

APBA SAFETY COMMITTEE MINUTES – THURSDAY 22JA2015

Meeting called to order at 8:03 AM with 40 persons in attendance. Sufficient committee members were present to provide a quorum.

Rescue reports 2014 racing year – Region 4 (Ken Smith) reported few incidents, with one hand injury. However, some drivers did exhibit concussion symptoms. Box 21 (Region 6 – Dave Noble, Karen Beavers) reported a very good year, only 1 incident with divers wet (no injury). Jim Chambers (OPC) reported an uneventful year. Mod reported very few incidents, as did Stock Outboard for Region 6 (Tom Johnston – Jeff Brewer). West coast SO reported some incidents, with three serious injuries; two of these involve feet: partial foot amputation, foot laceration; drivers wearing wet suit booties and tennis shoes, respectively. One occurrence of several broken vertebrae resulted from a driver striking the front of the hull head first (Pat Gleason, Jeanne MacKay). John Krebs reported a clean year for Vintage. Bob Wartinger noted UIM fatalities worldwide were 3 (2 USA and 1 Europe). The US fatalities were in the west, one inboard flatbottom and 1 COR. COR rules were revised to include a safety bar, easing some concerns; observation by Roger Carr is that the installations are well done and that racing by COR participants has resumed. Multiple boat collisions are creating concerns, leading to discussions regarding overlap and passing. SLT's Robin Shane reported a good year safetywise.

Pending action from categories or committees:

- A. The Race Management Committee requested discussion and decision regarding allowing participants to add lettering (name, etc.) to their helmet immediately above the visor/face opening within a (roughly) 1.5 x 8 inch area.
- B. Inboard (especially chief inspector Bill Thompson and others) request determination of acceptability of multi colored color schemes within the upper 50% of the helmet area currently designated as "solid color".

Concussion discussion: Ken Smith presented an informative 2 page memo regarding concussions. Very informative, the purpose of the memo is education of participants, parents, owners, officials, etc. regarding the symptoms of concussions. Awareness of concussions and the seriousness of their occurrence is an ever increasing item in the news, especially in sports. Ken had committed to coming up with this type sheet as a beginning step of a strategy to deal with concussions in boat racing, following general strategies in use across sports, and in motorsports particularly: that is, step one is educate, step two develop protocols to deal with occurrence. Discussion supports publication of this information APBA wide (Propeller magazine, APBA web, resources directory, club newsletters, region meetings, etc.); for example, Kristi Ellison (PRO) who has experience and strong ties in the medical world (including her husband, a military trauma MD), stated strong support for the memo, including endorsement from her husband as to the info and need. The memo will be fine tuned and distributed accordingly. This effort parallels strategies underway in UIM, Stand 21, PRI, SFI, etc, which are all significant players in the motorsport world. Subsequent discussion revolved around sitting down a concussed driver and return to participation. The Lystedt Law, aimed at youth sports activities, enacted in Washington state and various other states (among them Ohio, for instance), sets up a protocol regarding return to participation and a protocol to sit a participant down (usually football, but hockey, lacrosse, etc. apply) – *if in doubt, sit out* – this is LAW. A parallel is quickly seen between these activities and APBA's extensive youth racing, pointing out a need to develop a protocol that has authority to sit down a participant who shows symptoms of concussion. For any of this to work, good communication is needed between a referee and medical personnel, which in APBA generally exists at regattas. A committee was designated to draft a rule proposal to establish this first step protocol (Pat Gleason, Dave Noble, Karen Beavers, Ken Smith, D. Whitney); review by the Safety Committee will take place in the Saturday morning meeting.

Helmet discussion: Bill Chilcott reported on the poor energy characteristics of mil spec helmets compared to Snell, which is generally considered the baseline for motorsports. Especially disconcerting is the lack of test data. Energy management data that is available shows that one available milspec helmet design tests only a little better than a

bicycle helmet at worst and less than a DOT helmet at best; DOT helmets were removed from the approved listing a few years ago. No other milspec helmets have data available from testing.

A. Helmets must meet the specifications set forth by any of the following: American National Standards Institute, Inc., Snell, or military specification helmet designed for military aircraft — Mil-Spec helmets (CGF LA100, LH050, LH150, LH250; Gentex HGU-84/P), Peltor helmets (Rally Pro

Helmet EN ECU 04 or 05) and SFI Spec 24.1 youth helmets for drivers age 16 and under, SFI competition 31.1 and 31.2 are acceptable.

A proposal from Bob Wartinger which outlined a change to the APBA General Safety Rule 3A was discussed and modified to delete all mil spec helmets, including the Gentex listed, MSA Gallants, and military helmets designed for military aircraft; delete ANSI standard; keep Snell 2005; remove the reference to Peltor helmets as these are Snell rated; and no change to the youth helmets shown. Motion was made and seconded to adopt these changes; vote was 15 yes, no 1. Accordingly, this change to rule 3A will be recommended to the APBA BOD for adoption. Additional discussion is anticipated on Saturday morning.

