

**Executive Summary**  
**The Maritime Advisory Committee for Occupational Safety and Health**  
**U.S. Department of Labor, Frances Perkins Building, 200 Constitution Avenue, N.W.,**  
**Washington, D.C. 20210**

**Wednesday, November 28, 2007**

Roll Call for the committee was taken. In attendance was: Mr. James R. Thornton, Mr. Marc MacDonald, Mr. Donald V. Raffo, Captain Teresa Preston, Mr. Stewart Adams, Mr. James D. Burgin, Mr. Charles R. Lemon, Mr. Kenneth A. Smith, Mr. Michael J. Flynn, Mr. John Castanho, and Mr. Ernest Whelan.

The Committee was asked to review the executive summary of the minutes from the August 1, 2007 meeting in Oakland. The committee members unanimously approved the minutes.

**Remarks**  
**Edwin Foulke, Assistant Secretary**

Mr. Foulke thanked Mr. Thornton for continuing to chair the committee and apologized for not being able to attend the previous meeting, held in Oakland, CA. He thanked the committee for their hard work, dedication, and wealth of knowledge that they provide to OSHA. Assistant Secretary Foulke discussed some of the MACOSH recommendations OSHA has accepted, as well as recent and upcoming OSHA developments.

The final rule for employer-paid personal protective equipment (PPE) was published this year. "Under this rule, the employers will be required to provide PPE, at no cost to the employees, except under specific circumstances" which include employee-owned PPE and replacement PPE. Also, who pays for certain types of clothing and gear is clarified as well in the final rule.

OSHA is working on the revision of a standard on General Working Conditions in Shipyard Employment (Subpart F). The proposal will cover several workplace safety and health issues, clarifying and updating existing requirements, as well as providing new requirements. The proposed rule has cleared OMB and should be published in the near future.

The final rule for Subpart S, Electrical Standards for general industry, was published in February 2007 and became effective in August 2007. "The rule contained a requirement to provide ground fault circuit interrupters for temporary wiring involved in certain activities." At the August 1<sup>st</sup> MACOSH meeting in Oakland, CA, "MACOSH requested OSHA to delay enforcement of the GFCI provision" until further clarification of the requirements could be provided. In response to this recommendation, OSHA is currently working on clarifying the standard as it applies to shipyard employment.

"As part of our long-range review of all OSHA standards," the Agency is "considering changes to the maritime industry standards, specifically Parts 1915, 1917, 1918, and 1919. For example, in Subpart G of part 1915, which covers gears and equipment for rigging and material handling, OSHA is considering revising the sling standard. OSHA is also considering adding a definition of 'ship's stores' to 1917 and 1918."

Proposed Ergonomic Guidelines have been developed, which “provide recommendations for shipyards to help reduce the number and severity of work-related musculoskeletal disorders, increase employer and employee awareness of risk factors, and eliminate unsafe work practices, alleviate muscle fatigue, and increase productivity.” These guidelines were issued on September 11, 2007, and the comment period closed on November 13, 2007. OSHA will provide the comments to the Health Workgroup for their review.

A pandemic influenza worldwide outbreak continues to be a concern; OSHA has prepared two major guidance documents on this topic. One of the documents applies to general industry, while the other focuses on the specific needs of employees working in the health care industry.

OSHA’s enforcement program has exceeded its 2007 goal, to conduct 37, 700 inspections, by 4 percent and plans on continued commitment in this area. Enforcement efforts include the updating of training for COSHOs, making sure they are fully trained to conduct comprehensive inspections. There are several inspection emphasis programs OSHA is focusing on to help provide safety in the workplace which include oil refineries and facilities that manufacture butter-flavored popcorn. The goal is for the inspection of these facilities and refineries to be completed within the next two years.

Region 4 completed and presented 10-hour and 30-hour Train the Trainer courses designed for the maritime industry. The topics covered include shipyard employment, ship repair, shipbuilding, ship breaking, maritime terminals, and longshoring. “OSHA Directorate of Standards and Guidance Enforcement Programs and Training and Education are collaborating to redesign the Shipyard Process and Standards Course #2090,” as well.

