

RVTEC 2004 Annual Report

Oct 15, 2004

RVTEC 2004 UNOLS Report

- RVTEC 2003 Meeting
- Defined Levels of Technical Services
- New Initiative -SWAP
- INMARTECH 2004 / 2006
- Fleet Renewal
- RVTEC 2004 Meeting

RVTEC 2003 Meeting Highlights

In 2003 The United States Coast Guard hosted the Annual RVTEC Meeting on 18-20 November in Seattle, WA.

Key topics included discussions on:

- Defining levels of technician/instrumentation support (see #2 below on outline)
- Wireless networking and data transfer (expanded #3 below on outline)
- Ship to shore communications.

RVTEC 2003 Meeting Highlights

Various issues were addressed including:

- Response to the post cruise assessment form
- Ship inspection programs, types of inspections
- STCW and ISM compliance,
- Fleet renewal efforts – comments on SMRs
- Efforts to develop a next generation cable/wire design

RVTEC 2003 Meeting Highlights

- A variety of technical topics were presented including:
- HEALY multibeam upgrade options, plumbing discussion
- The high-resolution marine meteorology workshop-summary
- Improved ADCP quality, (Jules Hummon describing the new DAS)
- Performance of globally corrected-GPS – thru commercial vendors
- Ridge 2000 metadata forms – for sampling & equipment used

RVTEC 2003 Meeting Highlights

- The meeting included:
 - Factory tour of Sea-Bird Electronics
 - Tour of the US Coast Guard Icebreaker HEALY at Todd Shipyard.
- Steve Poulos was re-elected to another term as RVTEC Vice-Chair.
- Immediately following the 2003 meeting a two-day training class for POS/MV GPS by vendor.

Defined Levels of Technical Services

Under the Academic Fleet Review (AFR), areas of concern in Ship Operations & use of Shared Scientific Equipment arose.

The following is a start within RVTEC to address those concerns.

Defined Levels of Technical Services

Project Goals:

- Define the technical services that are provided in support of oceanographic research cruises aboard each UNOLS vessel.
- Develop a standardized, web-based format for providing this information

Defined Levels of Technical Services

Subcommittee Members:

- Barrie Walden (WHOI)
- Woody Sutherland (SIO)
- Stewart Lamerdin (MLML)
- Bill Fanning (URI)

Defined Levels of Technical Services

November 2003 – RVTEC endorsed the Technical Services Information Topic Outline. The URL for the tech services page is:

http://www.unols.org/committees/rvtec/services/Tech_serv_outline.html

Technical Services Information Topic Outline includes the following major topics:

- Vessel Operator Organizational Structure & Points of Contact
- Pre-Cruise Planning and Services
- Cruise Planning Details
- Cruise Loading and Setup
- Activities At Sea
- Post-cruise activities

Defined Levels of Technical Services

- Using the outline, Subcommittee members have been drafting technical services information and determining level of content for their respective institutions.
- Public Website for accessing the technical services site will be developed in the coming months. At the same time a password protected site for the operators to add and maintain information will be developed.

SWAP Project

Ship-to-Ship/Ship-to-Shore Wireless Access Protocol

The goal of SWAP is to engineer a working set of hardware, software and networking configurations to provide various wireless services to the UNOLS fleet.

We hope to provide a set of voluntary recommendations that will facilitate interoperability and automated network connectivity

- between ships
- between ships and shore facilities
- between ships and other devices (instrumented buoys for example).

SWAP Project

A working group from RVTEC including led by:

Toby Martin (OSU), Val Schmidt (Lamont), Geoff Davis (Scripps), have implemented a ship to ship and ship to shore wireless access protocol.

The approach was reviewed at the RVTEC 2003 meeting in November.

The first shore-side installation was hosted (Jan 2004) at the Univ. of Hawaii Marine Facility with simultaneous pier side install on the R/V Kilo Moana. The 3 above were joined by Eldridge McFadden (Coast Guard, Seattle) and UH techs who were successful in putting the systems together. Subsequently the Wecoma & Revelle, & WHOI vessels have been equipped. Discussion is underway with respect to outfitting additional ships and port sites. A SWAP website is available at

<http://data.ldeo.columbia.edu/admin/twiki/bin/view/SWAP/WebHome>

INMARTECH

- The British Antarctic Survey and SOC in Cambridge, England hosted the INMARTECH 2004 meeting on September 20-23, 2004. There was representation by RVTEC members.
- INMARTECH 2006 will be hosted by Woods Hole Oceanographic Institution (B.Walden). Planning for the meeting will be discussed during the upcoming November RVTEC meeting.

Fleet Renewal

Marc Willis (OSU):

RVTEC liaison to FIC has been effective this year. The RVTEC representative has been an active participant in committee discussions, particularly those concerning replacement/renewal of the Oceans class vessels, and life extension of existing OCEANUS class vessels. Along with the RVOOC representative, the RVTEC representative brings information and observations from closer to the vessel operations, as well as regulatory and operational details which other members may not be familiar with.

RVTEC 2004 Meeting

The Florida Institute of Oceanography will host this year's RVTEC meeting on November 3-5 at the University of South Florida – College of Marine Science, St. Petersburg, FL.

- The meeting will include technical sessions on:
 - ADCP Review
 - Towed Systems Inventory
 - SWAP (Hands-On)
 - Moving Vessel Profiler (MVP)

RVTEC 2004 Meeting

The Technical Services Subcommittee will report on this year's activities and proposed plans for defining Levels of Technician/Instrumentation Support.(continuation)

There will be reports on:

- High-Resolution Marine Meteorology workshop (Shawn Smith)
- SeaNet Update
- Tentative: HighSeasNet
- RV Spectrum – Frequency Mgmt
- RIDGE 2000 and Margins cruise metadata
- MATE Activities

RVTEC 2004 Meeting

FIO and USF Presentations and Facilities Tour will include:

- Alliance for Coastal Technologies
- Coastal Ocean Monitoring and Prediction System
- Physical Oceanographic Real Time Systems (PORTS)
- Ocean Technology Center
- FIO Ships

RVTEC 2004 Meeting

- Dale Chayes' second term as Chair is ending. Nominations and Election of Chair will take place.
- Bill Martin is completing his 2-year appointment. Additionally a RVTEC Representative to the RVOC Safety Committee will be appointed.

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