At this time the meeting was adjourned until Saturday morning, 9:30 AM. The first items on the agenda will be discussion and consideration of the race management committee proposal and helmet coloration (both described above).

APBA SAFETY COMMITTEE MINUTES - SATURDAY 24JA2015

The meeting was called to order at 9:40 AM with 35 persons present. A quorum of committee members was present.

General Safety Rule 3A: discussion was reopened, to discuss the Snell rating year. As voted on Thursday, the rating year was 2005. Snell ratings have not changed appreciably in the last three 5 year cycles (2000, 2005, 2010), with fine tuning of test procedures a focus. This allows a fairly broad range of years of use. Snell 2015 rating has changed mostly in one area: requiring neck restraint mounting points to have threaded inserts (making it easier for users to properly mount head / neck restrains (e.g., HANS, HYBRID, NEXGEN, etc.)(info from Stand21 presentation by Snell's Executive Director Ed Becker at the 2014 PRI meeting). Additionally, the 2015 rating will not be released until September, 2015, and the likelihood is that these newest rating helmets will reach the public only in springtime 2016. Since this is already 2015, it was decided that maintaining three cycles of Snell ratings would be more favorable for drivers while continuing to require equipment rated to a high level standard. Accordingly, the rule as proposed and approved Thursday is further modified by specifying the Snell rating to be 2000 or newer until November 1, 2016, at which time the minimum Snell rating shall become 2005 (motion Bill Thompson, second Kristi Ellison). This motion was passed unanimously. The committee has agreed to consider data which would confirm the meeting of at least Snell ratings from the so-called military spec helmets (Gentex in particular), due to the use of these by a number of drivers in the past, however, this data must be real test data, verifiable, and not anecdotal stories of surviving destructive wrecks without injury or helmet damage.

General Safety Rule 3A shall read: Helmets shall meet one of these rating specifications: Snell 2000 or newer (SA, M, K, CMR/CMS 2007, CMH); SFI competition 31.1 and 31.2; SFI spec 24.1 youth helmet for drivers age 16 and under. Effective November 1, 2016: Snell 2000 or newer becomes Snell 2005 or newer.

This rule change will be submitted for APBA BOD approval and if approved, in use this racing year.

Race Management Committee initiative: Discussion of the initiative from the race management committee: allowing participants to add lettering (name, sponsors, etc.) to their helmet immediately above the visor/face opening within a 3 inch x 8 inch area. The current rule regarding this area is GSR 3A1:

The upper fifty percent (50%) of the helmet must be a single color of the following: yellow or fluorescent (high visibility) yellow or lime green or orange or international orange or fluorescent red.

The area affected is part of the upper 50% referenced in the rule. Drivers often add their names, sponsors, or even medical data to that area, demonstrated often in photos, not only recently taken, but over the years. Additionally, it was pointed out that helmet manufacturers often place their company logo in that spot. After much discussion, a motion was made (Dave Shaw) and seconded (Kristi Ellison) to allow such decoration in an area immediately above

the facial opening of a helmet measured by 2 inch x 8 inch. This motion was approved by a 5 to 3 vote with several abstentions. This support for the change (allow decoration in the 2 inch x 8 inch area noted above) by the Safety Committee was communicated to the Race Management Committee chair (Dave Augustine) for their action.

Discussion continued regarding GSR Rule 3A1 regarding the 50% solid color requirement. Bill Thompson cited the lack of uniform enforcement regarding the solid color, citing flames and other decorations encroaching throughout the area set aside by rule to be solid color. Rescue sources cite the need for one color in that area, as differing colors interfere with recognition under water as well as above water. These opinions were seconded by personnel who are located on the judges stand or elsewhere in locating a helmet at a distance, above water. While the need for the solid color is recognized in general, Bill Thompson moved to require 100% solid color helmets, with Dan Bunting seconding. This motion failed and was not adopted. The solid color requirement remains at "upper 50%", with solid color meaning one color, no shadows, flames, etc., with the exception of the 2inch x 8 inch area cited above. The mandatory colors as specified within GSR Rule 3A remain the same.

Protocol for concussions: Discussion ensued on the protocol for concussed drivers. The committee (Pat Gleason, Dave Noble, Karen Beavers, Ken Smith, D. Whitney) presented the following for review by the Safety Committee as a whole: Following an incident at a racing event (regatta), the referee has the authority to suspend or limit a driver's or participant's activity at the racing event (regatta), taking into consideration input from appropriate medical personnel.