OSHA is continuing work with the four maritime industry specific national alliances –American Shipbuilding Association, National Shipbuilding Research Program, Shipbuilders Council of America, and National Maritime Safety Association, as well as the American Industrial Hygiene Association and the American Society of Safety Engineers to provide useful safety information to employers and their employees. A new fact sheet entitled "Safety Alert Involving Electrocutions" has been designed to inform shipyards about electrical hazards, particularly arc flashes. In addition, the marine industry safety topics page, displayed on the OSHA Web site, is being updated to reflect input from OSHA and the alliance partners.

### **Longshoring Workgroup Report James Burgin**

#### **Roll On-Roll Off (RO-RO) guidance document**

Mr. Burgin provided the committee with two documents -- a comparison table and a draft RO-RO guidance document. The table provided a side-by-side comparison of original OSHA language and the workgroup recommendations. The draft document incorporated suggestions the workgroup proposed that OSHA adopt. The workgroup listed the items to be clarified and requested that the MACOSH committee review the comparisons and rationale, and provide any

additional comments before the next full MACOSH meeting. At the next meeting, the committee will present a document for OSHA's consideration. The RO-RO draft was submitted into the record as Exhibit 2 and the RO-RO comparison table was submitted as Exhibit 3.

Overall, the workgroup thought the initial draft guidance document was too broad and required better defining of the "safety controls that would be applicable to the different types of vessels that handle roll on-roll off cargo," and address the types of cargo being handled on these vessels. Additionally, some of the other recommendations the workgroup provided were to identify and explain the training requirements for "powered industrial trucks as opposed to cargo aboard the vessels," change "definition titles to make it more United State-type operations friendly," and better define the group of workers referred to in the document -- seaman, lashers, and cargo handlers.

### **Traffic Safety Guidance document**

The workgroup reviewed the document published on the OSHA web site in July 2007 and created a side-by-side comparison table representing three points of view: published 2007 Traffic Safety Guidance Document, 2005 Traffic Safety Guidance Document, and comments from the recent conference call, held October 25, 2007. The workgroup members felt there are several issues, requiring clarification. The side-by-side comparison table was entered into the record as Exhibit 6.

### **Flatrack Guidance Document**

The workgroup is developing a draft guidance document intended to address the concerns and dangers associated with the use of flatracks for cargo handling. Specifically, to be addressed is the way in which the cranes hoist empty flat racks on and off vessels. Currently, the industry stacks several of these "flat-bed trucks" together, vertically lifting them with no ability to securely lock them.

The workgroup will submit the draft guidance document to the committee for review/comment and a clean copy will be submitted to OSHA at the next MACOSH meeting for consideration.

## **Outreach and Safety Culture Workgroup Captain Teresa Preston**

### **Ship-fitting SHIPs Document**

The SHIPs Document is a project taken over from the Shipyard workgroup with the pressing task of deciding what should be part of the ergonomics section. Despite some reluctance to move forward with the document as is, the workgroup decided to forward it for consideration. The workgroup felt that a new review process would cause unnecessary delay and the guidance document, "Ergonomics for the prevention of Musculoskeletal Disorders: Guidelines for Shipyards" will address relevant ergonomics issues. The workgroup submitted the draft document to the committee, which was accepted as amended. The committee requested that

OSHA consider publishing the document with the minor changes noted. The SHIPS document and corrected language were entered into the record as Exhibit's 5-1 and 5-2.

### **Translating E-tools into Spanish**

In an effort to address non-English speaking workers, the workgroup felt it was very important to translate the E-tools into Spanish. The top four e- tools were identified and prioritized in order of importance. The workgroup requested they be translated and posted on the OSHA web page. The workgroup and the committee recommended OSHA translate the e-tools in the following order: Ship Repair E-Tool; Longshore Tool Shed Document; Ship Construction E-Tool; and Shipbreaking E-Tool.

