, J.A. Orcutt, F.L. Vernon; DOD; "Regional Seismic Event Identification and Improved Locations with Small Arrays"; October 27, 1993.

941173; J.A. Orcutt; NSF; "Investigation of Volcanic Underplating in the Austral Islands"; October 27, 1993.

941179; W.S. Hodgkiss; ONR; "Vertical Source Array Development"; November 8, 1993.

941180; M.G. Haygood, B.M. Tebo; NSF; "Chemolithoautotrophic Diversity in Hydrothermal Vent Environments"; November 1, 1993.

941181; L. McFadden; CSI; "Relationships between Comets and Asteroids"; n.d.

941188; J.J. Sullivan; NOAA; "UCSG: National Sea Grant Fellowships"; November 10, 1993.

941192; P. Flatau; NSF; "Scattering and Radiative Properties of Aerosol Particles and Ice Crystals"; November 8, 1993.

941194; D.C. Agnew, F.K. Wyatt; USGS; "Deformation Monitoring of the S San Andreas"; November 5, 1993.

941196; G. Arrhenius; NSF; "Molecular Evolution of PO43-"; November 23, 1993.

941202; T.D. Herbert; NSF; "Collaborative Project: A Reference Section at Cison, Italy, for the APTICORE Program"; November 18, 1993.

[Box 71]

941207; M.E. Huntley; NSF; "Aggregation and Metabolism in N Boreal Euphausiids"; November 17, 1993.

941208; G.J. Zung; NIGEC; "Study of the Coupling between Convection and Surface Evaporation on Short Time Scales in the Tropical Pacific Using a GCM"; December 1, 1993.

941210; J.O. Roads; NIGEC; "A Regional Climatology of HI"; December 1, 1993.

941213; W. Collins; NIGEC; "Investigation of the Relation of Tropical Convection and the Super- Greenhouse Effect"; December 1, 1993.

941214; M.A. Zumberge; NSF; "Supplement to: Construction and Testing of an OBAGM"; November 23, 1993.

941216; F.L. Vernon; NSF; "Collaborative Research: Crustal Structure and Configuration of the Moho Beneath the Peninsular Ranges S CA"; November 29, 1993.

941221; M. Hildebrand, B.E. Volcani; NSF; "Role of Si in Gene Expression: Characterization of a Si- Responsive Putative Transcription Factor from a Diatom"; November 30, 1993.

941224; D. Lal; NIGEC; "Exploring Use of Cosmogenic 10Be and 36Cl as Tools for Delineating Extreme Natural Prehistoric Variability in the Polar Stratosphere, Related to Volcanic Aerosols, Cl, and O3 Chemical Reactions"; December 2, 1993.

941233; P. Bentzen, T.W. Pietsch; NSF; "Anglerfishes and Their Luminescent Bacterial Symbionts: Phylogeny, Sexual Parasitism, and Co-Evolution"; December 9, 1993.

941236; P. Flatau; NASA; "Influence of Aircraft Contrails on Climate-Radiation Perspective"; December 14, 1993.

941238; W.H. Thomas; NSF; "Microbial Ecology of Sierra Nevada Snowfields Containing Chlamydomonas nivalis Blooms"; December 15, 1993.

941241; W. Collins, G.J. Zhang; NASA; "Tests of Convective Parameterization in an AGCM Using Surrogate TRMM Satellite Observation"; December 28, 1993.

941242; R. Frouin; NASA; "Rainfall and Vegetation Variability in the Tropics"; December 29, 1993.

941248; W.F. Heiligenberg; MEFN; "Glutamate Receptors and Neural Modulation"; December 16, 1993.

941252; W.A. Kuperman; NRLSSC; "Influence of the Nearshore Environment on Amphibious Warfare Planning"; December 27, 1993.

941253; W.S. Hodgkiss; NRLSSC; "Bistatic Scattering in Shallow H2O"; December 27, 1993.

941254; W.S. Hodgkiss; NRLSSC; "Seismoacoustic Propagation in the Nearshore Region"; December 27, 1993.

941256; J.S. Jaffe; NRLSSC; "Optical Imaging System Transfer Function Measurements in Coastal H2O"; December 27, 1993.

941257; M.J. Buckingham; NRLSSC; "Acoustic Daylight Imaging in Shallow H2O: A New Concept in Covert, High-Frequency Mine Countermeasures"; n.d.

941258; R. Pinkel, J.A. Smith; NRLSSC; "Remote Detection of Beach Profiles and Surf Statistics"; n.d.

941264; R.A. Knox; ONR; "Additional Day of Shiptime on the R/V Point Sur for Dr. T. Chereskin of SIO"; January 11, 1994.

941266; J. Enright; NSF; "Vergence Changes Mediated by Saccades"; January 10, 1994.

941267; D.P. Rogers; SNL; "Process and Evaluate Cloud Images Acquired by the MPL Day-Only WSI Fielded at the ARM Site, OK"; January 13, 1994.

941268; L.A. Levin; ONR; "O2 Controls on Benthic Processes in the Arabian Sea"; January 10, 1994.

941272; E.R. Boer, W.D. Collins, V. Ramanathan; UNIDIS; "Info System Technology Applicable to EOSDIS"; March 4, 1994.

941279; A.J. Kalmijn; ONR; "Workshop on Biophysics of Electroreception"; n.d.

941280; R. Frouin; EOC; "N African Savanna Fires and Atmospheric Trace Gases"; January 25, 1994.

941282; R. Frouin, B.G. Mitchell; EOC; "In Situ Ocean and Atmospheric Observations and Modeling in Support of OCTS"; January 28, 1994.

941289; Y. Bock; NSF; "UNAVCO Workshop on Continuous GPS and Seismic Networks"; February 3, 1994.

941292; R.T. Guza; USNRL; "Mine Scour, Burial, and Migration as a Function of Wave and Current Forcing"; February 8, 1994.

941293; W. Thomas; UCEI; "Seasonal Changes in Sierra Nevada Snow Albedo: Relationships to Snow Algae Blooms"; February 8, 1994.

