

OTA Workshop Participants and Other Contributors

Workshop Participants-

Technologies for Surveying and Exploring the Exclusive Economic Zone, Washington, D. C., June 10, 1986. Participants described and evaluated technologies used for reconnoitering the EEZ, including bathymetry systems, side-looking sonar systems, and seismic, magnetic, and gravity technologies.

Chris Andreasen
National Ocean Service, NOAA

Robert D. Ballard
Woods Hole Oceanographic Institution

John Brozena
Naval Research Laboratory

Gary Hill
U.S. Geological Survey, Reston

John La Brecque
Lamont-Doherty Geological Observatory

William M. Marquet
Woods Hole Oceanographic Institution

Don Pryor
Charting and Geodetic Services
National Ocean Service, NOAA

Bill Ryan
Lamont-Doherty Geological Observatory

Carl Savit
Western Geophysical Co.

Robert C. Tyce
Graduate School of Oceanography
University of Rhode Island, RI

Donald White
General Instrument Corporation

Site-Specific Technologies for Exploring the Exclusive Economic Zone, Washington, D. C., July 16, 1986. Participants described and evaluated technologies for coring, dredging, and drilling and technologies for electrical and geochemical exploration.

Roger Amato
Minerals Management Service

Alan D. Chave
AT&T Bell Laboratories

Michael J. Cruickshank
Consulting Marine Mining Engineer

Charles Dill
Alpine Ocean Seismic Survey, Inc.

Peter B. Hale
Offshore Minerals Section
Energy, Mines, and Resources Canada

W. William Harvey
Arlington Technical Services, VA

Edward E. Horton
Deep Oil Technology, Inc.

Jerzy Maciolek
Exploration Technologies, Inc.

J. Robert Moore
Department of Marine Studies
University of Texas, TX

John Noakes
Center for Applied Isotope Studies
University of Georgia, GA

William D. Siapno
Marine Consultant

Paul Teleki
U.S. Geological Survey, Reston, VA

John Toth
Analytical Services, Inc.

Robert Willard
U.S. Bureau of Mines, Minneapolis, MN

S. Jeffress Williams
U.S. Geological Survey, Reston, VA

Robert Woolsey
Mississippi Minerals Resources Institute, MS

Pacific EEZ Minerals, Newport, Oregon, November 20, 1986. Participants assessed knowledge of chromite sands, cobalt crusts, and polymetallic sulfides of the U.S. Pacific EEZ and evaluated existing and potential technology for mining and processing these deposits. Held in cooperation with the Hatfield Marine Science Center, Oregon State University.

Robert Bailey
Department of Land Conservation and
Development
State of Oregon

Thomas Carnahan
Bureau of Mines, Reno, NV

David K. Denton
Bureau of Mines, Spokane, WA

Don Foot
Bureau of Mines, Salt Lake City, UT

Steve Hammond
Vents Program, NOAA

Benjamin W. Haynes
Bureau of Mines, Avondale, AZ

James R. Hein
U.S. Geological Survey, Menlo Park, CA

Donald Hull
Oregon Department of Geology and Mineral
Industries, OR

Laverne Kulm
College of Oceanography
Oregon State University, OR

Charles Morgan
Manganese Crust EIS Project

Joseph R. Ritchey
Bureau of Mines, Spokane, WA

Reid Stone
Office of Strategic and International Minerals
Minerals Management Service

James Wenzel
Marine Development Associates, Inc.

Robert Zierenberg
U.S. Geological Survey, Menlo Park, CA

Data Classification, Woods Hole, Massachusetts, January 27, 1987. Participants assessed the effect that classification of bathymetric data and other types of oceanographic data may have on marine science activities. Held in cooperation with the Marine Policy and Ocean Management Center, Woods Hole Oceanographic Institution.

James Broadus
Woods Hole Oceanographic Institution

John Edmond
Department of Earth and Planetary Sciences
Massachusetts Institute of Technology, MA

Richard Greenwald
Ocean Mining Associates

James Kosalos
International Submarine Technology

Jacqueline Mammericks
Scripps Institution of Oceanography

Donna Moffitt
Office of Marine Affairs
Department of Administration

W. Jason Morgan
Department of Geological and Geophysical Sciences
Princeton University, PA

Peter A. Rona
Atlantic Oceanographic and Meteorological
Laboratories, NOAA

David Ross
Woods Hole Oceanographic Institution

Derek W. Spencer
Woods Hole Oceanographic Institution

Robert C. Tyce
Graduate School of Oceanography
University of Rhode Island, RI

Mining and Processing Placers of the Exclusive Economic Zone, Washington, D. C., September 18, 1986.

