



Carbon Monoxide (CO)/Propeller Injury Avoidance

Update Meeting

Miami International Boat Show

Miami, FL

February 18, 2005

Minutes

Sponsored by:

United States Coast Guard

Office of Boating Safety

Recreational Boating Product Assurance Division

The National Institute for Occupational Safety & Health (NIOSH)

Minutes prepared by:

American Boat & Yacht Council, Inc. (ABYC)

3069 Solomon's Island Road

Edgewater, MD 21037

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Mr. Richard Blackman from the United States Coast Guard (USCG) Office of Boating Safety opened the meeting at 10:00 a.m. He stated that the USCG is very encouraged by the advancements in both the carbon monoxide (CO) and propeller injury avoidance areas. There is lots of work being done by manufacturers, non profit groups, etc., and all are helping to reduce these problems.

The purpose of this meeting is to provide a brief update. Mr. Blackman reviewed housekeeping items, and mentioned that minutes will be available via e-mail. If anyone is new to the meeting, they should fill out a sign in sheet in the back.

Carbon Monoxide (CO):

The Southwest Research Institute (SWRI) project is continuing. SWRI has completed freshwater testing and is moving forward with saltwater testing sometime this summer.

Mercury and Indmar have two catalytic converters out on the boat show floor. Mr. Blackman asked that if anyone knows of any others, to let him know.

Westerbeke now has Safe CO generators in the field. Westerbeke generators are being shipped; a few have been installed in boats on Lake Meade which have a few hundred hours on them. NIOSH will be heading out to look at levels over time and research maintenance issues – if any. Hopefully by this time next year these will have significant hours to give a clearer picture of maintenance issues, if any.

The Coast guard is hopeful that final EPA emissions regulations affecting recreational boats will specifically include maximum allowable levels for CO emissions.

Several houseboat builders are offering diesel power in boats as a safety issue. One problem in the more populated houseboat areas the availability of diesel fuel. However, this may be related to the fact there has been no historical demand for diesel. The Coast Guard has been advised that the number of diesel docks on Lake Cumberland has gone from zero to four in the past two years. The USCG has heard that there are three houseboat insurance companies that are offering discounts for using diesel engines.

Ski boats are being tested with diesel power as well. The USCG is told that the performance with a smaller diesel equivalent is very encouraging. We are hoping for more updates in the fall.

The Water Sports Industry Association (WSIA) and NIOSH will be conducting human testing to measure accumulated CO levels on people engaged in water sports.

The USCG has also been told that the dry stack installs are continuing to perform well.

Mr. Blackman also mentioned that two-stroke outboard technology continues to be very encouraging in low levels of CO emissions.

Mr. Blackman opened the floor to comments at this point:

A representative from Mercury invited attendees to view both catalytic converter prototypes on display at the boat show. They are concept engines and Mercury and Indmar invites comments to address issues involved in implementing the catalyst.

Phil Cappel from the USCG Office of Boating Safety also mentioned that along with the SWRI research; catalytic converter research was to reduce HC + NOX. These levels, of course, are not reduced to the point of that in an automobile, but the USCG is hopeful that once we get the concept of having catalytic converters on boats, the technology will advance to the point of the auto industry.

There was a comment from the floor that an industry standard from ABYC is desirable rather than a rule from the EPA. This is possibly something the ABYC Technical Board can take a look at. Mark Reichers commented that a CO level will be in the revised EPA rule.

Larry Akins from Fireboy/Zintex commented on continuing work on CO detectors. A new detector has an interlink feature that allows connection with other detectors and a relay feature to shut down the generator.

Dave Marlow updated the group on work on a warning label to comply with CA AB2222. This requirement is for a warning label for the transom of all powered boats warning about the dangers of platform dragging and CO. A subcommittee is working on an industry-accepted warning label.

Propeller Injury Mitigation:

Several derivatives of the lanyard are being worked on. Two different wireless devices are available. The CAST system from MariTech Industries has been accepted by the BASS Association for use during tournament Fishing.

Mercury has a concept idea on display for infrared sensing of the operator and also continues to work on an underwater detection system.

Prop Guard evolution continues, but there still is no universally acceptable application..

Destination Yachts developed a start delay, which that causes an alarm to sound, and a time delay to be initiated when the ignition is switched on. This has been installed on a boat and is undergoing testing. We should see this in the marketplace soon.

A Delta Systems representative spoke about a new sensing system that requires an operator to wear a device similar to a watch that detects that it is being worn by the operator, and then the operator checks into the system in order to start the boat. If the operator leaves the proximity of the control station a shut down sequence would commence. This strategy is not defined at this time. This system is a concept system and Delta is soliciting input from the industry. An attendee expressed concern that engine shut down in response to the operator leaving the helm may be dangerous. Delta recognizes this and will look for more input.

John Martino from ACT, Inc. Marine Propulsion Division spoke about their developments in pump jet technology. The product had been successfully used for many years in government and municipal applications. They have changed their marketing strategy to reach new markets for this technology.

The group revisited the CO topic:

Larry Meddock, WSIA Executive Director spoke about the proposed testing for wake-surfers and water-skiers. They are working on the protocol for the testing since the use of human test subjects has limitations. The testing is scheduled for April. They also have applied for a USCG grant for a national campaign targeting CO dangers.

Mr. Blackman asked if there were any other questions, comments or updates. Mr. Blackman also mentioned that we would have a more formal meeting in October that will include presentations.

Mr. Blackman thanked everyone for their participation, and again encouraged all to stay in touch with him regarding the formats of the meetings, comments or any updates regarding these two topics.

The meeting concluded at 10:40 a.m.