941294; R.E. Shadwick; NSF; "Research Training in Biomechanics of Marine Organisms"; March 3, 1994.

941299; P. Flatau; CSI; "Cirrus Clouds and Mesoscale Convective Systems"; n.d.

941307; E. Goldberg; UNU; "Organizational Meeting Asian Pacific Phase of International Mussel Watch"; February 21, 1994.

941308; J.J. Simpson; NASA; "An Extensible, Open- Architecture Analysis System for Remotely Sensed Data"; February 23, 1994.

941310; G.J. Zhang; NSF; "Interplay between SST, Evaporation, and Atmospheric Dynamics in Limiting the Sea Surface Temperature of the Equatorial Pacific"; February 26, 1994.

941312; B.M. Tebo; WGC; "Biomagnetic Separation Processes for Metal Pollutants"; February 24, 1994.

941313; B.M. Tebo; WGC; "Biomagnetic Separation of Radionuclide Pollutants"; February 24, 1994.

941318; R.C.J. Somerville; SAIC; "Info System for Climate Research"; March 3, 1994.

941319; M.G. Haygood; ONR; "Bacteriological Studies of Bioluminescence in the Arabian Sea"; March 3, 1994.

941320; L.D. Talley; URI; "DODS Data Server Development by Oceanographic Institutions: Accessing Oceanographic Data Sets over the Internet"; March 4, 1994.

941327; R.A. Knox; ONR; "Propulsion Monitoring System for R/V Melville"; March 9, 1994.

941332; J.S. Jaffe; BSF; "Ocean Flow and Zooplankton Dynamics: Use of New Acoustic Technology"; n.d.

941333; S. Chen; CSI; "Influence of the Tropics on Extratropical Low Frequency Anomalies"; n.d.

941334; C.L. Norris; CSI; "Remote Sensing of Atmospheric Precipitable H₂O Over Land Regions Using the SSM/I"; n.d.

941336; K. Ueyoshi; CSI; "A Fine Scale Regional Climatology of the W Tropical N Pacific Ocean"; n.d.

941339; J.A. Hildebrand, F.N. Spiess; NSF; "Supplement to Measurement of Seafloor Strain II"; April 4, 1994.

941341; J.A. Hildebrand; NSF; "Seismic Monitoring of the N Pacific Using SOSUS Arrays"; May 1, 1994.

941344; D. Lubin; CSI; "Simulation of Antarctic Climate by a GCM: Sensitivity to Cloud Optical Properties"; March 25, 1994.

941346; M. Kastner; CSI; "Paleocirculation Reconstruction by Neodymium Isotopic Ratios of Marine Barite"; n.d.

941353; P. Shearer; LLNL; "Imaging the 80-km Discontinuity with Shear-Coupled P Waves"; April 12, 1994.

941355; D.C. Agnew; USGS; "Interpretation of Crustal Deformation Measurements in S CA"; April 15, 1994.

941356; D.C. Agnew, H.O. Johnson; USGS; "Interseismic Strain in the SF Bay Area: A New Analysis"; April 15, 1994.

941358; P.J. Flatau; CSI; "Phenomenology and Modeling of Ocean-Atmosphere Response to the W Bursts during the CEPEX and TOGA-COARE Experiments"; n.d.

941361; D. Lal; NASA; "Search for ¹⁴C in Solar Material Implanted on Lunar Surfaces: An Experimental Enquiry"; April 21, 1994.

941362; D. Wirth; UTA; "Use of R/V Melville's SeaBeam 2000 Full Service Operation, Gravity, and Magnetics in 1995"; March 29, 1994.

941363; E.A. Frieman; NSF; "Renovation of Scholander Hall, UCSD, SIO"; April 4, 1994.

941365; W.H. Berger; NSF; "Climate History of the CA Current: 5 Centuries of ENSO Events from Foraminifera and Tree Rings"; April 29, 1994.

941366; W. Wei; NSF; "Cenozoic Nannofossil Magnetobiochronology and Paleoceanography"; April 4, 1994.

941373; J.W. Miles; NSF; "Wind-Generated Waves"; April 15, 1994.

941376; T.P. Barnett; NASA; "Research on Climate and Ocean Dynamics Using ERS-1 Observations"; April 11, 1994.

941377; P.P. Niiler; NSF; "Eddy Driven Dynamics in Ecosystems of the Subtropical Gyre: Mesoscale Circulation, Dynamics and Bio-Optics"; April 25, 1994.

941378; J.A. Orcutt, F.L. Vernon; NSF; "A Broadband Borehole Seismometer for DOPE"; April 27, 1994.

941379; A.J. Harding, J.A. Orcutt; NSF; "A MCS Survey of the Juan de Fuca and Gorda Ridges"; April 25, 1994.

941380; M.E. Huntley; NSF; "EDDIES: Zooplankton Dynamics"; April 21, 1994.

941382; J.P. Morgan; LLNL; "Modeling Small-Scale Asthenosphere Convection under CA"; April 9, 1994.

941383; J.P. Morgan; NASA; "A Swell Model for Hotspot Evolution on Mars and Earth"; April 21, 1994.

941386; J.S. Jaffe; NSF; "REU Support"; April 19, 1994.

941387; D.K. Checkley, M.M. Mullin, K.E. Osgood; NSF; "Concentration of Pelagic Copepods in the SB Basin"; April 27, 1994.

941388; R.T. Guza; NSF; "Shoaling Region and Surf Zone Wave Models"; April 12, 1994.

941389; C.D. Charles; NSF; "Collaborative Research: Paleooceanographic and Tectonic Evolution of the Subantarctic SE Atlantic: A Site Survey Proposal for the ODP"; April 20, 1994.

941390; S. Nagihara, J.G. Sclater; NSF; "Is Normal Oceanic Lithosphere Thermally Reset by a Convective Instability as it Ages? A Test in the Argo Basin"; April 27, 1994.

941393; M.J. Tegner; UCR; "Coastal Development and Habitat Management in CA: New Directions in the Wake of NAFTA"; April 14, 1994.