Participants critiqued an OTA working paper on the mineral resources of the U.S. Atlantic and Gulf coast EEZs. Technologies for offshore placer mining and for minerals processing were also discussed.

Richard A. Beale
Associated Minerals (U. S. A.) Ltd.

Michael J. Cruickshank
Consulting Marine Mining Engineer

Edward Escowitz
U.S. Geological Survey, Reston, VA

Andrew Grosz
U.S. Geological Survey, Reston, VA

Frank C. Hamata
Sceptre-Ridel-Dawson Constructors

Gretchen Luepke
U.S. Geological Survey, Menlo Park, CA

Ruud Ouwerkerk
Dredge Technology Corporation

Tom Oxford
U.S. Army Corps of Engineers

Richard Rosamilia
Great Lakes Dredge and Dock Co.

David Ross
Woods Hole Oceanographic Institution

John Rowland
Bureau of Mines, Washington, D.C.

Langtry E. Lynd
U.S. Bureau of Mines, Washington, D.C.

J. Robert Moore
Department of Marine Studies
University of Texas, TX

Scott Snyder
Department of Geology
East Carolina University, NC

George Watson
Ferroalloy Associates

S. Jeffress Williams
U.S. Geological Survey, Reston, VA

Environmental Effects of Offshore Mining, Washington, D. C., October 29, 1986. Surface, mid-water, and benthic impacts were assessed for both near-shore and open-ocean mining situations. Potential effects of offshore dredging on coastal processes were also addressed.

Henry J. Bokuniewicz
Marine Sciences Research Center
State University of New York at Stony Brook, NY

Michael J. Cruickshank
Consulting Marine Mining Engineer

Clifton Curtis
Oceanic Society

David Duane
National Sea Grant College Program, NOAA

Joseph Flanagan
Ocean Minerals and Energy, NOAA

Barbara Hecker
Lamont-Doherty Geological Observatory

Michael J. Herz
Tiberon Center for Environmental Studies
University of San Francisco, CA

Robert R. Hessler
Scripps Institution of Oceanography

Art Hurme
U.S. Army Corps of Engineers

Greg McMurray
Oregon Department of Geology and Mineral
Industries, OR

Ed Myers
Ocean Minerals and Energy, NOAA

John Padan
Ocean Minerals and Energy, NOAA

Andrew Palmer
Environmental Policy Institute

Dean Parsons
National Marine Fisheries Service, NOAA

David W. Pasho
Resource Management Branch
Energy, Mines, and Resources Canada

Mario Paula
New York District, U.S. Army Corps of Engineers,
NY

Richard K. Peddicord
Battelle NE, MA

Joan Pope
U.S. Army Corps of Engineers

Jean Snider
Ocean Assessment, NOAA

Buford Holt
U.S. Department of the Interior

David Thistle
Department of Oceanography
Florida State University, FL

George D. F. Wilson
Scripps Institution of Oceanography

Thomas Wright
U.S. Army Corps of Engineers

Other Contributors

Craig Amergian
Analytical Services, Inc.

Robert Abel
N.J. Marine Science Consortium, NJ

W.T. Adams
U.S. Bureau of Mines

Vera Alexander
University of Alaska

Chris Andreasen
National Oceanic and Atmospheric Administration

Jack H. Archer
Woods Hole Oceanographic Institution

Ted Armbrustmacher
U.S. Geological Survey, Denver, CO

Dale Avery
U.S. Bureau of Mines

Ledolph Baer
National Oceanic and Atmospheric Administration

Susan Bales
David Taylor Naval Ship Research and
Development Center

Bill Barnard
Office of Technology Assessment

Aldo F. Barsotti
U.S. Bureau of Mines

Dan Basta
National Oceanic and Atmospheric Administration

Alan Bauder
U.S. Army Corps of Engineers

Wayne Bell
University of Maryland, MD

Jeff Benoit
Massachusetts Department of Environmental
Quality and Engineering, MA

Rick Berquist
Virginia Institute of Marine Science, VA

Lewis Brown
National Science Foundation

Bill Burnett
University of Florida, FL

R.J. Byrne
Virginia Institute of Marine Sciences, VA

David Camp
Florida Department of Natural Resources, FL

Bill Cannon
U.S. Geological Survey, Reston, VA

Jim Cathcart
U.S. Geological Survey, Denver, CO

M. W. Chesson
Zellars-Williams Company

Michael A. Chinnery
National Geophysical Data Center

Joe Christopher
Gulf of Mexico Region, Minerals Management
Service

Jay Combe
U.S. Army Corps of Engineers, New Orleans
District, LA

Stephen G. Conrad
North Carolina Division of Land Resources, NC

Margaret Courain
National Environmental Satellite, Data, and
Information Service

Dennis Cox
U.S. Geological Survey, Menlo Park, CA

Michael Cruickshank
Consulting Marine Mining Engineer

Mike Czarnecki
Naval Research Laboratory

Lou J. Czel
E.I. du Pont de Nemours & Co.

