JOHN H. RYTHER, JR.

CR Environmental, Inc., 1994 to Present

Years with Other Firms: 16 Citizenship: U.S.A.

Security Clearance: TWIC card expires 2014

PROGRAM MANAGER UNDERWATER VIDEOGRAPHER HYDROGRAPHIC SURVEYOR BIOLOGICAL OCEANOGRAPHER

AREAS OF SPECIALIZATION

- Ship Operations/ Licensed Vessel Captain
- Hydrographic & Geophysical Surveys (side-scan sonar, magnetometer, bathymetric)
- Sediment & Surface Water Sampling
- CTD and Current Meter Operations
- ROV Surveys and Underwater Video Operations
- Oceanographic Mooring Operations

EDUCATION

2007 US FWS Certified in Principles and Techniques of Electrofishing

1997-Present OSHA 40-Hour Health and Safety Training, Supervisor, and refresher courses, First Aid and CPR

1991 EPA/NOAA Diving Certification; Hyperbaric International Nitrox Diving Certification 1986 U.S. Coast Guard 100 ton Near Coastal Motor Vessel License (last renewal 2009)

1978 NAUI Diving Instructors Course, Rockport, MA - No. 5110

1974 B.S., Journalism/Biology, Syracuse University

PROFESSIONAL SOCIETIES/AFFILIATIONS

Estuarine Research Federation Marine Technology Society
Marine & Oceanographic Technology Network Hydrographic Society of America

WORK HISTORY

CR Environmental, Inc., Falmouth, MA Manager Oceanographic Operations 19	994 - present
Minnow Diving, Inc., Falmouth, MA President/Owner 19	994 - present
TG&B Marine Services, Inc., Falmouth, MATreasurer/Co-Owner	987 - 1994
Battelle Ocean Sciences, Duxbury, MA Program Manager 19	990 - 1993
EG&G, Waltham, MA Operations Manager 19	979 - 1990
Marine Biological Lab, Woods Hole, MA Diver/Field Biologist/Captain 19	975 – 1979

SUMMARY OF PROFESSIONAL EXPERIENCE

Mr. Ryther has over 30 years of experience providing project management and technical field support on freshwater and oceanographic, geophysical and engineering projects. He has participated on a number of large government funded freshwater reservoir (Quabbin and Wachusett in MA, Lake Lanier in GA, Catskill and Delaware watershed reservoirs in NY) and commercial oceanographic and geophysical measurement programs world-wide and has extensive knowledge of oceanographic instrumentation, mooring and platform designs, and field deployment techniques. He has considerable experience designing and outfitting vessels for oceanographic and geophysical surveys and holds a U.S.C.G. 100-ton Near Coastal Motor Vessel License. Managed field studies involve the sampling of sediment/coring, surface water quality, fish and other aquatic organisms, and the development of bathymetric, side-scan sonar, magnetic and underwater video imagery.

RELEVANT PROJECT EXPERIENCE

- 2009 -2010 CR Manager Bathymetric and Sediment Sampling. Souhegan River, Milford, NH and Larkin Mill, Newbury, MA Dam Removal Feasibility Studies for Gomez and Sullivan
- 2009 -2010 CR Oceanographic Operations Manager CTD, ADCP and Zooplankton Sampling. Loggerhead Sea Turtle Study off Delaware and Maryland, for a NOAA grant held by Coonamesett Farm, Falmouth, MA

PROJECT EXPERIENCE (continued)

- 2009 present CR Program Manager Hydrographic and Geophysical Surveys. Ocean Renewable Power Company Tidal Energy Generators, Eastport, ME and Video Survey for Deep Water Winds potential wind turbines site
- 2008-2009 CR Program Manager Hydrographic and Geophysical Surveys CT River. Former Gas Facility Holyoke, MA
- 2008-present CR Oceanographic Manager Confirmatory Bathymetric Surveys for Dredge Depth New Bedford Harbor Superfund Site for Jacobs Engineering
- 2007-2010 CR Operations Manager Geophysical and Biological Surveys. for the proposed Hull Wind Farm, and the Suez Neptune LNG project in Massachusetts Bay including bathymetry, SPI, underwater video, side scan and benthic sampling
- 2005-present CR Program Manager Bathymetric and Geophysical Survey. Remediation and archaeological investigation of the Onondaga Lake Superfund Site in Syracuse, NY for Parsons and LCMM
- 2004-2007 CR Program Manager Hydrographic and Geophysical Surveys Penobscot River Restoration. Study in Bangor, Maine; Hull Offshore Wind Turbine Geophysical Survey, Masschusetts; Washington Navy Yard Geophysical Survey and Vibracoring; Kensico Reservoir Dredging Project, Lake Onondaga Geophysical Survey; Geophysical and Oceanographic Surveys former Anaconda Wire and Cable Company at Hastings on Hudson; Roosevelt Island Tidal Energy Project; and the Rondout-West Branch Tunnel Site Investigation in the Hudson River in New York state.
- 2003-present CR Oceanographic Manager Multibeam, Video, Mooring Operations. Under contract to
 AECOM (formerly ENSR) and joint venture small business contractor DamosVision of which CR
 Environmental is a partner manages DAMOS multibeam bathymetric surveys, dredged material disposal site
 mooring deployments, underwater video surveys, and sediment sampling tasks throughout the Gulf of Maine
 and Long Island Sound.
- 1999-2006 CR Program Manager and Field Manager Sediment Sampling Operations. Numerous vibracoring, grab sampling, box coring, piston coring and geophysical surveys at the New Bedford Harbor Superfund Site for Woods Hole Group, TetraTech FW, Foster Wheeler, ENSR, and Battelle.
- 1994-present Manager Vessel and ROV Operations. Annual hard bottom survey for the Massachusetts Water Resource Authority through contracts with AECOM (formerly ENSR) and Battelle for the Boston Harbor and Outfall Monitoring Program.
- 1996-2004 CR Program Manger for NOAA Fishing Industry Grants. Training of fishermen and conversion of their fishing vessels for oceanographic research, NOAA contracts to study otter trawling effects on soft bottom habitat and the characteristics of Essential Fish Habitat in the Gulf of Maine.
- 1991-1992 Task Manager Monitoring Project. As an employee of Battelle oversaw the first year of the MWRA Harbor and outfall monitoring study; managed 16 cruises in outer Boston Harbor, Cape Cod Bay and Massachusetts Bay
- 1990-1991 Diver and Field Biologist. EPA/ACOE artificial reef study in Delaware Bay and Quahog Shellfish Survey of the Providence River, RI.