941394; D.K. Blackman; NSF; "Investigation of the Relationship between Mantle Flow, Seismic Anisotropy, and Teleseismic Wave Propagation"; April 27, 1994.

941395; L. Dorman; NSF; "Crustal Structure and VLF Ambient Noise at the OSN Pilot Hole with R.A. Stephen, WHOI"; April 23, 1994.

941397; K.M. Brown, S.C. Constable; NSF; "Collaborative Research: Direct Measurement of Convergence along the Mid-America Trench off CR Using Seafloor Deformation Observatories"; April 27, 1994.

941398; W.K. Melville; NSF; "Field Measurements of Dissipation by Breaking Waves"; April 28, 1994.

941399; C.L. Johnson; NASA; "Bounds on Lithospheric Thickness on Venus from Magellan Gravity and Topography Data"; April 21, 1994.

941403; J.J. Simpson; NASA; "A GRIP for Satellite Data"; April 20, 1994.

941405; P.R. Castillo, J. Mammerrickx, D.T. Sandwell; NSF; "Survey of Uncharted Foundation Seamount Chain: Hotspot or Tension Crack?"; April 26, 1994.

941407; K.M. Brown; NSF; "Collaborative Research: Thermal, Hydrologic, and Chemical Constraints on the Spatial Heterogeneity in Fluid Conduits at the Toe of the N Barbados Accretionary Wedge"; April 26, 1994.

941408; J.G. Sclater; NSF; "A Digital Compilation of Topographic, Magnetic and Satellite-Derived Gravity Data Resulting in a Tectonic Chart of the Indian Ocean"; April 29, 1994.

941410; F. Valero; DOE; "Radiation Measurements System"; April 22, 1994.

941411; M.I. Latz; NSF; "Bioluminescent Camouflage Behavior in the Midwater Environment"; April 22, 1994.

941414; D. Wirth; UCSB; "Work Done on R/V Melville"; April 22, 1994.

941416; S. Constable, T.G. Masters; NSF; "Joint EM and Seismic Study of the N EPR"; April 27, 1994.

941418; J.L. Largier; NSF; "Physical and Biological Determinants of Estuarine Dungeness Crab Recruitment"; April 26, 1994.

941419; R. Goericke; NSF; "The Pigment-Labeling Method Calibrating the Method and Understanding its Limitations"; April 25, 1994.

941421; D.P. Rogers; NSF; "Coherent Structures in the Marine Atmospheric Boundary Layer and the Variability of the Surface Fluxes"; April 22, 1994.

941422; T.K. Chereskin, R. Peterson; NSF; "The CA Ocean Time Series"; April 29, 1994.

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941423; J. Gieskes; NSF; "APC Cutting Shoe Pore Fluid Sampler for the ODP"; April 28, 1994.

941424; T.D. Herbert; NSF; "A Late Pleistocene Thermal Transect: Winds, Temperature Gradients, and Productivity in the E and Central Equatorial Pacific"; April 29, 1994.

941425; B.D. Cornuelle; NSF; "An Investigation of Mid-Ocean Mesoscale Variability Using a Combination of Real Ocean Data and a Quasi-Geostrophic Model"; April 25, 1994.

941427; G.L. D'Spain, W.A. Kuperman; NSF; "The Relationship Between Marine Mammal Vocalizations and the Ocean Acoustic Environment"; April 27, 1994.

941430; D. Wirth; UCSC; "Support of Research Onboard R/V Melville in 1996 for a Marine Geophysical Study of the Nicaragua Continental Margin"; April 25, 1994.

941433; D.C. Agnew; NSF; "The Response of an Active Fault Zone to Applied Stress: An Integrated Investigation"; May 26, 1994.

941435; W.H. Berger; NSF; "Quaternary Paleocyanography of Ontong Java Plateau: Stability of the W Equatorial Pacific Warm-H₂O Pool"; May 4, 1994.

941436; H. Craig; NSF; "Ocean Basalts: Rare Gases and Isotopic Studies"; April 28, 1994.

941438; S.K. Ride; UNL; "Public Use of Earth and Space Science Data over the Internet"; May 5, 1994.

941445; J.A. Hildebrand; NSF; "Seismic Studies at the Juan de Fuca Ridge Observatory Site"; May 1, 1994.

941446; J.C. Sclater; NSF; "US-Japan Collaborative Research: Studies on the Thermal Evolution of Old Oceanic Lithosphere Using Precise Heat Flow and Seismic Refraction Measurements in the Argo Basin off NW Australia"; May 11, 1994.

941447; C.D. Keeling; NASA; "Assessment of Anthropogenic and Climatic Impacts on the Global C Cycle Using a 3-D Model Constrained by Isotopic C Measurements and Remote Sensing of Vegetation"; June 16, 1994.

941448; P.R. Castillo; NSF; "Collaborative Research: Detailed Geochemical Investigations of Arc Magmas from W Central and S Philippines"; May 23, 1994.

941458; D. Wirth; UT; "Support of Research Onboard R/V Melville in 1995 for an ARGO-II and 120kHz Survey of the EPR at 8°S"; May 11, 1994.

941460; M.G. Haygood, B.M. Tebo; NSF; "Molecular Probes for Chemolithoautotrophic Diversity and Activity"; May 12, 1994.

941463; B.T. Werner; NSF; "Micromechanics of Eolian Sand Dune Development: Computer Simulations and Field Experiments"; May 13, 1994.

941465; L.R. Haury; NSF; "Near-Surface Nutrient Enrichment"; May 23, 1994.

941466; A.A. Yayanos; NSF; "Influence of Pressure and Temperature on Growth Rates and on the Utilization of Organic Compounds by Deep-Sea Bacteria of Cold and Warm Deep-Seas"; May 16, 1994.

941467; B.M. Brahamsha; DOHHS; "Swimming Motility in the Cyanobacterium Synechococcus"; May 25, 1994.

941469; F.I. Tsuji; NSF; "Biochemical Studies of Bioluminescence"; May 18, 1994.

