

# Safe Seas Short Courses

August 7-8, 2006  
 Fort Mason Center, San Francisco, CA  
 Schedule and Descriptions  
 (Revised August 1, 2006)

Registration is free and on a first come, first-served basis. Please email [SSeasTrainingRSVP@noaa.gov](mailto:SSeasTrainingRSVP@noaa.gov) with your preferences.

	Monday August 7	Tuesday August 8
<b>Morning Session</b> 8:00 – 12:00		Safe Operations Working With Wildlife Diseases <i>(lower) Fort Mason Bldg C, Room 230</i> <i>16 spaces left</i>
		Overflight Observations <i>USCG Air Station SFO</i> <i>14 spaces left</i>
	Spill Response Tools <i>(lower) Fort Mason Bldg C, Room 370</i> <i>2 spaces left</i>	Shoreline Cleanup and Assessment Team Training <i>(lower) Fort Mason Bldg C, Room 235</i> <b>Class Full</b>
<b>12:00 – 1:00</b>	Lunch Spill Response Exhibition 12:00-2:30	Lunch
<b>Afternoon Session</b> 1:00 – 5:00	Marine Debris <i>(lower) Fort Mason Bldg C, Room 370</i> <i>29 spaces left</i>	Wildlife Handling, Investigations, And Care During Oil Spill Response <i>(lower) Fort Mason Bldg C, Room 230</i> <b>Class Full</b>
	Environmental Trade Offs <i>(lower) Fort Mason Bldg C Room 235</i> <i>20 spaces left</i>	Media in an ICS Context <i>(lower) Fort Mason Bldg C, Room 210</i> <i>20 spaces left</i>
	Natural Resource Damage Assessment <i>(lower) Fort Mason Bldg C, Room 230</i> <b>Class Full</b>	Shoreline Cleanup and Assessment Team Training Continued <i>(lower) Fort Mason Bldg C, 235</i> <b>Class Full</b>
	SCAT Field Refresher	Dispersant Applications Workshop <i>USCG Air Station SFO</i> <i>15 spaces left</i>

## **Dispersant Application**

**8/8 PM**

Ok. So you've decided to apply dispersants. Now what? Taught by experienced experts, this course explores in detail the steps necessary to successfully and safely apply the right amount of the right dispersant at the right time in the right location according to the California Dispersant Plan. It will cover topics related to the use of the "Dispersant Mission Planner", the logistics and coordinated air / surface operations for dispersant application, and the steps involved that start with dispersant approval and end with dispersant application. The course will be followed immediately by a real mission planning and safety meeting for the air operations that will be conducted the following day. Intended audience: operators, planners, leaders in the Incident Command System.

Instructors: U.S. Coast Guard, CAL OSPR, GENWEST Systems

Room: Coast Guard Air Station San Francisco

## **Environmental Trade Offs**

**8/7 PM**

All response actions involve environmental tradeoffs. No response is 100% effective in removing the pollutant and all actions involve collateral ecological risks and injuries. A focus of response should be on minimizing injury and maximizing ecological and environmental recovery using all the available tools.

This course explores information and ways to evaluate benefits and tradeoffs of all oil spill response and clean up options. It is intended to help resource trustees understand and work quickly toward consensus on developing the most effective and least injurious suite of response actions. The course will follow as a scenario develops, with presentations and discussion on tradeoffs associated with Places of Refuge decisions, open water and shoreline spill clean up methods, collateral impacts of response, and "How Clean is Clean Enough?" concepts. We begin with several very short refresher trainings on oil composition and fate and on oil spill clean up methods (open water and shoreline), with an emphasis on their relative effectiveness, benefits and collateral impacts. Participants will be introduced to trustee consensus-building methods such as Consensus Ecological Risk Assessment workshops. The session will close with class working groups evaluating response tradeoffs associated with a specific spill scenario in the Bay area.