James F. Davis
California Department of Conservation, CA

Mike De Luca
National Oceanic and Atmospheric Administration

John H. De Young, Jr.
U.S. Geological Survey, Reston, VA

John Delaney
University of Washington, WA

Bob Detrick
University of Rhode Island, RI

Captain Joseph Drop
National Environmental Satellite, Data and
Information Service

Barry Drucker
Offshore Environmental Assessment Div.

David Duane
National Sea Grant College Program

John Dugen
Arete Associates

Frank Eaden
Joint Oceanographic Institutions

R.L. Embleton
British Embassy

Bill Emery
National Center for Atmospheric Research

Robert Engler
U.S. Army Corps of Engineers

Herman Enzer
U.S. Bureau of Mines

William Erb
State Department,

Edward Escowitz
U.S. Geological Survey, Reston, VA

Robert H. Fakundiny
New York State Geological Survey, NY

Rich Fantel
U.S. Bureau of Mines, Denver, CO

Martin Finerty
Ocean Studies Board, National Academy of
Sciences

Joe Flanagan
National Oceanic and Atmospheric Administration

John E. Flipse
Texas A&M University, TX

Mike Foote
U.S. Geological Survey, Reston, VA

Eric Force
U.S. Geological Survey, Reston, VA

Linda Glover
U.S. Navy

John Gould
Institute of Ocean Sciences, England

James L. Green
National Space Science Data Center

Andrew Grosz
U.S. Geological Survey, Reston, VA

Kenneth A. Haddad
Florida Department of Natural Resources, FL

Robert Hall
Department of the Interior

Gary Hallbauer
Texas Sea Grant, TX

Erick Hartwig
Office of Naval Research

W. William Harvey
Arlington Technical Services, VA

G. Ross Heath
Oregon State University, OR

Barbara Hecker
Lamont-Doherty Geological Observatory

J.B. Hedrick
U.S. Bureau of Mines

George Heimerdinger
National Oceanographic Data Center, NE Liaison

P.O. Helm
Embassy of New Zealand

H. James Herring
Dynalysis of Princeton, PA

Jerry Hilbish
University of South Carolina, SC

Gary Hill
U.S. Geological Survey, Reston, VA

Tom Hillman
U.S. Bureau of Mines, Spokane, WA

Jack Hird
Texas Gulf

Joe Hlubucek
Embassy of Australia

Porter Hoagland
Woods Hole Oceanographic Institution

Carl H. Hobbs
Virginia Institute of Marine Science, VA

Kent Hughes
National Oceanographic Data Center

Art Hurme
U.S. Army Corps of Engineers

Lee Hunt
Naval Studies Board, National Research Council

Michel Hunt
Minerals Management Service

Kaname Ikeda
Embassy of Japan

Roy Jenne
National Center for Atmospheric Research

Janice Jolly
U.S. Bureau of Mines

Jim Jolly
U.S. Bureau of Mines

Ellen Kappel
Lamont-Doherty Geological Observatory

Mary Hope Katsouros
Ocean Studies Board, National Research Council

Jeff Kellam
Georgia Department of Natural Resources, GA

Joseph T. Kelley
Maine Geological Survey

Terry Kenyon
Vitro Corporation

Randall Kerhin
Maryland Geological Survey

Donald G. Kesterke
U.S. Bureau of Mines, retired

Daniel Kevin
Office of Technology Assessment

Lee Kimball
Council on Ocean Law

Chuck Klose
NASA Jet Propulsion Laboratory

John Knauss
University of Rhode Island, RI

Skip Kovacs
Naval Research Laboratory

Kenneth Kvammen
L.A. County Dept. of Public Works, CA

Richard N. Lambert
Aero Service

Bill Langer
U.S. Geological Survey, Denver, CO

Raymond Lasmanis
Washington State Geologist, WA

Brad J. Laubach
Minerals Management Service

Stephen Law
U.S. Bureau of Mines, Avondale, AZ

Jim Lawless
National Oceanic and Atmospheric Administration

Wah Ting Lee
David Taylor Naval Ship Research and
Development Center

Peter Leitner
General Services Administration

Howard Levenson
Office of Technology Assessment

Ralph Lewis
Connecticut Department of Environmental
Protection

Bob Lockerman
National Oceanographic Data Center

Millington Lockwood