941470; M.E. Huntley; NSF; "Ecosystem Dynamics of the Antarctic Inner Ice Zone: Zooplankton Processes and Vertical Flux"; May 4, 1994.

941473; J.P. Morgan; NSF; "Joint Seismic and Geodynamic Inversion for Whole Mantle Structure"; May 28, 1994.

941475; C. Constable, L. Tauxe; NSF; "Global Paleointensity of Earth's Magnetic Field from Submarine Basaltic Glass"; May 26, 1994.

941476; Y. Bock; NSF; "Expansion of the PGGA across the Plate Margin in S CA and N Baja CA"; n.d.

941478; S. Constable, J.A. Orcutt; NSF; "Seafloor Data Loggers at UCD and SIO"; February 16, 1995.

941480; S.C. Constable, C. de Groot-Hedlin; NSF; "Joint Inversion for MT Decomposition and 2-D Model Resistivities"; May 23, 1994.

941481; P. Franks, R. Frouin, B.G. Mitchell; NSF; "Ecosystem Dynamics of the Antarctic Inner Ice Zone: Autotrophic Processes"; May 27, 1994.

941482; R. Frouin; CNES-NASDA; "Ocean Color Remote Sensing Using Polarization and Bidirectionality Properties of Reflected Sunlight"; May 24, 1994.

941483; J.A. Orcutt; NSF; "Subcontract to UTEP for Use of SIO's OBSs and OBHs"; May 24, 1994.

941484; S.C. Cande, M.F. Coffin; NSF; "Collaborative Research: A Geophysical Survey of the Enderby Basin and Adjacent Antarctic Margin"; May 23, 1994.

941487; B.M. Tebo; EPA; "Oxidation of Organic Pollutants by Mn-Oxidizing Bacteria"; May 31, 1994.

941489; F. Azam; NSF; "Ecosystem Dynamics of the Antarctic Inner Ice Zone: Significance of the Microbial Loop in C Fluxes"; May 31, 1994.

941491; R.C.J. Somerville; UCB; "Analysis of Surface Meteorological and Hydrological Data"; May 26, 1994.

941492; W.H. Fenical; DOHHS; "Microbial Production of the Antitumor Agent Bryostatin 1"; May 26, 1994.

941493; E.A. Frieman; LLNL; "UC Institutional Collaborative Research Program"; March 30, 1994.

941494; W.F. Heiligenberg; NSF; "Info Processing in the Diencephalon of Gymnotiform Fish"; June 7, 1994.

941495; J.O. Roads; NSF; "HI Climate and Weather"; June 17, 1994.

941497; J.B. Graham; NSF; "Fishes of the Family Gobiidae as a Model for the Origin of Vertebrate Terrestriality"; June 3, 1994.

941499; M. Hildebrand; DOE; "Role of Si in Cellular Metabolism: Effect on Glycolytic Enzymes Glyceraldehyde-3-Phosphate Dehydrogenase and Lactate Dehydrogenase"; June 23, 1994.

941500; S. Chen, J.O. Roads; NSF; "Global to Regional Modeling"; n.d.

941503; C.D. Winant; DOD; "Continental Shelf Broadband ADCP Facility"; June 13, 1994.

941505; T.G. Drake, J.S. Jaffe; ONR; "3-D Sonar Observations of Nearshore Cobble Behavior"; June 16, 1994.

941506; R. Goericke; DOD; "Acquisition of an LC-MS System"; June 9, 1994.

941507; D.M. Checkley; DOD; "Acoustic Doppler Velocimeters for Physical-Biological Studies of Langmuir Circulations"; June 15, 1994.

941509; M.J. Buckingham; DOD; "High Performance Data Analysis System for Ambient Noise Oceanography"; n.d.

941510; R. Pinkel; DOD; "Instrumentation in Support of Ocean Physics Research"; n.d.

941511; J.A. Hildebrand; DOD; "A 10Hz-20kHz Seafloor Hydrophone Instrument for Continuous 6 Month Recordings"; n.d.

941512; W.K. Melville; DOD; "Instrumentation for the Measurement of Coastal Fronts and Shallow H₂O Nonlinear Internal Waves"; June 13, 1994.

941514; J.S. Jaffe; DOD; "Advanced Visualization for Underwater Acoustical and Optical Imaging"; n.d.

941515; W.S. Hodgkiss; DOD; "Fluctuations of Shallow H₂O Oceanographic Parameters"; n.d.

941516; J.A. Smith; DOD; "Instrumentation for 3- Component Velocity Measurements across the Air/Sea Interface"; n.d.

941517; D. Rudnick; DOD; "An Upper Ocean Surveying Facility"; n.d.

941518; M. Vernet; NSF; "The Synthesis and Excretion of Intra- and Extracellular UV-Absorbing Compounds in Antarctic Phytoplankton"; July 20, 1994.

941530; C.G. Constable, S.C. Constable; NASA; "Drs M. Baltuck/J. LaBreque/E. Friis-Christensen Program Managers Ørsted Program"; June 30, 1994.

941532; J. Berger; SAIC; "Purchase of a Sun 4/40 Computer System with Disk Drive and a Best Ferrups 1.4 KVA Uninterruptible Power Supply"; June 9, 1994.

941541; R. Pinkel; ONR; "Tides, Waves, and Mixing at Ocean Boundaries"; June 27, 1994.

941542; G.J. Zhang; NSF; "Studies of the Coupling between Convection and Surface Evaporation in the Tropical Pacific"; June 23, 1994.

941544; J.R. Arnold; CASS; "STEDI"; July 8, 1994.

941545; W.K. Melville; ONR; "Breaking, Mixing, and Transport Due to Long Nonlinear Internal Waves on the Inner Shelf"; July 29, 1994.

941546; R. Pinkel, J.A. Smith; ONR; "Wind and Wave Forced Currents on the Inner Shelf"; June 27, 1994.

941548; W.H. Berger; NSF; "Abrupt Climatic Changes during the Late Quaternary Monitored with Annual to Biennial Resolution in SB Basin"; June 27, 1994.