### **Leading indicators**

Since the last MACOSH meeting, the workgroup looked at many leading indicators and narrowed them down to focus on leading indicators of businesses that have had success in the safety area. The workgroup will request some guidance from OSHA on whether the indicators could be used to produce a guidance document or fact sheet. Although this topic is still a work in progress, the workgroup is hopeful that it will be completed by the end of the committee charter.

### **Training for New Technology**

The workgroup has "identified new technologies" that they "feel are somewhat lacking in having training available" to everyone. Although the training may be available at certain workplaces, there is no consistency across the board. The workgroup felt that it might be possible to create an OSHA guidance document that could be accessed and used as a resource by all shipyards. It is expected that the workgroup will be able to provide the Agency with a list and explanation by the end of the charter.

### **Substance abuse**

Despite much discussion, the workgroup has been unable to reach consensus on standard testing protocol for employee substance abuse. Some still feel that if OSHA produced guidance, endorsing the DOT guidelines, it would help enforce standardized testing throughout the industry. Others feel this is not necessary. The workgroup will attempt to revisit this issue and will have a final recommendation at the next meeting.

### **OSHA 10-hour and 30-hour maritime alliance outreach course**

Ken Atha, from Region 4, provided a power point presentation and presented updates on the 10-hour and 30-hour training courses. The 10-hour course has been developed and obtained approval through OTI. A Train the Trainer 10-hr and 30-hr course was developed in conjunction with the Mobile Area Office with the support of Region 4, and the alliance with the Mobile Maritime Safety Group, and the Alabama Physical Therapists Association. Further, the University of South Florida played a huge role in building this course, which covers OSHA Parts 1915, 1917, and 1918. A pilot course for the Train the Trainer course was held late in September with attendees from: industry, labor, and OSHA representatives from the east and

west coasts, as well as Puerto Rico. Currently USF, an Ed Center, is the only center capable of doing the course. Ken Atha's power point presentation was submitted into the record as Exhibit 4.

## **Cranes and Falls Workgroup report Stewart Adams**

### **Athena-106 Accident**

At the last MACOSH meeting, held in Oakland, the National Transportation Safety Board (NTSB) gave a presentation on the *Athena 106* accident. Three recommendations came out of this discussion: OSHA and the Coast Guard need to work further on their MOUs; OSHA, along with MACOSH, needs to develop a fact sheet to inform the industry of the hazards associated with locking pins on spud barges; OSHA needs to "develop a document dealing with these types of barges as far as what's expected from occupational safety and health."

There are no OSHA maritime regulations that apply to spud barges. The closest standard that applies is from part 1926, which is a construction industry standard. Further, if a vessel falls under the "uninspected" type, which applies to many of these spud barges, the Coast Guard doesn't necessarily regulate them. Therefore, a fact sheet was produced and reviewed by MACOSH, "answering the question or response to the recommendation from the NTSB." The fact sheet was submitted into the record as Exhibit 7. MACOSH has recommended that OSHA develop a guidance document to address barges such as the *Athena 106*.

### **Barge Safety Guidance Document**

The workgroup was given the task of reviewing an outline on barge safety, which OSHA developed in response to the *Athena 106* accident. The outline shows the basic structure of what should be covered in a barge safety guidance document. The workgroup, as well as the committee, recommended that OSHA move forward in producing guidance material based on the outline with the exception of the title; it was unanimously decided that it should be entitled, "Guidance Document: Un-inspected Work Barge Safety." During discussion, it was mentioned that the Coast Guard and Offshore Marine Service Association (OMSA) would like to be of assistance throughout the development of this project. The barge safety outline was submitted into the record as Exhibit 8.

### **Working on or under suspended loads from cranes**

From the last MACOSH meeting, in Oakland, the workgroup was tasked with trying to "define some type of parameters of when it would be okay to work under a suspended load." Currently, the OSHA standard states that employees are not to work under a suspended load. The workgroup researched instances where employees were permitted to work under a suspended load, and discovered "an alternate standard approved by OSHA for NASA." The alternate standard allows NASA to have federal employees work under a suspended load, instead of complying with the 1910 standards. In order for this to occur, there are 15 things that must be done, by NASA, to certify it safe for personnel to work under a load. Although this situation

would not specifically apply to the private maritime industry, the workgroup feels that it is a starting point for beginning to tackle this issue. They plan to continue to research the issue and by the next meeting, have a formal proposal that includes the language/steps required to allow workers to safely work under a suspended load.

