WORLD SAILING CONFERENCE 2024

INTERNATIONAL REGULATIONS COMMISSION MEETING ON 4 NOVEMBER 2024

REPORT ON RELEVANT ISO ACTIVITIES

1. **Revision of ISO 12217: Stability and buoyancy assessment and categorization**

ISO TC 188/WG9 is undertaking a revision of all three parts of ISO 12217 that specifies requirements and procedures for small craft stability, buoyancy assessment and categorization.

Following a review of comments and the improvement list at a meeting of TC 188/WG9 in Southampton in June 2024, the working draft for all three parts has been updated. After some discussion, a draft resolution was proposed by those present in WG9 to merge non-sailing boats under 6 metres into parts 1 and 2 with the following new titles:

- *ISO 12217-1: Small craft – Stability and buoyancy assessment and categorization – Part 1: Non-sailing boats; and*
- *ISO 12217-2: Small craft – Stability and buoyancy assessment and categorization – Part 2: Sailing boats.*

The scope of each will be amended to align with the addition of boats of less than 6 metres.

The draft resolution was approved by ISO/TC188 at its plenary meeting in Southampton on 14 June 2024. Pending a positive P vote by a majority of all national participating members, the working draft for each part of the standard will move to the committee stage when it will be circulated to all committee members (both participating and observer) for comment until consensus is reached on the technical content among the P-members of the committee.

WS should continue to take an active interest in the revision of ISO 12217.

2. **Revision of ISO 12215-9: Sailing craft appendages**

The revision of ISO 12215-9: Sailing craft appendages as the second edition has been published as a Draft International Standard for voting which terminates on 24 October 2024.

IRC members may recall that in January 2022, the World Sailing Offshore and Technical Manager wrote to the chair of ISO/TC 188 to express support for a recommended action to revise/amend the standard and to request that ISO12215 Part 9 be opened for revision to examine and verify the validity of the keel fatigue requirement for series production yachts and in particular to request that the number design stress cycles be increased by a factor of 2.

This has been achieved in the second edition by a re-assessment of Annex F on simplified fatigue strength assessment, doubling the operational life to 16 million stress cycles and associated Miner's Summation Rule (MSF) calculations for assessing fatigue life prediction.

3. **Proposal for a specific standard for Sailing Helmets**

Currently there is no specific standard that is explicitly intended for head protection to safeguard sailors of all abilities and ages against known and potential risks while undertaking sailing activities. Specifying requirements for a suitable helmet will reduce these risks and help protect participants against injury or death.

EN 1385:2012 specifies requirements for helmets for canoeing and white-water sports use and is widely used as an alternative by sailors in the absence of a specific standard for sailing helmets. As such, it is proposed that EN 1385:2012 could form the basis for a core specification for sailing helmets if the following additional criteria and testing procedures were added:

- Helmets must not feature a peak, visor, or brim.
- Helmets must feature prominent and functional drainage holes.
- Helmets must not cover the ears without functional canals to aid hearing.
- Helmets shells must not be a "one size fits all" design across the model range.
- Helmets must not interfere with peripheral vision.
- Helmets must be highly visible in a variety of conditions (colour/reflective tape etc)

EN 1385:2012 falls under the remit of Technical Committee CEN/TC 158 – Head Protection, the secretariat of which is held by the British Standards Institute. Therefore, I submitted a proposal for a specific ISO Standard for a helmet for sailing to the BSI Standards Development team.

At its most recent planning and approval meeting on 10 September the proposal was assigned to BSI committees' PH/6 Head protection and PH/6/6 - Protective helmets for sport and leisure for consideration. I will keep WS informed as I find out more.

If accepted, WS will need to ensure that both the industry and user groups provide representation in the development of a standard.

4. Revision of ISO 12402-6 to specify Impact protection for high-speed watersports including foiling

Standardization of test methods and requirements relevant to personal safety equipment used on small craft falls under ISO TC 188/SC1. This includes personal floating devices (PFD) and immersion suits but excludes life rafts. Requirements for PFD are published in the ISO 12402 series and more recently WS has been successful in getting specific requirements for an offshore lifejacket added to Part 6 of the standard which deals with special application lifejackets and buoyancy aids.