941550; Y. Bock; NSF; "Facility for Supporting the Analysis and Integration of Regional and Global GPS Networks for Crustal Deformation"; June 29, 1994.

941553; M.C. Hendershott, C.D. Winant; ONR; "Internal Waves and Their Role in Stirring over the Continental Shelf"; June 28, 1994.

941554; B. Cornuelle, P.F. Worcester; ONR "Acoustic Fluctuations Due to Internal Waves and Tides in Shallow H₂O"; June 29, 1994.

951004; C.E. Dorman, D.P. Rogers, C.D. Winant; ONR; "The Interaction between Propagating Disturbances and Supercritical Marine Layers on the W Coast of the US"; July 25, 1994.

951011; P.M. Shearer; PL; "Regional Event Detection and Location Using Matched Filter Methods"; July 28, 1994.

951012; E.A. Frieman, A. Miller, J. Roads, W. White; NOAA; "JIMO TASK IV Coupled Ocean-Atmosphere Predictability"; July 29, 1994.

951019; E.A. Frieman, R. Goericke; NOAA; "JIMO TASK II A 150-Year Time Series of ¹³C-Fractionation of Phytoplankton in the SB Basin"; July 29, 1994.

951020; F. Azam; ONR; "Role of Bacteria in Particle Aggregation in the Sea"; August 24, 1994.

951025; F.L. Vernon; USGS; "The ANZA Broadband Seismic Array: A 24-Bit Real-Time Telemetry Network"; August 4, 1994.

951034; J.J. Simpson; NASA; "One Year Extension with Cost to 'Analysis of Long-Term Cloud Cover, Radiative Fluxes, and SST in the E Tropical Pacific Using Satellite and In Situ Data'"; August 5, 1994.

951036; E.A. Frieman, T.D. Herbert; NOAA; "JIMO- TASK II: History of the CA Current and the Tropical Pacific in a Transitional Region"; August 5, 1994.

951037; R. Davis, E.A. Frieman, R. Peterson, W. White; NOAA; "Preliminary Network Design of a Temperature Salinity Measurement (JIMO Task II)"; August 8, 1994.

951041; R.A. Knox, C. de Moustier, J.H. Swift, D. Wirth; NSF; "Oceanographic Instrumentation"; August 23, 1994.

951043; C.G. Constable; NGS; "Paleomagnetic Secular Variation from 0-4Ma Lava Flows in the Azores"; August 8, 1994.

951046; B.T. Werner; NSF; "An Integrated Modeling and Experimental Study of the Formation and Dynamics of Patterned Ground"; August 26, 1994.

951047; Y. Bock; DT; "SOPAC Tracking Network Project"; August 15, 1994.

951048; M. Vernet; NSF; "Organic C and S2 Cycling in Arctic Phytoplankton"; September 30, 1994.

951050; E.A. Frieman, A. Miller; NOAA; "Empirical Ocean Climate Studies (Task II)"; September 8, 1994.

951053; J.A. Hildebrand; NEH; "Native American Responses to Subsistence Stress in S CA"; n.d.

951067; G.L. Kooyman; DOHHS; "Physiology of Sleep Apnea and Diving in Elephant Seals"; September 23, 1994.

951068; J. Arnold; JPL; "Mars Observer GRS Flight Investigation Team"; September 15, 1994.

951078; J.S. Jaffe; WCNURC; "Zooplankton in Scripps Canyon: Interaction of Animals with Topography"; September 23, 1994.

951079; B.M. Tebo; EPA; "Microbially Produced Biosorbents and Magnetic Separation of Pollutants"; September 21, 1994.

951082; G. Carnevale; NSF; "The Effects of Rotation on 3-D Flow"; October 25, 1994.

951086; R. Goericke; DOD; "AASERT Support for Grad Student Training for Studies in the SCCZ"; October 21, 1994.

951087; J.J. Simpson; NASA; "Improved Detection of Sea Ice, Clouds, and Snow in Remotely Sensed Arctic Imagery"; September 28, 1994.

951091; B. Brahamsha, R. Goericke, B. Palenik; NSF "The Extent and Potential Causes of Cyanobacterial Diversity in the Marine Environment"; October 25, 1994.

951099; J.H. Filloux; NSF; "Mid-Ocean Ridge Tilt Array"; October 28, 1994.

951102; S. Constable; NSF; "Controlled Source EM Study of a Lau Basin Axial Magma Chamber"; October 28, 1994.

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951104; S. Constable; NSF; "Analogue and Numerical Methods for Interpretation of Seafloor EM Controlled Source Sounding"; October 24, 1994.

951107; K.L. Smith; NSF; "Supplement for Rover Testing"; October 12, 1994.

951109; M. Kastner, B.L. Ransom; NSF; "Cl Stable Isotope Composition of Subduction Zone Sediments and Pore H2O"; October 27, 1994.

951112; D.P. Rogers; NSF; "Coherent Structures in the Marine Atmospheric Boundary Layer and the Variability of the Surface Fluxes"; October 21, 1994.

951113; P.R. Castillo, J. Mammerickx, D.T. Sandwell; NSF; "Survey of Uncharted Foundation Seamount Chain: Hotspot or Tension Crack?"; October 24, 1994.

951117; F.P.J. Valero; NASA; "A Cloud Radiation Research Proposal in Support of the 1st ISCCP Regional Experiment Phase III"; October 27, 1994.

951118; J.L. Largier; NSF; "Physical and Biological Determinants of Estuarine Dungeness Crab Recruitment"; October 21, 1994.

951121; T. Hayward; DOD; "Application of Bio-Optical Models for Estimating Primary Production in the CA Current"; October 31, 1994.

951122; C.D. Winant; DOD; "Coastal Meteorology AASERT Proposal"; October 31, 1994.

951123; N.A. Bray; DOD; "Grad Student Support for the Indonesian Throughflow Experiment"; October 31, 1994.