### **Aerial work platform & PFD's**

The workgroup continued discussion on the topic of aerial work platforms and personal flotation devices (PFD's) from the last MACOSH meeting. There is a misconception that personnel are only to tie off over land and wear PFD's while working over water. Currently the standard states that when working aloft, whether over land or water, in an aerial platform, personnel are to tie off. The workgroup feels that this rule is acceptable and that there are other pertinent issues that should be addressed to include: at certain heights, a PFD is ineffective; employers should not allow "anybody to get into an aerial work platform," over water or on land, if there is a concern of stability; when working over water, there may be certain situations where extra care to ensure stability is necessary. The workgroup will prepare a recommendation on worker safety on aerial work platforms to present at the next meeting.

### **Final Rule for Employer-paid Personal Protective Equipment (PPE) Report William Perry**

On November 15, 2007 the final rule for employer-paid personal protective equipment was published. The scope of the final rule is very broad and addresses the issue of who is required to pay for the PPE and under what circumstances it applies. It "covers all major industry sectors and amends general PPE requirements in all of the parts of 29 CFR that contain personal protective equipment standards." Therefore, it covers "shipyards, marine terminals, and longshoring, those three parts, as well as general industry and construction."

### **Subpart S David Wallis**

Since OSHA issued the revision to the general industry electrical installation requirements standard – Subpart S, on February 14, 2007, many questions have been raised about the standard. Due to numerous concerns, mainly regarding the GFCI rule, OSHA instructed the field staff to not issue citations on the new standard; this administrative stay is expected to be lifted in the near future.

The standard requires the employer to have GFCIs any time there is temporary wiring on construction-like activities. Construction-like activities include shipbuilding, ship repair, and ship breaking. Therefore, when temporary wiring is being used, GFCIs are required.

Mr. Wallis gave a short presentation on some of the issues brought up by MACOSH and the industry:

Q: "Does the provision apply to all receptacles or only those on branch circuits?"

A: The provision applies to branch circuits, which are considered to be circuits used to directly power tools and equipment. In this situation, the circuit would have reached its final rating and require GFCI protection. For example, connection from spider box to spider box at a higher voltage and current rating is not considered to be providing direct power to a tool or equipment. Therefore, no GFI is required.

Q: “Does the standard recognize all forms of ground-fault protection devices or only ground-fault circuit interrupters approved by nationally recognized testing laboratories, or NRTLs?”

A: The provision requires ground-fault circuit interrupters, which need to be approved. Therefore, “in order for the GFCI to meet the rule, it would have to be NRTL approved.”

Q: “Does the standard require GFCIs to be used with branch circuits supplying temporary lighting?”

A: The provision only requires GFCI protection for circuits temporarily supplying lighting if the circuits supply receptacles as well. The standard doesn't require a GFCI for lighting circuits without receptacles.

**Ergonomics for the Prevention of Musculoskeletal Disorders: Guidelines for Shipyards  
Report  
Michael Seymour  
Joanne Snyder**

On September 11, 2007 OSHA published the draft guidance document for Ergonomics in shipyards. The public was given an opportunity to provide comments. The comment period closed on November 13, 2007. This draft was one out of “four-prolonged approach to ergonomics” that included nursing homes, retail grocery stores, and poultry processing that Secretary Chao announced on April 2002.

The shipyard document basically consists of two sections. The first part is intended to describe a process for management to follow to protect employees. It explains the importance of employee involvement, training, evaluation, and ways in which to identify problems and the implementation of solutions. The second part gives examples of common ergonomic situations that might occur in a shipyard and possible ways to provide a safe environment for the employees.

OSHA has reviewed and evaluated the public comments and has begun to revise the document for final publication. Once finalized, this document will be made available through the OSHA website, and hard copies distributed to the shipyards.