ISO 12402, part 6, clause 7.5 also provides specific requirements and additional markings for PFDs for personal water craft (PWC), water skiing or similar towed uses to inhibit them from being dislodged when the user engages in high-speed water sports. With the exponential rise in foiling sailing craft of all types, high-speed water sports now include foiling boats, kite surfers and wind surfers. Foiling brings higher risks from increased speed and requires greater securement features, impact protection and in-water removal testing to avoid entrapment from rigging.

With the exception of securement, it is not clear that Clause 7.5 deals adequately with enhanced impact requirements and minimum impact protection dimensions for these new foiling applications. WS has proposed that in the forthcoming Standard Revision of EN ISO 12402-6, requirements to meet those for foiling sailors are included in Clause 7.5.

ISO TC 188/SC1 met in the USA from 9 to 14 September. The Chair sent a message to all members stating that the focus for that meeting would be on collecting input for the revision of the ISO 12402 at the preliminary work item (PWI) stage which began in December 2022. The base documents for revision are the published versions of the standard series.

Consequently, WS has proposed that the forthcoming Standard Revision of EN ISO 12402-6 should include requirements for foiling activities in Clause 7.5 and has supplied detailed comments for

consideration. As WS did not have a face-to-face representation at the meeting, the comments have been agreed by the BSI mirror committee and were presented by them at the meeting. I await feedback from the meeting.

A s the PWI stage can last 36 months, there is until December 2025 to start the project for the 12402 series. Until then the committee will discuss the ISO 12402 series within the PWI stage. If the project starts in December 2025, the new revision will be published 36 months Later or by December 2028 at the earliest.

It should be noted that at its recent meeting, it was resolved to create an ad hoc group to make recommendations to consider the restructuring of the ISO 12402 series to consolidate parts 2 to 6 and part 8 and provide a report to the next plenary meeting of ISO/TC 188 SC1.

ISO/TC 188 SC1 approved the dates of April 7-11, 2025 for the 24th TC 188 SC1 Plenary meeting in Europe (Paris or Germany are likely). Details will be communicated later.

I recommend that WS takes an active role in the revision of EN ISO 12402 and in particular part 6 both in discussion and when the consolidated revision project starts.

5. Revision of ISO 12401: Deck safety harness and safety Line requirements and test methods.

ISO/TC 188/SC1 and CEN/TC 162/WG6 have agreed unanimously to activate a revision of EN ISO 12401 which is now at the committee draft stage.

The first issue for WS and OSR is the length of safety lines (tethers) as specified in Section 5.02 and the possibility that a combination of a 1-metre tether together with a 2-metre tether may inadvertently lead to a 3-metre tether. As a result, clause 4.1 of EN ISO 12401 is to be amended with additional wording in red as follows:

> *The original effective maximum length of a safety line, measured with a measuring tape between the attachment points, under a load of 10 kg, shall not exceed 2 m including the length of the hooks. The measurement shall be made from the inside of the hook (s).*
>
> *Where the safety line incorporates more than two hooks or loops, the length of 2m shall not be exceeded in any combination of hook or loop attachment.*
>
> *Note: If a safety line has a break out indicator that expands the length after being subject to load, the maximum length of 2 m might be exceeded after the breakout indicator being on the load.*
>
> *Design of the safety line and its attachments to the wearer shall preclude accidental incorrect attachment resulting in more than 2 m between the strong point on the craft and the strong point on the deck safety harness.*

The second issue follows an incident on 18 November 2017 when a crewman fell overboard from the foredeck of the Clipper Ventures yacht CV30 following an accidental gybe in very rough seas while the crew were lowering the headsail.

The crewman was initially secured to the yacht by his tether, but before he could be recovered his tether gave way. A UK Marine Accident Investigation Branch investigation concluded that the tether hook became caught under the starboard forward mooring cleat, resulting in the hook being loaded

laterally, distorting and finally releasing. This type of loading is not envisaged or tested in the ISO standard.

The UK Marine Accident Investigation Branch acknowledge would be difficult to develop a standard for safety tethers that ensured hooks could not be opened accidentally and withstand all possible loading scenarios. However, The German DIN has proposed that a lateral load test similar to the edge test for carabiners set out in UIAA (international mountaineering and climbing federation) Standard 121-V4:2018 is included in the draft, but this has yet to be agreed.

I recommend that that WS takes an active interest in the revision of EN ISO 12401.

Stuart Carruthers
18 September 2024