951124; P. Flatau; NASA; "Convection Generated Cirrus Life Cycle Derived from the US Satellite Cloud Climatologies"; October 28, 1994.

951128; L.M. Dorman, W.A. Kuperman; NSF; "Determining Earthquake Source Properties from Waveform Modeling of T-Phases Observed by OBS and MHA"; October 28, 1994.

951130; M.I. Latz; DOD; "A Novel Tool for Flow Visualization of Swimming Marine Organisms"; October 25, 1994.

951131; J.D. Macdougall; NSF; "B Isotopes in MORB as a Tracer of Recycled Components"; November 1, 1994.

951132; W.K. Melville; DOD; "Correlation of Velocity Measurements with Microwave Scattering by Surface Waves at Grazing Incidence"; November 3, 1994.

951138; D.P. Rogers; DOD; "The Effect of Mesoscale Atmospheric Structures on the Variability of Surface Fluxes and Cloud Development over the Ocean"; October 30, 1994.

951140; C. de Moustier; NSF; "Sediment Dynamics along a Glaciated Margin Fine-Scale Investigation of the Barents-Svalbard Continental Slope"; n.d.

951146; A.A. Yayanos; NSF; "Influence of Pressure and Temperature on Growth Rates and on the Utilization of Organic Compounds by Deep-Sea Bacteria of Cold and Warm Deep-Seas"; November 9, 1994.

951147; M.P. Flanagan, P.M. Shearer; NSF; "Mantle Attenuation Studies Using Broadband Seismic Data"; November 23, 1994.

951148; C. Constable, T.G. Masters, J.P. Morgan, P.M. Shearer; NSF; "Computing Support for Research in Seismology, Geodynamics, and Geomagnetism"; November 22, 1994.

951150; D. Wirth; NSF; "ODF Support for 'Deep H2O Formation off the E Wilkes Land Coast of Antarctica'"; November 7, 1994.

951152; G.L. D'Spain, W.A. Kuperman; NSF; "Matched Field Processing of Marine Mammal Vocalizations for Localization and Signature Determination: A Exploratory Study Using Existing Data"; November 16, 1994.

951157R1; S. Constable; IGPP; "Gulf of MX Seafloor MT Survey"; July 28, 1995.

951167; W.H. Berger; NIGEC; "Dendrochronological Response of Pacific NW Conifers to Climate Change"; November 11, 1994.

951169; M.G. Haygood; NSF; "Anglerfishes and Their Luminescent Bacterial Symbionts: Phylogeny, Sexual Parasitism, and Co-Evolution"; December 5, 1994.

951173; J.D. Macdougall; NSF; "Field and Geochemical Studies of the Siberian Traps, Russia"; November 29, 1994.

951177; G.E. Backus; NSF; "Tailoring a General Inversion Formalism to Error Analysis in the Construction of Stochastic and Deterministic Models of Geomagnetic Field Sources"; May 19, 1995.

951181; H. Craig; NIGEC; "Continued Studies of Tropo- and Stratospheric N2O"; November 28, 1994.

951183; E.A. Frieman, W.B. White; NOAA; "The Use of Satellite Altimetry in the Study of Sea Level Variability over the Global Ocean (JIMO Task II)"; November 23, 1994.

951187; S.C. Constable, C. de Groot-Hedlin; NSF; "2-D MT Inversion with Simultaneous Decomposition"; December 1, 1994.

951194; W.H. Thomas; NSF; "Short-Term and Long-Term Effects of UV Radiation on Microbial Ecology of Sierra Nevada Snowfields"; December 12, 1994.

951197; M.I. Latz; NSF; "Physiological Mechanisms in the Control of Bioluminescent Camouflage Behavior"; December 12, 1994.

951201; W.H. Berger; ACS; "Paleoproductivity in the Quaternary: Proxies and History"; December 16, 1994.

951202; J.J. Simpson; UCAR; "Integration of OLS and SSM/I Data into Operational Weather Forecasting"; December 15, 1994.

951204; S.C. Constable; NSF; "Collaborative Work with UMF and Ministry of Petroleum and Minerals, Sultanate of Oman"; December 22, 1994.

951208; R. Goericke; NSF; "Estimating Relative or Absolute Phytoplankton Growth Rates from the Natural Abundance of ¹³C in Chlorophyll-a and its Degradation Products"; December 22, 1994.

951211; L.M. Dorman; DOD; "Broadband Seismic Sensors for the ONR OBS"; n.d.

951212; S. Chen, J.O. Roads; NSF; "Global to Regional Modeling"; January 12, 1995.

951214; J. Arnold; NASA; "Curriculum Development Projects of NASA/ARC"; March 3, 1995.

951221; R. Pinkel; DOD; "Instrumentation in Support of Ocean Physics Research"; n.d.

951227; P.R. Castillo, J.W. Hawkins; NSF; "The Early Evolution of the Crust and Mantle of a Supra- Subduction Zone System; A Petrologic-Tectonic Study of the Palau-Kyushu Ridge and Parece Vela Basin"; February 9, 1995.

951229; M. Wahlen; NASA; "The Use of Cl Stable Isotopes to Elucidate the Chemical Speciation of Cl Volatilized from Marine Sea Salt Aerosols"; January 13, 1995.

951232; W.S. Hodgkiss; DOD; "Fluctuations of Shallow H2O Oceanographic Parameters"; n.d.

951233; R. Frouin; DOD; "POLDER Imager for Environmental Studies of Climate Research"; January 17, 1995.

951234; M.E. Huntley; DOD; "ADCP for New Applications in Bioacoustics"; n.d.

951235; A.A. Benson; UCEI; "Studies toward Successful Utilization of CH4OH Auto Fuel"; January 20, 1995.

951236; W. Wei; NSF; "Collaborative Research: 500 Ky Record of the Caribbean Current on the N Nicaragua Rise: Variations of the Upper Return Flow of the Global Thermohaline Circulation Cell"; February 13, 1995.

951237; P.M. Shearer; IRIS; "Imaging Broadband Seismographs from the IRIS Network"; January 17, 1995.