The committee felt this wording was a good start to define a protocol of how to deal with a driver / participant who exhibits symptoms of concussion. It was noted that the authority of the referee is defined, along with the need to have advice from medical personnel, and fulfills the committee's feelings that it is time to deal with concussion issues at APBA regattas. A motion to approve as shown (Kristi Ellison), with second (Pat Gleason) was passed unanimously. The change will be forwarded to the APBA BOD for approval as shown below as added wording to GSR Rule 22 (shown in ***bold italics***).

GSR 22. No contestant shall participate in an APBA-sponsored event with any type of splint, including, but not limited to, a cast or brace applied to his body without showing written authorization from a medical doctor and approval by the Referee at the particular event. ***Following an incident at a racing event (regatta), the referee has the authority to suspend or limit a driver's or participant's activity at the racing event (regatta), taking into consideration input from appropriate medical personnel.***

COR Safety Bar: COR outboard racing has incorporated a safety bar for additional driver safety. Dutch Squires has requested Safety Committee review of the safety bar, especially looking at design, construction technique, and costs. The object of the safety bar is to deflect a wayward hull away from the driver in the event of a collision between boats. The drivers in COR are unrestrained, which has influenced the design to be similar to a so-called six point roll bar, often used in sportsman drag race vehicles. Some COR craft have installed the safety bar, leading to a resumption of racing in the fall of 2014. Some examples of other craft using roll bars or roll cages are OPC Super Sport and TriHull (divisional class in Texas), with suggestions to look to these users for advice or opinions. Jersey Speed Skiff (Inboard) and Jet River racers also use a roll cage. In each of these cases, the drivers are restrained. A committee has been appointed to examine the safety bar (Tom Stanley, Bob Wartinger, D. Whitney) and advise Dutch. Additionally, the committee will look at drafting a general proposal for such a system that can be widely used, as proposals come into APBA for new racing ventures.

Rescue equipment: minimum equipment standards exist for rescue boats at regattas. From time to time, there are reports of rescue craft carrying insufficient equipment or improper equipment. A committee of Ken Smith (Region 4), Dave Noble (Box 21), and Marc Thomson (Black Diamond) will review current rules and equipment. Publicity of these minimums is desired, so more know what is needed. Additionally, new equipment or changes in law can be examined. For instance, backboard usage is changing in regards to transport and transfer, coming into play this coming year in some areas (Michigan, for one).

OPC Safety Committee is working to commonize air connection fitting (male / female quick disconnect) orientation with Inboard, to remove confusion that has come up at joint OPC / Inboard races. This confusion has been noted before, at dunk tests for one place. Updates should be coming into play soon. OPC also noted that at the recent PRI in Indianapolis, Sweet Manufacturing has introduced a stainless steel steering wheel coupler, to reduce the corrosion occurring in the usual steel / aluminum couplers. The stainless component is the attachment on the steering column, to which the steering wheel hub and steering wheel is attached. This new component was developed in response to a boat racer's comment to Sweet Mfg. that steering wheels were getting stuck. Kudos to whoever made the comment and got this started!

Bob Wartinger presented a slide show of safety trends and data. The half hour presentation featured slides, photos, and graphs showing trends and illustrating some safety issues. One of these involves helmet colors, and the difficulty picking out colors that are not those currently specified. Another issue appears to be the growing number of collisions in heavily populated classes. An observation from Jeff Williams is that the shape of the race course has a lot to do with these collisions and even the ones which don't happen (chopping). Many of the international courses feature triangular shapes, with very tight radii and rather than 90 degree leading to a 180 degree turns, these are 120 degree tight radii, which means bunching up of boats but also a lot of incursions into other boats paths. One other item apparent from the slides: boat racing is becoming stagnant when it comes to safety and severity of crashes, whereas auto racing has continued significant progress towards reducing serious injury incidents. Possibly the decline in the number of boat racing events may influence the slope of trend lines somewhat, however, the disparity remains. Head clearance for restrained drivers remains at issue. OPC Sam LaBlanco related that the six point safety harness is working well in OPC, once the mounting and adjusting difficulties were ironed out. It appears that NASCAR is going to a seven point harness, as vertical movement is reduced. Along with this are some new seat specifications, which may be applicable to boat racing. Padding seats for tight fit is advancing with companies at PRI exhibiting laser scan and cut materials meeting SFI standards for energy absorption at reasonable prices, which lead to less movement for drivers and increased head movement constraints in crashes. These advances are very applicable to boat racing. Work continues with Offshore (UIM especially) to improve cockpit strength, especially in blowovers.

A suggestion was made to create a Safety Committee Budget – currently nonexistent. Need some budget dollars, some suggested reasons: keep up to date on safety advances, investigate issues, presentations at meetings, education for the membership. Web sessions open to membership were suggested, although these are costly. Another suggestion was made to use YouTube for distributing this educational material, as a homegrown video could be produced to show how something works, for instance, and then put up on YouTube rather reasonably, with easy access for just about anybody, including the membership. No committee appointed, work will happen during the year. The APBA BOD must be approached with such a request, too late for 2015, but can happen for 2016 if a request is drawn up.