To help speed the learning process, attendees are asked to prepare by reviewing basic information on Places of Refuge, oil composition and fate, open water response methods (mechanical, in situ burn, dispersion) and shoreline cleanup methods (manual, mechanical, hydraulic, chemical cleaners, bioremediation). See:

<http://www.itopf.com/fate.html>

<http://www.itopf.com/effects.html>

<http://www.itopf.com/clean-up.html>

<http://www.itopf.com/response.html>

*Instructors: Dr. Alan Mearns, NOAA; Jean Cameron, Pacific States/BC Oil Spill Task Force; Robin Lewis, Cal OSPR; Ed Levine, NY SSC, NOAA; and Glen Watabayashi, Simulation and Modeling Team leader, NOAA*

*Room: Lower Fort Mason, Building C, Room 235*

## **Marine Debris**

**8/7 PM**

The course will use case studies from past spills (e.g., Selendang Ayu) and the 2005 Hurricane events to illustrate how marine debris can complicate, hinder, and drive response operations. In some situations it will be important to characterize the magnitude and extent of incident-specific debris for accident investigation and subsequent cleanup operations. Local experts will provide relevant information about marine debris monitoring and mitigation efforts, marine debris collection points, and yearly trends in marine debris along shorelines that will be impacted by the spill scenario. Resources at risk and wildlife concerns will be identified and discussed by local experts with a focus on how types of marine debris present cumulative hazards. The short course is designed for a broader audience and will incorporate local experts responsible for cataloguing and managing chronic inputs of land and marine-based debris associated with the Northern California shorelines.

*Instructors: Dr. Amy Merten (NOAA), Dr. Jenna Jambeck (UNH), Michele Jacobi (NOAA), and Ian Zelo (NOAA)*

*Room: Lower Fort Mason, Building C, Room 370*

A Joint Information Center is a co-located group of representatives from local, state, federal and private organizations designated to handle public information needs during an incident or event. The JIC is designed to fit naturally into the Incident Command Structure (ICS) and can be customized to reflect the size of the incident or event. Establishing a Joint Information Center (JIC) under the Incident Command System is the most effective means of meeting CFR requirements and can make the difference between the public perceiving your incident to be under control or out of control.

PIAT JIC training provides participants with an understanding of what a Joint Information Center is, how it fits into the Incident Command System, and how a JIC is run. Special attention is paid to the Information Officer (IO) position and responsibilities and how each JIC position helps the IO carry out his responsibilities.

Topics covered include: JIC structure; JIC products ; JIC/ICS forms; JIC processes; and JIC positions and responsibilities

The training involves a mix of lecture, class discussion, practical exercises, and examples of successful JICs to help public affairs and public relations professionals understand and work more efficiently in a JIC.

*Instructor: Jim Milbury (NOAA); USCG Public Information Assistance Team*

*Room: Lower Fort Mason, Building C, Room 210*

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**Natural Resource Damage Assessment****8/7 PM**

This half-day workshop course will explain the basics of doing a natural resources damage assessment (NRDA) for oil spills under the Oil Pollution Act of 1990 (OPA90) and other applicable laws. The course will address the NRDA needs under this drill's spill scenario: we will focus on resources likely to be affected by the hypothetical spill. After discussing the principles of NRDAs, we will review methods for quantifying injuries to natural resources caused by oils in question, including the integration of injury quantification with restoration identification and quantification.

*Instructor: John Cubit (NOAA), Chris Plaisted (NOAA), Rick Dawson (DOI, tentative), Gordon Robilliard (tentative)*

*Room: Lower Fort Mason, Building C, Room 230*

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**Overflight Observations****8/8 AM**

During the initial phases of an oil spill response, information about the release is often extremely sketchy. Although various types of remote sensing techniques are available for detecting and mapping oil distribution, the most reliable technique is visual observations from aircraft. These observations are used by the response team for forecasting oil movement, implementing appropriate oil spill countermeasures, and informing the wider response community of the present status of the pollution distribution.

Although overflights can be a valuable tool in the response effort, reports from different observers can vary widely. This problem is particularly apparent during major spills, when many observers report oil position data from overflights. Many of these observers are untrained with little experience identifying and quantifying oil floating on the sea. As the spill progresses, a surprising number of false positive sightings may be reported. Ice, internal waves, kelp beds, natural organics, pollen, plankton blooms, cloud shadows, jellyfish, algae, and guano washing off rocks

have all been reported as oil by untrained observers. These false reports obscure the actual location and description of the spill. Some of these problems can be minimized if observers use a common reporting standard (Pavia and Payton 1983; McFarland et al. 1993).