951240; F.I. Tsuji; NSF; "Biochemical Studies of Bioluminescence"; January 20, 1995.

951244; G.F. Carnevale; NSF; "Topographically Induced Large-Scale Flow Instability"; February 8, 1995.

951246; L.Z. Holland; DOHHS; "Molecular Basis of Myogenesis in Amphioxus Development"; January 21, 1995.

951252; D.K. Blackman, J.P. Morgan; NSF; "Tectonic Controls on the Evolution of the SE Indian Ridge: Ridge Propagation, Asymmetric Spreading, and the Influence of Large-Offset Transform Faults"; February 14, 1995.

951253; W. Crawford, S.C. Webb; NSF; "The Relationship of Crustal Magma Chambers and Ridge Morphology"; February 13, 1995.

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951257; A.J. Harding; NSF; "A Multichannel Seismic Survey of the Lau Spreading Center: A New Look into Crustal Accretion at Back Arc Spreading Centers"; February 13, 1995.

951266; G.D. Gibson, L.A. Levin; NSF; "Mechanisms and Consequences of Life-History Variability in a Marine Polychaete"; February 7, 1995.

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951273; D.C. Jacobs; NSF; "Intensive Profiling of Mixing Parameters at Abyssal Depths during BBTRE"; February 13, 1995.

951275; B.D. Cornuelle, P.F. Worcester; NSF; "Evolution of the 3-D Thermal Structure and Heat Content of the Labrador Sea from Tomographic Measurements"; February 9, 1995.

951276; A.A. Yayanos; UCEI; "Development of a Method to Facilitate Selections and Acceptance of Radioactive Waste Disposal Sites"; February 6, 1995.

951277; J.S. Gee; NSF; "Collaborative Research: An Approach for Evaluating the Nature of Seismic Layer 2A Using Near-Bottom Axial Magnetic Anomalies and Sampling"; February 13, 1995.

951281; M. Kastner; UCEI; "Controls on Organic C Preservation, Distribution, and Hydrocarbon Resource Potential in CA Offshore Sediments"; n.d.

951284; R.T. Guza; USCSGC; "Short-Range Swell Forecasts for S CA"; January 17, 1995.

951287; S.C. Webb; NSF; "Deep Ocean Compliance Sensors"; February 13, 1995.

951288; K.M. Brown; NSF; "The Coupling between Confining Stress and the Hydraulic Conductivity Response of Variably Fractured Muds and Fault Zone Melanges from the Cascadia Accretionary Wedge off OR"; February 13, 1995.

951294; J.P. Morgan; NSF; "Project SWELL: Seismic Wave Exploration of the Lower Lithosphere beneath the HI Swell"; February 21, 1995.

951295; J.A. Orcutt, F.L. Vernon; NSF; "Extreme Continental Extension and Tectonic Evolution along the CA Margin"; February 24, 1995.

951300; W.H. Berger; UCFPL; "Historical Growth Rates of CA Hardwoods Derived from Tree Rings"; n.d.

951302; S. Chen, A.J. Miller, J.O. Roads; NSF; "Coupled Ocean-Atmosphere Predictability"; March 10, 1995.

951303; L.M. Dorman; NSF; "Broadband Seismic Sensors for the ONR OBS"; February 27, 1995.

951304; W.R. Riedel; NSF; "A Monograph of Present- Day and Recent Polycystine Radiolaria"; February 27, 1995.

951305; S. Constable, J.A. Orcutt, F. Wyatt; NSF; "Observation of Seafloor Tilt and Seismicity at the Juan de Fuca Ridge"; February 28, 1995.

951308; J.A. Hildebrand, W.S. Hodgkiss, W.A. Kuperman; NSF; "Development of an Academic Infrastructure for Research Using the USN Pacific SOSUS Arrays"; February 28, 1995.

951310; J.J. Simpson; NASA; "Accurate Segmentation Algorithms for Polar Surfaces Using AVHRR and DMSP/OLS Data"; March 2, 1995.

951315; R. Frouin; NASA; "A 12-Year Time Series of Meteosat-Derived Surface Radiation Products"; March 7, 1995.

951327; D.C. Agnew, H. Johnson; USGS; "A 1st-Epoch Geodetic Network to Monitor the Rose Canyon Fault Zone"; n.d.

951330; M. Hedlin, J.A. Orcutt; LLNL; "Whole Waveform Analysis of Ground-Truthed Mining Events Recorded in the W US"; March 31, 1995.

951341; D.T. Sandwell; NSF; "Neotectonics and Earthquake Displacements of Active Plate Boundaries"; n.d.

951357; D.C. Agnew; USGS; "Interpretation of Crustal Deformation Measurements in CA"; April 5, 1994.

951359; M.G. Haygood; NSF; "Production of Fe- Complexing Compounds by Marine Particle-Associated Bacteria"; April 27, 1995.

951362; F. Vernon; SAIC; "Seismic Data Collection and Processing"; April 6, 1995.

951365; M. Wahlen; EPA; "Pollution and Sea Salt Aerosols: The Production of Reactive Cl Species in the Urban Atmosphere"; April 14, 1995.

951368; J.J. Sullivan; UCR; "Coastal Development and Habitat Management in CA: New Direction in the Wake of NAFTA"; n.d.

951372; M. Kastner, B.L. Ransom; NSF; "Mineralogic Controls on the Sequestering and Preservation of Organic C in Marine Sediments"; April 26, 1995.

951380; W.H. Berger, D.R. Cayan; NSF; "Collaborative Research: Long-Term H₂O Supply of the US-MX Border Region Reconstructed from Tree-Rings and Varves"; April 20, 1995.

951390; S.C. Constable; NSF; "Electrical Resistivity Study of Oman Ophiolite in Collaboration with Ministry of Petroleum and Minerals, Sultanate of Oman and UMF"; April 21, 1995.

951394; P.P. Niiler; ONR; "Upper Ocean Circulation: The Creation of Eddies on Continental Margins"; May 1, 1995.

