

# Harbor Safety Committee

of the San Francisco Bay Region

*Mandated by the California Oil Spill  
Prevention and Response Act of 1990*

## MINUTES

### HARBOR SAFETY COMMITTEE OF THE SAN FRANCISCO BAY REGION

10:00 a.m., Thursday, June 5, 1997

Port of Richmond Harbormaster's Office, 1340 Marina Way South, Richmond, CA

1. The public meeting was called to order at 10:15 a.m. by **A. Thomas**, Chair. The following committee members or alternates were in attendance: **Ronald Kennedy**, Port of Richmond; **Margo Brown**, National Boating Federation; **Stuart McRobbie**, SeaRiver Maritime; **Geoff Landon** (alternate for **Maurice Croce**), Chevron Shipping Co.; **Scott Merritt**, Foss Maritime; **John Gosling**, Matson Navigation Company; **Arthur Thomas**, San Francisco Bar Pilots; **Joan Lundstrom**, San Francisco Bay Conservation and Development Commission; **Gunnar Lundberg**, Sailor's Union of the Pacific; and **Roger Peters**, Member at Large; U. S. Coast Guard representatives, **Cmdr. Chip Sharpe** and **Capt. Dennis Sobeck**; OSPR representative, **Bud Leland**; and State Lands Commission representative, **Jay Phelps**. Also in attendance, more than forty representatives of the interested public.
2. The Secretariat confirmed the presence of a quorum.
3. Correction to minutes of the previous meeting, pg. 2: Clearinghouse Report should indicate that "there were five occasions during March and April where escorts did *not* check in." MOTION by **J. Lundstrom**, seconded by **M. Brown** "to approve the minutes of the previous meeting as corrected.." Motion passed without objection.
4. The Chair, **A. Thomas**, welcomed those in attendance. In response to interest in the role of the human element in marine casualties during previous meetings, representatives of the Human Factors Group, the USCG's Prevention through People program and State Land's work on the issue were in attendance.
5. **COAST GUARD COTP'S REPORT**, **Cmdr. Chip Sharpe**. Written reports of pollution statistics for the period 5-1-97 to 5-31-97 and significant port safety events for the period 5-7-97 to 6-4-97 are made a part of these minutes.
6. **OSPR REPORT**, **B. Leland**. (1) **Chuck Raysbrook** has left OSPR to take the office of Director of the Department of Boating and Waterways. **Carl Moore** and **Rob Florki** will jointly serve as Chief Assistant to **Pete Bontadelli**. (2) An oil spill response drill is underway today as a

**Bontadelli** has been working to get the SF Bay Area designated a national priority for enhanced technology. (4) Two bills are alive in the state legislature to fund PORTS maintenance; one in each house's budget bill. \$600,000 is being sought as a start-up budget; with \$500,000 to come from OSPR and \$100,000 from Boating and Waterways. Both bills will go to Conference Committee shortly. (5) The Chair noted that the HSC appreciates the efforts of **C. Raysbrook** during his tenure as Deputy Director of OSPR. He was a good friend to the bay and the Chair is certain he will serve the state well in his new position. Hearing no opposition the Chair will write a letter expressing these sentiments on behalf of the committee.

**7. CLEARINGHOUSE REPORT, A. Steinbrugge.** (1) Statistics for the month of May and year-to-date are made a part of these minutes. (2) There were three occasions during May where tankers that were not required to have an escort did not check in with the Clearing House. Appendices for the Harbor Safety Plan with this data are available at this meeting or from the Marine Exchange upon request. The plan will also be available from the MX. (3) **B. Leland** will have a synopsis of OSPR follow-up to reports to OSPR wardens for the next meeting. (4) **T. Hunter** reported that deep draft vessel arrivals are up 30 over the previous month. It may not be a trend, but May was the biggest month in the last year. (5) The Chair emphasized that unladen vessels that do not require an escort under the current tug escort regulations must still check in with the Clearing House.

**8.** The Chair introduced **Vincent Cantwell** of the Human Factors Group. An overview of **V. Cantwell's** presentation, *Physiological Factors Affecting Safety in Maritime Operations*, is available upon request from the MX. The presentation was concluded at 1:00 and a fifteen minute recess was called.