Leftover issues for the future, undiscussed:

- 1.The Vintage group is opening up participation to pre 1994 OPC boats with safety capsules and restrained drivers. The Safety Committee has been asked to review the additions to the Vintage rules regarding the capsule OPC craft. Review is requested by March 1. A committee has been appointed (Rich Evans, Eric Pomber, Patrick Sankuer, D. Whitney) to begin this review. Vintage is exploring bringing on Inboard craft with capsules in the future, there will be review and suggestions from this subcommittee for the vintage inboards.

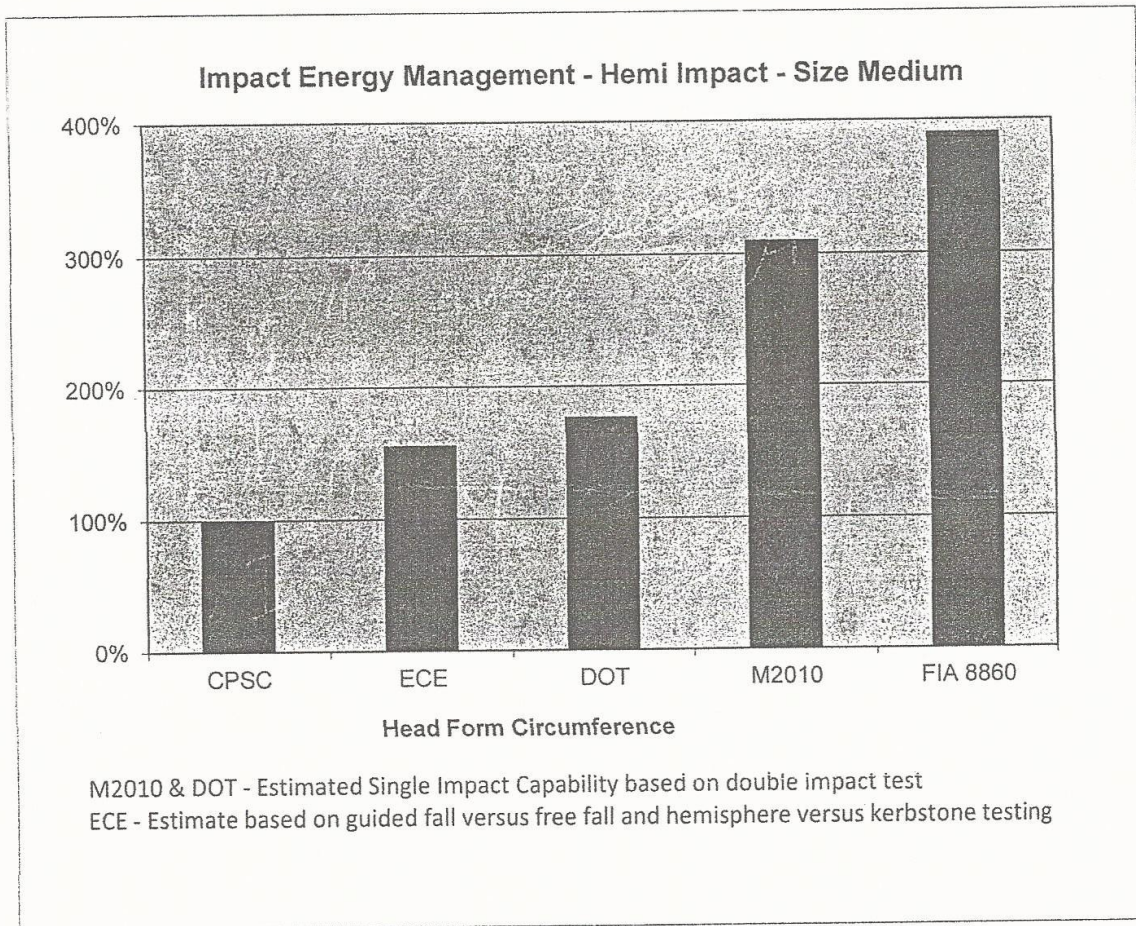
Meeting was adjourned at 12:00 Noon.

Respectfully submitted:

Don Whitney

APBA Safety Committee Chairman

ILLUSTRATION # 1



CPSC = BICYCLE HELMET
 ECE = EUROPEAN COMMUNITY MOTOR CYCLE HELMET
 DOT = DEPT. OF TRANSPORTATION
 M2010 = SMALL MOTORCYCLE HELMET
 FIA 8860 = EUROPEAN SUPER RACING HELMET
 HELICOPTOR HELMETS FALL BETWEEN CPSC AND ECE.

3/28/2013