

# CODAR International Technician Training Course Bali, Indonesia 2014

August 4 - 6, 2014 Ayodya Resort - Bali, Indonesia

# Monday 08/04/2014: 9:00 am - 5:00 pm

#### **COURSE OVERVIEW**

- Introductions
- Course outline

#### **OVERVIEW OF SEASONDE OPERATION**

- SeaSonde Overview
- Basic Principles of HF Radar and How SeaSondes Work

#### **INFRASTRUCTURE**

- Site Selection
- Testing for RF Interference and Selection of Operating Frequency
- Estimating Coverage Area
- Power systems AC, Solar, Fuel Cells, Hybrid
- Data Transfer and Communication Options

#### Lunch

#### **HARDWARE**

SeaSonde Hardware Overview

- DomeAntennas
- Receiver Chassis
- Transmitter Chassis
- Antenna Cabling Important Components for Data Integrity
- Antenna/Cable/Rx tests
- SeaSonde Processor (Apple Intel Computer Configuration)
- Hardware Setup and SeaSonde Startup

#### SEASONDE SIGNAL PROCESSING - GENERATION AND ACQUISITION

SeaSonde Signals: Generation and Processing

- -Radial R7 Software
- Basic Principles
- Current Processing and Wave Measurements
- Configuring SeaSonde Software
- Automated SpectraOfflineProcessing

## Tuesday 08/05/2014: 9:00 am - 5:00 pm

#### SITE VISIT AND FIELD SETUPS

- Site visit to a Lowpower SeaSonde
- Field setups for Transmit/Receive Antenna Systems

#### SYSTEM CALIBRATION - ANTENNA PATTERN MEASUREMENTS

- Basic Principles of APMS
- APM Techniques (Pulse and CW Methods)
- APM Processing and Installation of Calibration Files

#### Lunch

#### COMMUNICATIONS

- Communications Options for Robust Data Transfers and Remote Support
- How to Configure Automated ssh and Timbuktu Data Transfers

## **Banquet Dinner Hosted by CODAR**

# Wednesday 08/06/2014: 9:00 am - 5:00 pm

## PROACTIVE CHECKS AND DATA MANAGEMENT (DATA "HOUSEKEEPING")

- How to Use the Proactive Site Check Checklist
- Viewing Data with RadialWebserver, TB2, and FileExchange
- Using SOP for Automated Reprocessing
- Routine Maintenance Tasks:
- Installing Firmware and Software Updates

#### TROUBLESHOOTING HARDWARE AND SOFTWARE PROBLEMS

- Using DiagDisplay and Diagnostic Data for Remote Troubleshooting
- Hardware Trouble shooting Workshop

#### Lunch

### **COMBINING RADIAL DATA INTO 2-D TOTAL VECTOR MAPS**

- Combine Site Overview
- Basic functions of the Combine Site
- Creating Combine Grid Files on your Site Map Using SeaDisplay
- Processing and Reprocessing totals
- Viewing Data with SeaDisplay, Wave Display, SpectraPlotterMap

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Official Training Course Finished