**9.** When the meeting reconvened, it was agreed to postpone the USCG Prevention through People presentation until the next committee meeting in order to allow time to vote on the plan update.

**10. PORTS STEERING COMMITTEE, Capt. Tom Richards.** (1) Divers couldn't level the Benicia sensor because of storm run-off mud so a new platform will be built to accommodate the sensors. Sensors in Carquinez Strait will be replaced next week. (2) **T. Richards** will report on the June 3<sup>rd</sup> meeting at the Port of Oakland regarding "squat" at the next HSC meeting in order to facilitate addressing the plan update today.

11. **PLAN SUB-COMMITTEE, J. Lundstrom.** An update of the Harbor Safety Plan is mandated on an annual basis. The highlights of changes were reviewed. (1) Underwater Rock Removal, page. 5. In response to a written request from Congressman Miller, the Underwater Rock Removal Sub-Committee looked at sources for a local funding match for the reconnaissance study. After review, the sub-committee concluded that the rock removal would benefit all facets of business and recreation on the bay. As such, the sub-committee's recommendation is to seek a state appropriation of funds for the match. Discussion. MOTION proposed by **M. Brown**, seconded by **R. Peters** stated that, "The HSC adopt the language on page 5 of the plan update, as recommended by the Underwater Rock Removal Sub-Committee." Discussion. Question - What is the timeline for state action to meet the timeline on the federal side? Answer - The \$100,000 required to conduct the initial one-year feasibility study has been funded federally. To be in sync with the federal timeline for the reconnaissance study, language for local matching funds should be in the state legislature next year. Question called. Motion passed without opposition. (2) New appendices to the plan are available at this meeting and from the MX. They include: PORTS information on NOS plans for where the sensors are; new recommendation just approved; and VTS report on near-misses for 1996. The HSC went on record in 1996 encouraging the voluntary reporting of near misses. To date, no written reports have been received. More significantly, pilots and some mariners have been voluntarily reporting by radio to VTS. These reports have led to civil penalties in some seven cases. As an OSPR follow-up to HSC recommendations, OSPR is requesting that the Pilotage Sub-Committee reconvene to address pilots on barges and shipping company pilots. The appendices also include an update of certified escort tugs; 62 in 1996 and 51 in 1997; and revised tug escort regulations.

12. **J. Lundstrom** stated that she would like to add a sentence p. 7, paragraph 3, regarding PORTS, to clarify that the on-going demonstration project is being conducted under the aegis of NOS. "NOAA/NOS, the present managers of the PORTS project, report that . . ." **J. Lundstrom** called for other corrections or changes. Top of p. 4, **Capt. Don Montoro** has been relieved by **Capt. Harlan Henderson**. P. 3, should read "Foss Maritime" rather than "Foss Marine". **Gary Hallin** has replaced **Dave Adams** as Port of Oakland representative on the HSC, with **Dave Adams** as alternate. Bottom of p. 15 should refer to the "stand-on" vessel rather than the "vessel having the right of way."

13. **M. Brown** asked for more information about the OSPR draft implementation plan referred to on p. 18 regarding recreational boaters. Question - When can the recreational boating community see the plan. **B. Leland** responded that there is one plan for each HSC. They are currently

internal documents in draft form. **M. Brown** suggested the plan update indicates that there are *five plans* or specify that there is a specific plan for San Francisco Bay. The Chair responded that the language in the update includes the plan for this region. **B. Leland** indicated that the draft implementation plan will be distributed.

14. **J. Lundstrom** noted that the plan update will be printed in a week and to call her prior to then with spelling errors and typos. Question - Should recent VTS enhancements be noted in the update? They appear on p. 21. **J. Lundstrom** noted that the data and language on this issue were written and provided by the USCG to indicate where the system is now. The old and new systems ran as a dual operation until 5-21-97 when the cut over was made to a stand-alone new system. The old system is in stand-by mode now. MOTION by **J. Lundstrom**, seconded by **M. Brown**, to "adopt the 1997 plan update as amended." Motion passed unanimously. **J. Lundstrom** thanked the sub-committees for their contributions. The final draft will be distributed at the next HSC meeting.

