

# LIDAR Littoral Studies Workshop

RC Olsen

Naval Postgraduate School

**Welcome**

# Monterey Bay Remote Sensing Consortium

- Workshops designed to inform, and build our remote sensing community
  - Develop new tools and techniques for more effective research
  - Develop new research areas that can be funded
  - Link civil and military projects – greater gain for local community in scientific and monetary pursuits

Why are we here?

# Sponsorship

- Congressional funds from Congressman Farr are supporting this workshop, particularly the time of Ms. Steenbergen, who has done most of the organizing
- Monterey Bay Aquarium Research Institute (MBARI) – graciously allowing use of their wonderful facility.

## Acknowledgements

# Program

- Introduction to LIDAR – Optech
- Bathymetric LIDAR – Stennis
- Applications and Techniques
  - Philpot
  - Streutker
  - Chen
- Software – Kao
  - NPS students – QT Modeler
- Lunchtime discussion – how to apply LIDAR to research topics of local interest

# Grungy Details

- Break at 10:00, Lunch at 12:00, Break at 13:40
- Restrooms off to the right

# Future Plans

- Workshop topics being developed
  - Synthetic Aperture Radar (SAR)
    - Oceanographic and terrestrial applications – tentative date – July 12
  - Spectral Imaging
    - Focus on atmospheric compensation how-to
  - Thermal Imaging
    - Can this technology be useful for civil applications?

# Schedule

- 08:00 - 08:25 Meet and Greet
- 08:25 - 08:35 RC Olsen Welcome to the Workshop
- 08:40 - 09:15 Optech, Inc. Introduction to LIDAR Systems
- 09:20 - 09:55 CE Wiggins Airborne LIDAR Bathymetry
- 10:00 - 10:25 Break
- 10:30 - 11:05 W Philpot Lidar Bathymetry in Very Shallow Waters
- 11:10 - 11:45 D Streutker Change Detection with LiDAR Data
- 12:00 - 13:00 Lunch
- 13:00 - 13:35 Qi Chen Mapping Terrain and Forest Information
- 13:40 - 14:05 Break
- 14:10 - 14:45 Optech, Inc.
- 14:50 - 15:25 David Kao LidarVis: An Interactive Visualization Tool
- 15:30 - 15:50 RC Olsen Conclusion / Future Workshop Plans