National Oceanic and Atmospheric Administration

J.R. Loebenstein
U.S. Bureau of Mines

Michael Loughridge
National Geophysical Data Center

J.M. Lucas
U.S. Bureau of Mines

Edwin E. Luper
Mississippi Bureau of Geology

Langtry Lynd
U.S. Bureau of Mines

Bruce Magnell
EG&G

R. Gary Magnuson
Coastal States Organization

Frank Manheim
U.S. Geological Survey, Woods Hole

Charles Mathews
National Ocean Industries Association

Samuel W. McCandless, Jr.
User System Engineering, Inc.

Bonnie McGregor
U.S. Geological Survey

Gregory McMurray
Oregon Department of Geology & Mineral
Industries

Michael Hunt
Minerals Management Service

Rosemary Monahan
Environmental Protection Agency, Region I

Carla Moore
National Geophysical Data Center

Peter Moran
Eastman Kodak Co.

S. P. Murdoch
Embassy of New Zealand

Nancy Friedrich Neff
University of Rhode Island, RI

Myron Nordquist
Kelley, Drye & Warren

Terry W. Offield
U.S. Geological Survey

Jim Olsen
U.S. Bureau of Mines, Minneapolis, MN

Tom Osborn
Chesapeake Bay Institute

Ned Ostenso
National Sea Grant College Program

Norm Page
U.S. Geological Survey, Menlo Park, CA

John Padan
National Oceanic and Atmospheric Administration

Tom Patin
U.S. Army Corps of Engineers

Jack Pearce
National Marine Fisheries Service

John Perry
Atmospherics Studies Board, National Research
Council

Hal Petersen
Battelle NE, MS

Richard A. Petters
Sound Ocean Systems, Inc.

Don Pryor
National Oceanic and Atmospheric Administration

Larry Pugh
National Oceanic and Atmospheric Administration

Tom Pyle
Joint Oceanographic Institutions

Ransom Reed
U.S. Bureau of Mines

R. Reese
U.S. Bureau of Mines

Joe Ritchey
U.S. Bureau of Mines, Spokane, WA

Donald Rogich
U.S. Bureau of Mines

Nelson C. Ross
National Oceanographic Data Center
West Coast Liaison

John Rowland
U.S. Bureau of Mines

Paul D. Ryan
Embassy of Japan

Carl Savit
Western Geophysical Co. of America

Frederick Schmidt
Ames Laboratory, Iowa State University, IA

Robert L. Schmidt
U.S. Bureau of Mines

Henry R. Schorr
Gulf Coast Trailing Company

Bill Siapno
Deepsea Ventures

Allen Sielen
Environmental Protection Agency, Office of
International Activities

E. Emit Smith
Geological Survey of Alabama, AL

Jean Snider
National Oceanic and Atmospheric Administration

David J. Spottiswood
Colorado School of Mines, CO

Sidney Stillwaugh
National Oceanographic Data Center Pacific NW
Liaison

Reid Stone
Minerals Management Service

William F. Stowasser
U.S. Bureau of Mines

William L. Stubblefield
National Oceanic and Atmospheric Administration

Tim Sullivan
Atlantic OCS Region, Minerals Management
Service

Bill Sunda
National Marine Fisheries Service

Nick Sundt
Office of Technology Assessment

John R. Suter
Louisiana Geological Survey, LA

George Tirey
Minerals Management Service

Tom Usselman
Geophysics Study Committee, National Research
Council
Gregory van der Vink
Office of Technology Assessment
Van Waddell
Science Applications Inc.
Mike Walker
Intermagnetics General Corporation
Maureen Warren
National Oceanic and Atmospheric Administration
Sui-Ying Wat
United Nations, Ocean, Economics and Technology
Branch
E. G. Wernund
University of Texas at Austin, TX
Hoyt Wheeland
National Marine Fisheries Service
Bob Willard
U.S. Bureau of Mines, Minneapolis, MN

S. Jeffress Williams
U.S. Geological Survey, Reston, VA
Stan Wilson
National Aeronautics and Space Administration
Robert S. Winokur
Office of the Chief of Naval Operations
Gregory Withee
National Oceanographic Data Center
W.D. Woodbury
U.S. Bureau of Mines
Tom Wright
U.S. Army Corps of Engineers
Jeffrey C. Wynn
U.S. Geological Survey
Dave Zinzer
Minerals Management Service
Philip Zion
NASA Jet Propulsion Laboratory