15. **UNFINISHED BUSINESS:** (1) **J. Lundstrom** noted that two environmental organizations, the Save San Francisco Bay Association and the Center for Marine Conservation are on record in support of removing the underwater rocks and PORTS

16. **NEW BUSINESS:** None.

17. The next meeting is scheduled for 7-10-97 at the Port of Oakland. It was agreed that, unless something unforeseen occurs, the July meeting will be canceled in favor of a summer recess. The next scheduled meeting is 8-14-97, 10:00, Port of San Francisco.

18. Inasmuch as the next meeting will not be held until August, **Capt. Tom Richards'** report on the squat meeting at the Port of Oakland will be made a part of these minutes in written form.

19. The Chair will appoint a sub-committee to focus on human factor issues.

20. **M. Brown** thanked the San Francisco Bar Pilots for their participation in the Opening Day on the Bay Parade. She commemorated the event by bestowing upon SFBP VP Bill Wells a plaque and framed photograph of the pilot boat towing the decorated SFBP's rowing team whale boat.

21. **B. Leland** stated that the draft implementation plan discussed earlier will be available from the MX.

22. MOTION to adjourn by **S. McRobbie**, seconded by **S. Merritt** Meeting adjourned without objection at 1:40pm.

Submitted by:

**T. Hunter**  
Executive Secretary

# POLLUTION STATISTICS

## FOR PERIOD 01MAY97 - 31MAY97

	MSO	MSD	TOTAL
1.) Total reported/investigated pollution incidents within MSO SF BAY AOR:	17	2	19
Civil Penalty Action	8	2	10
Spill, No Source	2	0	
Spill, No Action Taken	2	0	
No Spill, Potential Only	2	0	3
No Spill, Unconfirmed Report	3	0	6
EPA Zone Reports	0	1	1
2.) Discharges of Oil from:			
Deep Draft Vessels	0	0	0
Oil Transfer Facilities	0	0	0
Military Vessels/Facilities	1	0	1
3.) Federalized Cleanups	1	0	1
4.) Non-Federal Cleanups	2	1	3
5.) Hazardous Material Releases	0	0	0
6.) Cases requiring polreps	1	0	1
7.) Tickets Issued	6	0	6

### Significant Cases:

06 MAY 97 - MSO received a report of the fishing vessel Brandon One moored slip A-33 Monterey Harbor Marina. The vessel discharged approximately 16 gallons red dye diesel into Monterey Harbor, the fuel was coming out of the fuel tank vent. MSO investigated and issued a ticket to the owner of the vessel. The oil was cleaned up by marina personnel.

30 MAY 97 - At 1900 on 30 May 1997, MSO received a report that the fishing vessel Three Daughters fell off the Marine Railway haul out Cradle puncturing an integral starboard fuel tank and discharging 300-500 gallons diesel fuel into the Pacific Ocean. The OSTLF was accessed since the owner was unable to respond. Smith Environmental was contracted using the Fund to clean up the spilled oil and remove the remaining 2000 gallons of fuel on board the vessel. Containment boom was placed around the vessel and sorbents were used to remove 300 gallons of spilled oil. A sensitive marsh to the west was protected with boom, then later double bermed in accordance with the ACP with no impact to the sensitive site.

**MARINE SAFETY OFFICE SAN FRANCISCO BAY**

**SIGNIFICANT PORT SAFETY EVENTS**

**FOR PERIOD May 7, 1997 to June 4, 1997**

1. Total Port Safety cases open for period:	19
2. SOLAS Interventions:	0
3. Number of vessels requesting/granted Letters of Deviation to enter Bay: Cases include: Inop Radar (4)	5/5
4. Propulsion/Steering Casualties:	2/0
5. Allisions:	1
6. Groundings:	1

**Significant Cases:**

**ALLISION** - On May 7<sup>th</sup> the tug SARA REED(U. S. Flag, 63') allided with the Highway 4 bridge in the vicinity of Victoria Island. The tug master reported the allision occurred when he attempted to avoid colliding with a down-bound fishing vessel. Neither the vessel nor the bridge sustained any structural damage, however, the catwalk beneath the bridge was damaged. No injuries were reported.