**Directorate of Enforcement Update  
Tom Galassi**

Mr. Galassi gave a recap of the projects and their successes that have occurred throughout calendar year 2007 in the Directorate of Enforcement including: a 4 percent increase in inspections - 39,324 out of planned goal of 37,700; increased inspections in Enhanced

Enforcement Program, SST program, NEP program, and LEP programs; updating of training for COSHOs; inspections of oil refineries expected of exposing employees to diacetyl; updated and put out directives useful to the industry, shipyards, tool shed, and other directives; working with the Coast Guard in determining jurisdiction over vessels.

Some upcoming projects include: putting together the shipyard employment directive for PPE and “an online database for the Part 1919 Ring Cargo Gear Certification Program to automate the OSHA 71-72 forms.” The Enforcement Update was entered into the record as Exhibit 9.

### **Shipyard Workgroup Donald Raffo**

#### **Spray paint, 1915.35 and 36, Subpart C**

The workgroup conducted a side-by-side review of Subpart C, “Surface Preparation and Preservation,” revealing that the solvents and coatings, as well as the application methods, used in the industry have changed at a rapid rate since the standard was first developed. The manufacturers are taking more care in the production of products, no longer using “the most toxic and flammable” ingredients. For example, the practice of using Red Ledge and coal tar epoxies for coatings to prevent rust is no longer the norm. The workers are not, in most cases, using the basic spray paint gun for application; new methods such as the High-Volume/Low-Pressure spray are being used, limiting the amount of exposure to employees. Therefore, several issues that were a concern in the past are no longer a worry for industry today.

The MACOSH Shipbuilding workgroup provided comments in the form of a comparison table with the recommendation for Subpart C to “be reviewed and updated, with emphasis on Sections 1915 and 35 and 36.” The comments and side-by-side comparison table were submitted into the record as Exhibit 10.

#### **Welding, 1915 Part D review**

The workgroup conducted a line-by-line, side-by-side review of Subpart D and provided comments in the form of a comparison table. The main issue revolves around the four-inch strip-back rule in the current standard and whether it is necessary and consistent with today’s processes, new technologies, and materials used. At the time the standard was developed, there was a concern about employee exposure to airborne toxins during the welding, cutting, heating, and coating of steel surfaces. Although this is still a concern, there are new technologies that are in practice, limiting the amount and type of exposure. For example, most steels are coated and primed at the factory and are no longer in the raw condition at the shipyard worksite and the concentrations of toxic compounds, such as lead, chrome, cadmium, and zinc have been reduced.

The MACOSH Shipbuilding workgroup feels that a new standard needs to be developed to reflect both the need to control worker exposure to hot work and to allow enhanced productivity by the worker, for all maritime activities (shipbuilding, ship repair, and ship breaking). The comments and side-by-side comparison table were submitted into the record as Exhibit 11.

## **The Electrical Standard, Subpart S**

The workgroup had few comments on Subpart S from the last MACOSH meeting. The members would like more time to delve into the GFCI issue and provide a recommendation at the next full MACOSH meeting.

## **Shipbreaking Guidance Document**

The workgroup was asked to review a shipbreaking guidance document and provide comments. Through conference calls, discussion and comments the workgroup will provide OSHA with a recommendation at the next full MACOSH meeting in March.

**Health workgroup report  
Marc MacDonald**

## **Radiation exposure: Cargo Inspection Fact sheet**

At the last MACOSH meeting, the workgroup was asked to conduct research dealing with general sources of radiation at various exposure levels for employees operating and working around U.S. Customs and Border Protection Vehicle and Cargo Inspection Systems. They determined that “exposure to radiation from these devices can be related to the effects or dangers, or compared to the dangers of everyday living.” Due to the safety systems in place for operating the machinery, such as controlled areas, the exposure levels are “virtually immeasurable.” “There are three primary means used to protect marine terminal workers from radiation exposure during the operation of cargo inspection devices: 1) the radiation beam is directed away from workers; 2) some shielding is used to protect CBP workers who operate the equipment; 3) controlled areas/exclusion zones are established and patrolled by CBP around the machine to prohibit exposure of marine terminal workers.”

