

Ocean Science, Technology and Operations (OSTO) Workforce Workshop

November 10-12, 2008

Best Western Beach Resort Monterey
2600 Sand Dunes Drive, Monterey, CA 93940

Workshop Hosts: MATE Center at Monterey Peninsula College
Naval Postgraduate School

Draft Agenda

Workshop Goals

1. Outline present OSTO workforce needs and challenges for each of the major employer groups (e.g., large and small businesses, research and academics, government).
2. Outline a plan for informing and engaging the educational system in OSTO workforce issues.
3. Identify best practices for professional development of the OSTO workforce, including best practices for professional certification, mentoring, and on-the-job training.
4. Outline a plan to conduct long-term monitoring of the OSTO workforce, including a plan for getting buy-in from employers and employees. (Monitor: to collect and analyze workforce data, provide routine reports on workforce status, etc.)

Day 1: Goal 1 - Defining OSTO Workforce Challenges

Monday, November 10, 2008

Time	Activity	Location
07:45 – 08:30	Continental Breakfast	La Grande Room at the Monterey Beach Resort
08:30	Introductions	La Grande
09:30	Goal 1 - Presentation: Introduction to assessment of OSTO workforce and its challenges, including overviews of OSTO project and related studies, and key questions for discussion: (Tom Murphree, Naval Postgraduate School and Deidre Sullivan, MATE Center) <ol style="list-style-type: none"> 1. What are the greatest OSTO workforce challenges? 2. For which occupations is it most difficult to hire qualified applicants? 3. For what occupations are there problems with oversupply, retention, work conditions, lack of skills/education, obsolescence, losing skilled and experienced workers due to uncertain or intermittent funding, ...? 	La Grande
10:30	Break	
10:45	Goal 1 - Break-Out Group Sessions: What are the most critical workforce challenges? <ol style="list-style-type: none"> 1. For large non-government employers 2. For small non-government employers 3. For government 	La Grande Captain's Table Pt Cabrillo
11:45	Goal 1 - Reports from Breakout Groups	La Grande
12:15	Lunch	Pt Cabrillo
13:45	Goal 1 - Presentations: Findings from OSTO project. (Tom Murphree and Deidre Sullivan)	La Grande
14:45	Goal 1 - Presentations: Case Studies: <ol style="list-style-type: none"> 1. Large business (Jan van Smirren, Fugro GEOS) 2. Small business (Speaker TBD) 3. Government agency (Bob Ridkey, USGS) 4. Oil and gas industry (Drew Michel, ROV Technologies) 5. Ocean observing systems (Paul Siri, Ocean Science Applications, CA; Norman Guinasso, Texas Automated Buoy System) 	La Grande
16:00	Break	
16:15	Goal 1 - Large Group Discussion: Workforce Challenges	La Grande
17:15	Break for the day	

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Day 2: Goal 2 – Attracting and Preparing the OSTO Workforce Tuesday, November 11, 2008

Time	Activity	Location
07:45 – 08:30	Continental Breakfast	La Grande
08:30	Goal 2 - Presentation: Overview of interactions between educational system and OSTO employees and employers, with emphasis on solutions to workforce challenges identified yesterday. Some key issues for discussion: <ol style="list-style-type: none"> 1. Ocean related educational programs 2. Internship and fellowship programs (high school through graduate school and beyond) 3. Collaborations between employers and educational institutions 4. Military as a path to OSTO employment 	La Grande
8:45	Goal 2 - Presentations: Case Studies <ol style="list-style-type: none"> 1. Community college program (Pete Simpson, Cape Fear CC) 2. Undergraduate program (Brian Bingham, Olin College) 3. Graduate program (Speaker TBD) 4. Internships/Fellowships (Jacqueline Rousseau, NOAA) 5. Industry education and training (Frank Klein, Oceaneering) 6. Military training and experience as path to civilian OSTO employment (Ray Toll, SAIC) 	La Grande
10:15	Introduction to Goal 2 breakout sessions	
10:30	Break	
10:45	Goal 2 - Breakout Group Sessions: <ol style="list-style-type: none"> 1. What do educators need to know about the workforce, and how should this information be communicated? 2. What are the best practices for aligning educational experiences with workforce needs? 3. How can we attract people to occupations where there is an undersupply? Are there OSTO occupations for which there is oversupply? 	La Grande Captain's Table Pt Cabrillo
12:00	Lunch	Pt Cabrillo
13:30	Goal 2 - Reports from Breakout Groups	La Grande
1430	Goal 3 - Presentation: Assessing the need for professional certification (Leslie Rosenfeld, Naval Postgraduate School)	La Grande
15:30	Break	
15:45-16:45	Goal 3 - Presentations: Professional certification <ol style="list-style-type: none"> 1. Hydrography (Jerry Mills, ACSM/THSOA Certification Board) 2. GIS (Deidre Sullivan, MATE Center) 3. Oceanographic and related professional societies <ol style="list-style-type: none"> a. TOS (Mel Briscoe) b. MTS (Jerry Boatman) c. IEEE (Tom Wiener) 	La Grande
16:45-18:00	Break before dinner	
18:00	Group dinner with speaker from Monterey Abalone Company	Fishermen's Wharf

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Day 3: Developing, Retaining and Monitoring the OSTO Workforce Wednesday, November 12, 2008

Time	Activity	Location
07:45 – 08:30	Continental Breakfast	La Grande
08:30	Goal 3 - Presentation: Discuss best practices for professional development of the OSTO workforce, including professional certification, mentoring, and on-the-job training. Discuss how to address challenges of attracting and retaining workers.	La Grande
08:45	Goal 3 - Presentation: How is technology development going to change OSTO workforce needs? (Melvin Greer, Lockheed Martin)	La Grande
09:00	Goal 3 - Breakout Group Sessions (each group focuses on one of the following sets of questions): <ol style="list-style-type: none"> 1. How can professional certification be used to enhance confidence in the knowledge, skills and accomplishments of employees and perspective employees? What occupational areas and levels should be considered as potential candidates for certification? How can certification be used to improve the education system for ocean-related careers? How can certification enhance professional development through continuing professional development requirements? 2. How can employers best address challenging work conditions such as undesirable job location, time at sea, watch schedule for 24/7 operations. Are cultural differences among government, industry, and academic employers a hindrance to workers moving between these sectors? 3. How can employers best develop their incumbent workforce through methods such as mentoring, on-the-job training, relationships with educational institutions, professional certification, etc. How best to keep up with rapidly developing technology, and deal with employees in obsolete occupations. 	La Grande Captain's Table Bayview
10:15	Break	
10:30	Goal 3 - Reports from Breakout Groups	La Grande
	Goal 3 - Large Group Discussion	La Grande
12:00	Lunch	Bayview
13:15	Goal 4 - Monitoring the workforce: review of the methods and challenges of our project.	La Grande
13:45	Goal 4 - Presentations: Case Study Employee attraction and retention in the marine science and technology industry in Southeastern MA (Maggie Merrill, U. Mass Dartmouth)	La Grande
14:00	Goal 4 - Large group discussion <ol style="list-style-type: none"> 1. Why should we monitor the workforce? 2. What data do we need to collect and how should it be analyzed? 3. Who do we monitor and how? 4. How do we get the buy-in needed to collect data from employees and employers? 5. How should the results of monitoring be reported and be used? 	La Grande
15:00	Break	
15:15-17:00	Overview Discussion: <ol style="list-style-type: none"> 1. Synthesis of workshop findings 2. Preparation of workshop report and recommendations 	La Grande