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951397; D.P. Rogers; NSF; "Small Scale Response of the SST during TOGA COARE"; April 25, 1995.

951398; R.C.J. Somerville; NSF; "Using TOGA COARE Observations to Improve Climate Model Parameterizations"; April 27, 1995.

951399; B.M. Tebo; NSF; "Investigations of the Mechanism of Mn-Oxidation by Gram- Bacteria"; n.d.

951400; G.F. Carnevale; NSF; "Transport of Surface H₂O Away from Coasts"; April 27, 1995.

951402; W.S. Hodgkiss; NCCOSC; "Undersea Data Communications"; April 27, 1995.

951404; B.P. Palenik; NSF; "Cell Surface Proteins Induced by Trace Metal Stress in Microalgae"; April 25, 1995.

951409; R. Davis; NASA; "Evidence for Topographic Effects in the Antarctic Circumpolar Current: A Request for Travel Funds to Present Results"; May 5, 1995.

951410; G. Carnevale; NSF; "Dynamic-Thermodynamic Processes in Compressible, Heat-Conducting Vortices and Boundary Layers"; June 27, 1995.

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951425; P.R. Castillo; NSF; "Collaborative Research: Detailed Geochemical Investigations of Arc Magmas from Central and S Philippines"; May 25, 1995.

951430; R. Peterson; NSF; "Repeat CTD Surveys along 11°N with the Fast Hydrographic Profiler"; May 30, 1995.

951434; D.C. Agnew; NSF; "A Geodetic Study of the Mechanics of Transpressive Fault: The Central San Andreas Fault"; May 30, 1995.

951436; M.G. Altalo; OST; "CA Coastal Ocean Forecast System: An Integration and Enhancement of Existing Monitoring and Observation Centers"; n.d.

951437; R.C.J. Somerville; LLNL; "The Persistence of Marine Stratocumulus Clouds: A Modeling Study Based on ASTEX Data (INCOR Project Proposal)"; May 18, 1995.

951440; B.T. Werner; NSF; "Micromechanics of Eolian Sand Dune Development: Computer Simulations and Field Experiments"; May 22, 1995.

951441: M. Wahlen; NSF; "CO₂ and 13CO₂ in Antarctic Ice Cores, and Related Isotopic Studies in Antarctic Air, Snow, and Ice"; May 30, 1995.

951443: S. Constable, J.A. Orcutt, F.L. Vernon; NSF; "White Island Drilling Geophysical Subcontract"; May 26, 1995.

951444: J.P. Morgan; NSF; "Hotspot Epeirogeny Revisited"; May 26, 1995.

951446: J. Roads; LANL; "Development of a Regional Climate Model"; May 16, 1995.

951455: J.L. Bada; NASA; "An Analytical System for the Detection of the Key Prebiotic Organic Components Amino Acids and Adenine on Comet P/Wirtanen"; May 31, 1995.

951457: J.B. Graham; NSF; "Fishes of the Family Gobiidae as a Model for the Origin of Vertebrate Terrestriality"; June 8, 1995.

951492: P.K. Dayton; LLNL; "Estimation of Age and Growth Rates of the Desert Perennial Ocotillo (*Fouquieria splendens*) by AMS Radiocarbon Measurements"; June 28, 1995.

961011: T.K. Chereskin; NSF; "Repeat ADCP Velocity Surveys at 11°N during ACCE"; July 14, 1995.

961024: J.A. Orcutt, M. Tolstoy; NSF; "An Experiment to Measure Ground Deformation at a Fast-Spreading Mid-Ocean Ridge Crest"; August 11, 1995.

961025: B. Brahamsha, R. Goericke, B.P. Palenik; NSF; "Cyanobacterial Diversity in the Marine Environment"; August 4, 1995.

961034: J. Swift; NSF; "Hydrographic Support for US WHP '24N Atlantic CTD Section"; July 21, 1995.

961035: D. Cayan, B. Cornuelle, A. Miller; NSF; "Interdecadal Modeling Perspective of ACCE Observations"; August 5, 1995.

961037: F.N. Spiess; NSF; "Imaging the Hydraulic Structure of the Oceanic Crust at CR Rift by Super Crosswell Tomography"; August 17, 1995.

961040: J.D. Macdougall; NSF; "B Isotopes in MORB as a Tracer of Recycled Components"; August 9, 1995.

961043: P.R. Castillo, J.W. Hawkins; NSF; "The Early Evolution of the Crust and Mantle of a Supra- Subduction Zone System; A Petrologic-Tectonic Study of the Palau-Kyushu Ridge and Parece Vela Basin"; August 3, 1995.

961045: P.P. Niiler; NSF; "BIOME Mesoscale Circulation and Dynamics"; August 4, 1995.

961049: W.H. Berger; NSF; "Reconstruction of Atmospheric CO₂ for the Brunhes Chron from Deep-Sea Sediments"; August 10, 1995.

961051: J.A. Hildebrand, F.N. Spiess, M.A. Zumberge; NSF; "Crustal Deformation at the Cleft Segment of the Juan de Fuca Ridge"; August 11, 1995.

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961066: H.K. Given; NSF; "Characterization of Seismicity near the Mid-Atlantic Ridge near Ascension Island Using Newly Available Broadband Seismic and Hydrophone Data"; August 9, 1995.

961067: M.C. Hendershott, R.G. Peterson; NSF; "Numerical Modeling of the Malvinas Current Shelf- Break Front"; August 9, 1995.

961071: A.Y. Basovich, W.K. Melville; NSF; "The Effects of Wave Growth and Dissipation on Langmuir Circulations"; August 14, 1995.

961074: A.J. Harding, J.A. Orcutt; NSF; "ARAD 3-D Reflection Experiment"; August 21, 1995.

961078: K.L. Smith; NSF; "Active Transport of Organic C by Macrozooplankton/Micronekton in the Ross Sea: Long Time-Series Monitoring"; August 24, 1995.

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961084: M.E. Huntley; NSF; "Subtropical BIOME: Zooplankton Dynamics"; August 8, 1995.

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