A fact sheet was developed based on the workgroup’s research, which was presented to MACOSH for review. The committee felt it was a good start, but requested that the workgroup continue to work on the fact sheet, providing further clarification on some of the issues discussed and requested that they present it at the next MACOSH meeting. The draft fact sheet was entered into the record as Exhibit 12.

## **Ergonomic Guidelines**

The workgroup reviewed the OSHA “Ergonomics for the Prevention of Musculoskeletal Disorders: Guidelines for Shipyards” and provided comments. The workgroup recommended that MACOSH endorse the document and encourage OSHA to publish it.

## **Diesel Exhaust**

There has been no significant work done by the workgroup in gathering information on diesel exhaust. However, they briefly discussed the recent study conducted by the American Heart

Association and many new “regulations that seem to be proliferating with regard to diesel engines.”

The workgroup will continue to gather information in this area and decide whether an OSHA standard or guidance document is necessary. Further discussion and recommendations will follow at the next MACOSH meeting.

### **Hearing Loss**

The workgroup has no significant updates to report to the committee. They will continue to provide updates to the committee as they receive information on hearing loss concerns in the maritime industry.

### **Automatic External Defibrillators (AED’s)**

The automatic external defibrillators (AED’s) item is no longer part of the MACOSH agenda, since OSHA issued language for general usage of AED’s in the workplace. Despite there being no action required, the workgroup reported an incident where someone had been saved due to the quick reaction of co-workers, the use of CPR, and an AED.

## **Open Discussion Full Committee**

### **Rechartering**

Chairman Thornton informed the committee that he would be working with OSHA to begin the rechartering process.

### **Feedback**

Chairman Thornton asked the committee to provide feedback about the overall meeting.

Mr. Smith stated, “I think that the meetings can be run a little bit more efficiently if, at the end of the first day, the committee is allowed to have in hand documents that they may be having to vote on the following day. That way we can take them back to our rooms or homes and review them, and then come to the full meeting ready to discuss them rather than waiting till the next meeting.”

Mr. Whelan stated, “Once again we’re missing a couple of our labor representatives, particularly the I.L.A. representative. I think a phone call or a letter would be appropriate to encourage them to participate. They certainly should be here.”

Chairman Thornton asked the committee to provide feedback on the productiveness of the meeting.

Mr. MacDonald stated, “We’ve got to use or rely on the conference calls almost more than the workgroup, because if you try to -- and I agree with Ken about getting the papers here so

everybody has a chance to review them the night before. But in some cases, if you're doing work on the fly in the workgroup, you're doing the corrections during the night and getting it back out the next day. So, I don't know. There's a little bit of a conflict with that there. So I would stress that we should be trying to do as much as we can at the conference calls, so that when we get to the working groups, it's more pro forma, perhaps, and last-minute stuff rather than trying to do major editing and stuff like that.”

Captain Preston stated, “my only frustration, and I don't really know how to get around it, is we do a lot of the work in the workgroup the day before, come prepared with a presentation to the committee, but then we want to go through all the same things we went through in the workgroup the day before. So we just need to make sure we set the ground rules ahead of time so that we know what needs to be printed, what needs to be handed out, when it needs to go to the people, because there were some assumptions made, at least in my workgroup, that we were presenting something to the full committee to work on, but didn't necessarily need backup because they've had it in hand for months. So, you know, just set the ground rules so we all know ahead of time. That would be great.”

Mr. Smith stated, “If the correspondence group leaders could distribute the final draft version that the workgroups are coming to the meetings with to the whole group in advance, they could take a read on it before they get here and then kind of be made aware of any minor modifications that might have been made.”

### **Closing Remarks/tasking**

Chairman Thornton tasked the committee with the following:

(1) To keep a few dates in March available for the next MACOSH meeting – 10<sup>th</sup> and 17<sup>th</sup> as possibilities.

(2) To “think about, when you do your summaries, what can you do in the remaining time? Don't bite off more than you can chew. Look at how much time you have left, the tasks you have in front of you, and plan your conference calls.”

At 5:32 p.m. -- Meeting adjourned.