**PERSONNEL CASUALTY**- On May 28<sup>th</sup> the M/V C. S. VALIANT (Panama flag,) experienced a fatal personnel casualty. While mooring the vessel at the Bencia Coke dock, a spring line, stuck between the vessel and the pier knocked the vessel's Chief Mate to the pier when it was freed. The vessel consulted with its flag state and requested approval to sail short. This request was granted by the OCMI.

**GROUNDING** - On May 29<sup>th</sup> the S/V CALIFORNIAN (U.S. flag, 86') reported grounding in the vicinity of the Richardson Bay channel. The vessel was waiting for ship traffic to clear the channel before departing for Ayala Cove, Angel Island when it drifted into shallow water and went soft aground. There were passengers aboard at the time, however no injuries were reported. The vessel was inspected by USCG inspectors and was found to have sustained no damage.

**REDUCED PROPULSION** - On June 1<sup>st</sup> the M/V MARCHEN MAERSK(Denmark flag, 294') experience a propulsion casualty at the Bar Pilot Sea Buoy while preparing to enter the Port of San Francisco. The casualty was found to be attributed to a failure in the vessel's pneumatic maneuvering system. A COTP order was issued, requiring the vessel to obtain a tug escort and proceed to it's intended destination at Oakland Berth 24. The vessel completed repairs while at berth and was allowed to sail following inspection by the local class society representative and USCG inspectors.

# San Francisco Bay Clearinghouse Report For 1997

## San Francisco Bay Region Totals

Tanker arrivals to San Francisco Bay	297
Tank ship movements & escorted barge movements	1,692
Tank ship movements	1,056
Escorted tank ship movements	486
Unescorted tank ship movements	570
Tank barge movements	636
Escorted tank barge movements	291
Unescorted tank barge movements	345

Percentages above are percent of total tank ship movements & escorted barge movements for each item.

Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%
Total movements	820		1,463		9		786		3,078	
Unescorted movements	405	49.39%	815	55.71%	9	100.00%	379	48.22%	1,608	52.24%
Tank ships	287	35.00%	499	34.11%	0	0.00%	210	26.72%	996	32.36%
Tank barges	118	14.39%	316	21.60%	9	100.00%	169	21.50%	612	19.88%
Escorted movements	415	50.61%	648	44.29%	0	0.00%	407	51.78%	1,470	47.76%
Tank ships	281	34.27%	444	30.35%	0	0.00%	251	31.93%	976	31.71%
Tank barges	134	16.34%	204	13.94%	0	0.00%	156	19.85%	494	16.05%

### Notes:

1. Information is only noted for zones where escorts are required.
2. All percentages are percent of total movements for the zone.
3. Every movement is counted in each zone transited during the movement.
4. Total movements is the total of all unescorted movements and all escorted movements.



# San Francisco Bay Clearinghouse Report For May 1997

## San Francisco Bay Region Totals

Tanker arrivals to San Francisco Bay	66
Tank ship movements & escorted barge movements	359
Tank ship movements	233
Escorted tank ship movements	107
Unescorted tank ship movements	126
Tank barge movements	124
Escorted tank barge movements	51
Unescorted tank barge movements	73

Percentages above are percent of total tank ship movements & escorted barge movements for each item.