CONTRIBUTED POSTERS

NEERS Spring 2006 Symposium Boston Harbor, Hull, MA

"Effects of Smooth Bottom Trawl Gear on Soft Bottom Habitats in Western Massachusetts Bay" Cogswell, C.M., J.H. Ryther, Jr., C.F. Wright, F. Mirarchi, B. Hecker, A.D. Michael, D.C. Rhoads, D. Stevenson and R. Valente

2002 <u>USGS, NOAA, ASF and ESA Symposium on the Effects of Fishing Activities on Benthic Habitats:</u>
<u>Linking Geology, Biology, Socioeconomics and Management, Tampa, FL</u>

"Effects of Smooth Bottom Trawl Gear on Soft Bottom Habitat" Cogswell, C., B. Hecker, A. Michael, F. Mirarchi, J. Ryther, Jr., D. Stevenson, R. Valente, and C. Wright

CONTRIBUTED PAPERS AND TALKS

June 2007 Non-Destructive Bridge Inspection Techniques, Technical Exchange Conference, Newington, CT "Integration of Aquatic Geophysical Survey Data with GIS "C. Wright and J.H. Ryther, Jr. Conference hosted by ConnDOT, FHWA, and the Association for Bridge Construction and Design, NE Division.

2001 CZM Gulf of Maine Marine Habitat Conference, Sebasco, ME

"Near Term Observations of the Effects of Smooth Bottom Net Trawling on the Seabed NOAA/NMFS Cooperative Research Project". CR Environmental, Inc. and Boat Kathleen A. Mirarchi, Inc.

1998 <u>Dredging Conference</u>, Los Vegas, Nevada

"Monitoring Results from the First Boston Harbor Navigation Improvement Project Confined Aquatic Disposal Cell". Murray, P.M. and T.J. Fredette, P.E. Jackson, S.H. Wolf and J.H. Ryther, Jr.

January 1998 Invited by New York Sea Grant to speak at the <u>East Coast Commercial Fisherman's and Aquaculture Trade Show,</u> Ocean City, Maryland

"Use of Fishing Vessels for Oceanographic Survey" J.H. Ryther, Jr.

October 1997 Oceans 97, Halifax, Nova Scotia

"Conversion of Fishing Vessels and Training of Fishermen for Oceanographic Surveys, Research and Resource Assessment" Ryther, J.H. Jr. and C.M. Cogswell.

PUBLICATIONS

- Ryther, J.H., Jr. April 2007. Standard Field Issue: Camera and Fishing Rod. Marine Technology Reporter Offshore Edition. pp. 18-19.
- Ryther, J.H., Jr., S.G. Harris and C.F. Wright. May 1998. New York Catskill Reservoir Surveys -Application of Marine Technology to Freshwater Reservoirs; Surveys of and Bottom Samples from Seven Reservoirs Obtained. <u>Sea</u> Technology.
- Ryther, J.H., Jr., R.S. Lane and F. Mirarchi. 1996. Fishing Vessels Successfully Used for Oceanographic Surveys. <u>Sea Technology</u>.
- Ryther, J.H., Jr., S. McDowell and C.S. Albro. 1991. Mini-BOSS: Portable Sewage Effluent Monitoring System for Boston Harbor integrated profiling system for Boston Harbor. <u>Sea Technology.</u>
- Ryther, J.H., Jr., D.B. Harris, John P. Fish. 1990. Putting ROVs to Work Investigating Shipwrecks. <u>Sea</u> Technology.
- Magnell, B.A., C.L. Greengrove, J.H. Ryther, Jr., and C.D. Winant. 1988. Real-time Data Telemetry Northern California Coastal Circulation Study. <u>Argos</u>, 37, pp. 7-11.
- Ryther, J.H., Jr., B.A. Magnell, C.L. Greengrove, and C.D. Winant. 1988. Real-time Data Telemetry. <u>Sea Technology</u>, 29:8, pp. 10-16.
- Menzie, C.A., J.H. Ryther, Jr., L.F. Boyer, J.D. Germano, and D.C. Rhoads. 1982. Remote methods of mapping seafloor topography, sediment type, bedforms and benthic biology. <u>In: Oceans '82 Conference Record</u>, pp. 1046-1051 IEEE Catalog Number 82CH1827-5.
- Menzie, C.A., G.M. Mariani, and J.H. Ryther, Jr. 1981. Seafloor Mapping System Applied to Biological, Environmental Surveys. <u>Sea Technology</u> 22(2): 15-16.