For many years the Hazardous Materials Response Division (HAZMAT) of the National Oceanic and Atmospheric Administration (NOAA) has tracked and forecasted the movement of oil spills. Through these experiences, we have developed in-house guidelines for aerial observations of oil slicks. The intent of this session is to provide a uniform terminology for describing oil sightings, techniques for planning observational overflights, and a data format for reporting spill observations.

Instructors: Ed Levine, (NOAA); Jeff Lankford (NOAA)

Room: Coast Guard Air Station San Francisco

**Safe Operations Working With Infectious Wildlife Diseases  
In The Field And In Rehabilitation**

**8/8 AM**

This workshop will cover infectious diseases that may be encountered in live or dead wildlife during a oil spill or hazmat response, and what practices will enhance the detection of these diseases and reduce the risks of their transmission to other wildlife and to workers. For marine mammals, we will cover what role infectious disease clearance plays in release decisions for animals that have undergone rehabilitation. Finally we will provide an overview of avian influenza viruses in wild birds and marine mammals, including reporting and detection, surveillance, and human safety protocols for handling animals, samples and data.

Talks:

- Infectious diseases of marine mammals
- Infectious diseases of marine birds
- Methods for detection of infectious diseases
- Avian influenza
- Infectious diseases and release criteria
- Methods to decrease risks of transmission of infectious disease to other wildlife and people

Instructors:

*Dr Frances Gulland (The Marine Mammal Center and the Cooperative for Health Investigations of Marine Mammals of the North Pacific and Arctic)*

*Dr. Mike Zaccardi (Oiled Wildlife Care Network)*

*Dr Teri Rowles (NOAA, Marine Mammal Health and Stranding Response Program)*

Room: Lower Fort Mason, Building C, Room 230

**Shoreline Clean-up and Assessment Team**

**8/7 and 8/8**

When spilled oil ends up on the shoreline, the decisions of how, and sometimes why, to cleanup oil can be complex. Many factors must be taken into account such as: oil type, environmental, economic, cultural and sometimes political concerns. The shoreline cleanup assessment team (SCAT) process has been developed to rapidly assess oiled shorelines in order to make cleanup recommendations, while accounting for environmental, economic and other considerations.

This training is an entry-level class designed to give the participant an overview of shoreline assessment methodologies for spill response. Using a combination of lectures, a case study, and on-the-beach hands-on exercises, the participants will learn: the shoreline assessment process; SCAT team member roles, responsibilities and qualifications; be introduced to the necessary terms, tools & data collection techniques; basic oil chemistry; the behavior of oil in different coastal habitats; and be introduced to the concept of environmental trade-offs.

Since the class will involve classroom and beach segments, please dress for the weather and wear beach worthy footwear.

*Instructor: John Tarpley, (NOAA); Additional instructors will be a combination of experienced SCAT responders from NOAA HazMat and Calif. Fish & Game – OSPR.*

*Room: Lower Fort Mason, Building C, Room 235*

### **Spill Response Tools**

**8/7 AM**

Timely and accurate information can be critical to a successful response to oil or hazardous materials releases. Emergency responders need to know how a substance will behave when it is released, where it will go, and what its impacts are likely to be when it arrives. NOAA HAZMAT has produced several information and modeling tools to help assess these questions and assist in making response decisions. This workshop will review two of our primary information tools – GNOME and the CAMEO software suite. Both are available for download from the Office of Response and Restoration Web Site (<http://response.restoration.noaa.gov>)

The GNOME is the oil spill trajectory model used by HAZMAT responders during an oil spill. GNOME can predict how wind, currents, and other processes might move and spread oil spilled on the water and can show how spilled oil is predicted to change chemically and physically ("weather") during the time that it remains on the water surface.