<b>Movements by Zone</b>	<b>Zone 1</b>	<b>%</b>	<b>Zone 2</b>	<b>%</b>	<b>Zone 4</b>	<b>%</b>	<b>Zone 6</b>	<b>%</b>	<b>Total</b>	<b>%</b>
Total movements	174		329		1		184		688	
Unescorted movements	88	50.57%	189	57.45%	1	0.00%	94	51.09%	372	54.07%
Tank ships	63	36.21%	121	36.78%	0	0.00%	52	28.26%	236	34.30%
Tank barges	25	14.37%	68	20.67%	1	0.00%	42	22.83%	136	19.77%
Escorted movements	86	49.43%	140	42.55%	0	0.00%	90	48.91%	316	45.93%
Tank ships	60	34.48%	100	30.40%	0	0.00%	54	29.35%	214	31.10%
Tank barges	26	14.94%	40	12.16%	0	0.00%	36	19.57%	102	14.83%

**Notes:**

1. Information is only noted for zones where escorts are required.
2. All percentages are percent of total movements for the zone.
3. Every movement is counted in each zone transited during the movement.
4. Total movements is the total of all unescorted movements and all escorted movements.

## **Status Report on NOAA's San Francisco Bay Project's GPS Vessel Dynamics Experiments**

Submitted by Capt. Tom Richards

For Inclusion with the minutes of the June 5, 1997 Harbor Safety Committee Meeting

On June 3rd NOAA, National Ocean Service provided a status report at the Port of Oakland on using the Global Positioning System (GPS) satellite technology in California coastal waters to measure vertical sinkage (squat) of commercial ships when they are underway in relatively shallow water. The precise measurement of vertical movements of underway ships is critical in determining safe underkeel clearances and these sinkage effects on commercial cargo ships have never before been precisely and directly measured in the various, shallow-water environments they transit. These experiments are being conducted in partnership with a number of commercial shipping interests including Maersk Inc., the Port of Oakland, Trimble Navigation, Ashtech, numerous members of the San Francisco Bay Region Harbor Safety Committee, the US Coast Guard and many, many others. The first experiments were conducted aboard USCG Buoy Tender BUTTONWOOD in December of last year to validate the experimental approach and equipment configuration and operation. These tests aboard BUTTONWOOD were completely successful. The second phase of the experiment was to place numerous GPS antennae aboard a commercial, deep-draft container ship in transit from Los Angeles to San Francisco Bay and the Port of Oakland.

This second phase was completed earlier this Spring when scientists and technicians placed two sets of 5-antennae, GPS arrays on specially-configured containers aboard the Maersk "M" class container ship MAGLEBY MAERSK during its regularly scheduled transit from Los Angeles to the Port of Oakland. The onboard computers successfully recorded precise GPS observations every second during the 20-hour transit from LA/Long Beach to San Francisco Bay and the Port of Oakland.

Preliminary post-transit processing and analysis of the data clearly indicate that centimeter-level horizontal measurements of the ship motion were obtained and vertical movements of the 4 to 10 centimeter level were accurately measured. Marine shipping interests attending the Port of Oakland briefing were very excited by the preliminary results and eager to learn more from the fully-processed data and the four more round-trip container ship transits planned between LA/Long Beach and Oakland. These four additional transits are scheduled to take place over the next few weeks. Some of the more interesting results from the initial observations and analysis showed significant vessel squat occurring as the MAGLEBY MAERSK "pushed" its way outbound through the opening in the LA breakwater; the effect of sea actions affecting underkeel clearance on the San Francisco Bay entrance bar; the effects of propeller action on squat; the effects of rudder commands and acceleration and deceleration inducing roll and squat as the ship was in transit and much more. The instrumentation was so sensitive that it could measure the ship's bow and stern flexing away from its berth in Los Angeles prior to the center portion of the ship beginning to move away.

Dr. Lloyd Huff (Nautical Charting Development Laboratory) and Dr. Dave Zilkoski (National Geodetic Survey), scientists from NOAA's National Ocean Service are leading this research and stated that the data already gathered constitute a wealth of vessel dynamics data that can be mined for much more information that will undoubtedly prove valuable to the maritime community. Members of the oil-tanker industry present at the status briefing expressed eagerness to see how this technology can be applied to their class of vessels as well. The sinkage due to squat, rudder actions, accelerations, decelerations and other maneuvers on tankers hulls may well differ significantly from what has been observed on container ship hulls. Richard Smith, Operations Supervisor Sea River Maritime, Inc. repeated an earlier offer to make SeaRiver's in-bay, oil-tankers available for such experiments if a suitable GPS-antennae array could be designed for installation aboard an oil tanker.