CAMEO is database of response information on chemical compounds, a repository for chemical inventory information, an air dispersion model (ALOHA), and a simplified GIS. Together these tools can provide a rapid assessment of the scale and impacts of a chemical release. CAMEO is used by thousands of fire departments and emergency responders and planners around the country. 2006 is the 20<sup>th</sup> anniversary of CAMEO. Several new features of this software will be highlighted.

Attendees wishing to download or review materials on these software packages can do so at:

<http://response.restoration.noaa.gov/software/gnome/gnome.html>

<http://archive.orr.noaa.gov/cameo/cameo.html>

<http://www.epa.gov/ceppo/cameo/>

*Instructors: Dr. CJ Beegle-Krause, NOAA; Dr. Carl Childs, NOAA*

*Room: Lower Fort Mason, Building C, Room 370*

### **Wildlife Handling, Investigations, And Care During Oil Spill Response**

**8/8 PM**

This workshop will provide an overview of the issues and practices relative to wildlife response, including necropsy techniques, rehabilitation guidelines, and release decisions. The workshop will provide a review of impacts and risks to protected species (with an emphasis on marine mammals), birds and other animals. Included in this discussion are beach or water decisions, directed relocations, and trade-offs relative to individual animal care and population impacts. We will provide standard principles for human safety and essential training for wildlife personnel. In addition, we will review the major items that need to be included in contingency plans.

Talks:

- Wildlife care during oil spill response
- Necropsy techniques
- Rehabilitation guidelines
- Release decisions

- Contingency plans
- Safety guidelines

Instructors:

*Dr Frances Gulland (The Marine Mammal Center and the Cooperative for Health Investigations of Marine Mammals of the North Pacific and Arctic)*

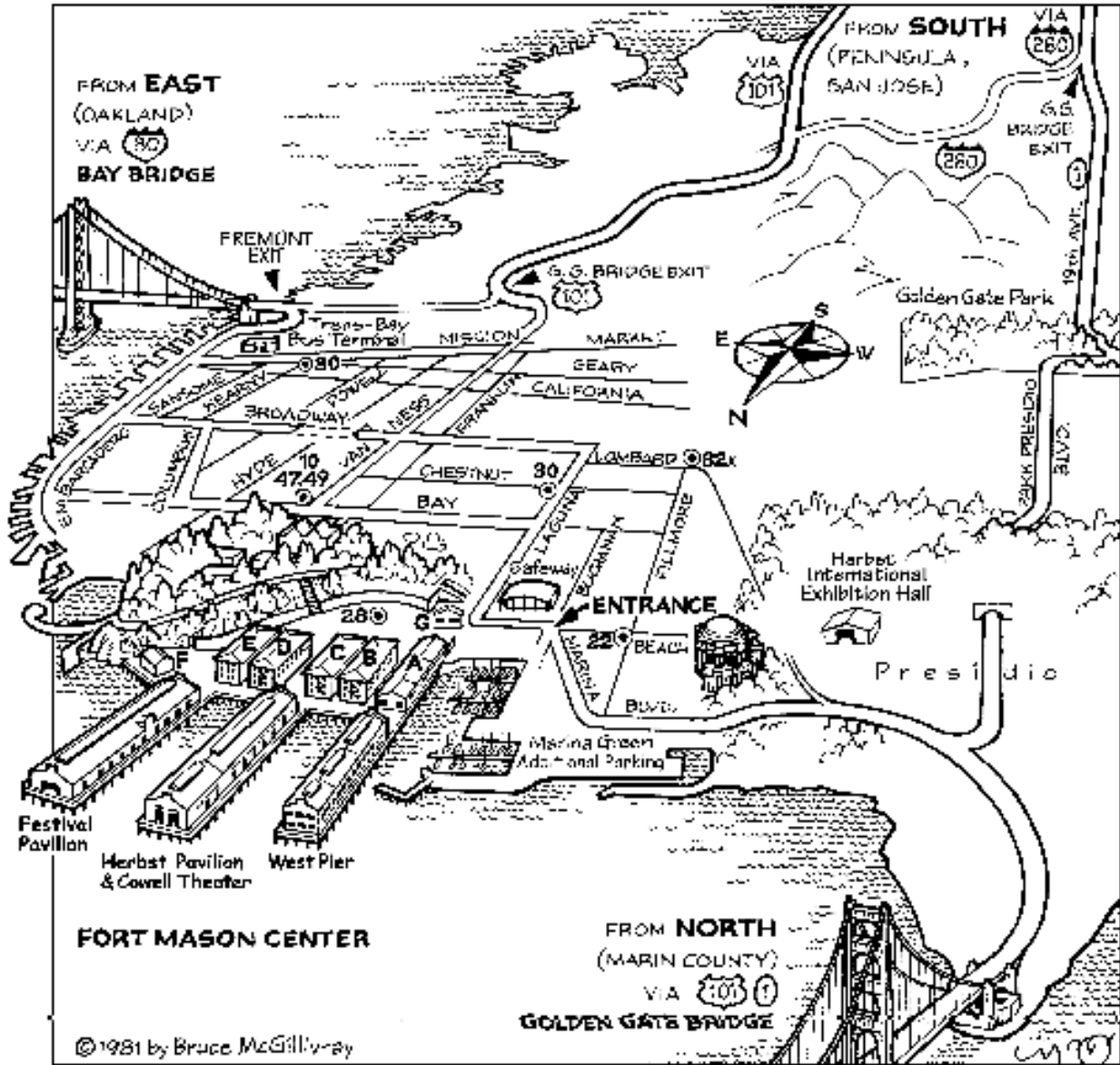
*Dr. Mike Zaccardi (Oiled Wildlife Care Network)*

*Dr Teri Rowles (NOAA, Marine Mammal Health and Stranding Response Program)*

Room: *Lower Fort Mason, Building C, Room 230*

## Directions to the Fort Mason Center

Fort Mason Foundation  
 Landmark Building A, Fort Mason Center  
 San Francisco, CA 94123-1382  
 Phone: (415) 441-3400  
 Fax: (415) 441-3405  
 E-mail: [contact@fortmason.org](mailto:contact@fortmason.org)



⊙ Bus Stop 10 Townsend, 22 Fillmore, 28 - 19th Avenue, 30 Stockton, 47 Van Ness, 49 Van Ness/Mission, 82x Presidio/Wharves Express

Located between Fisherman's Wharf and the Golden Gate Bridge on San Francisco Bay, Fort Mason Center offers easy access by MUNI and BART.

### Muni Lines To or Near Fort Mason Center

10 Townsend, 22 Fillmore, 28 - 19th Avenue, 30 Stockton, 47 Van Ness, 49 Van Ness/Mission, 82x Presidio/Wharves Express. Call MUNI for details (see below).

## **By Car**

### East Bay

Bay Bridge to Fremont Street Exit; on Fremont (100 yards north) take first right on Howard; left on Embarcadero and go 2 miles; left on Bay and go 2 miles; right on Buchanan. Cross Marina Boulevard and turn sharp right into Fort Mason Center.

### North Bay

Golden Gate Bridge (US 101) to Marina Exit; Marina Boulevard (1.5 miles) to Buchanan and turn left into Fort Mason Center.

### Peninsula/South Bay

US 101 North to 9th Street Exit; 9th across Market and left on Hayes; right on Franklin; left on Bay; right on Buchanan. Cross Marina Boulevard and sharp right into Fort Mason Center.

### **Fort Mason Center Parking**

Enter at the intersection of Buchanan Street and Marina Boulevard. Make a sharp right into the Center, or a left to park along the Marina Green. Parking is a maximum of \$8 per day.

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## **Directions to the Coast Guard Air Station San Francisco**

Directions from both 101 North and South:

- Take Hwy 101 to the SFO Airport
- North Access Road exit
- Follow the exit and go straight through the stoplight
- Follow the road past the United Airlines hangar - the road curves
- Straight at the 1st stop sign, CG Air Station San Francisco is on your left.
- At the 2nd stop sign, turn left into the gate.
- The gate is unmanned, use the phone at the entrance.

IDs required.