



ABYC H-1 July 2019

Hull Division Standard

**Hull Performance Project
Technical Committee**

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ABYC reviews each standard at least every five years at which time it may be reaffirmed, revised, or withdrawn. ABYC welcomes any written comments on the standards and technical information reports.

ABYC H-1

FIELD OF VISION FROM THE HELM POSITION



H-1
7/19

Origin and Development

First published in 1965, H-1, *Field of Vision from the Helm Position* was updated in 1970, 1974, 1985, 1988, 2000, 2006, 2010, and 2012. The 2019 update is the work of the Hull Performance Project Technical Committee.

Hull Performance Project Technical Committee

This list represents the membership at the time the Committee was balloted.

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Membership on a committee shall not in and of itself constitute an endorsement of ABYC or any document developed by the committee on which the member serves.

This standard, which is the result of extended and careful consideration of available knowledge and experience on the subject, was developed under procedures accredited as meeting the criteria for American National Standards and is intended to provide minimum performance requirements. The Project Technical Committee that approved the standard was balanced to ensure that individuals from competent and concerned interests have had an opportunity to participate.

ABYC's Project Technical Committee (PTC) meetings are open to the public. All inquiries regarding standards activity, interpretations, or meeting attendance should be directed to the ABYC Technical Department at comments@abycinc.org.

ABYC and its committees do not "approve" or "endorse" any item, construction, or proprietary device.

Request for Interpretations

Upon written request the Hull Performance PTC will render an interpretation of any requirement of the standard. The request for interpretation should be clear and unambiguous. Requests should be presented to the PTC in a manner in which they may be answered in a "Yes" or "No" fashion.

The committee reserves the right to reconsider any interpretation when or if additional information that might affect it becomes available to the PTC. Persons aggrieved by an interpretation may appeal to the Committee for reinterpretation.

Summary of Revisions

This list indicates revisions to the standard when compared with the previously published version. It is not intended to be used independently of the standard. It should be used for informational purposes and as a guide to the official requirements contained in this standard. It is the responsibility of the user to read and understand the complete standard.

The main changes in this revision of H-1, *Field of Vision From the Helm Position* as compared with the previous edition dated 7/12, are:

- Scope and Purpose were combined
- Units of Measure section was added
- Horizontal range of visibility was clarified

DISCLAIMER

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H-1 FIELD OF VISION FROM THE HELM POSITION

Based on ABYC's assessment of the existing technology, and the problems associated with achieving the goals of this standard, ABYC recommends compliance with this standard for all boats, associated equipment, and systems manufactured after July 31, 2020.

1.1 SCOPE

This standard specifies the requirements for the field of vision from the helm position(s) and applies to all boats powered by machinery.

EXCEPTION: Sailboats.

NOTES:

1. *In order for this standard to be effective the boat must be operated in a reasonable and prudent manner.*
2. *Boats can be operated in a manner and at certain speeds causing trim and/or roll angles such that vision is obscured. A boat operator may experience some loss of vision from the helm position while operating at high trim angles during the transition between displacement and planing mode.*
3. *This standard does not relieve the operator of the requirement to comply with the United States Coast Guard (USCG) Navigation Rules.*
4. *Movable items such as persons, gear, and convertible tops are considered under the control of the boat operator and therefore are not obstructions to visibility for the purpose of this standard.*

1.2 UNITS OF MEASURE

Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate.

1.3 REFERENCES

The following references form a part of this standard. Unless otherwise noted the latest version of the referenced standards shall apply.

1.3.1 ABYC - American Boat & Yacht Council, Inc, 613 Third Street, Suite 10, Annapolis, MD 21403. Phone: (410) 990-4460. Fax: (410) 990-4466. Website: www.abycinc.org

[ABYC H-3, Exterior Windows, Windshields, Hatches, Doors, Port Lights, and Glazing Materials](#)
[ABYC T-5, Safety Signs and Labels](#)

1.3.2 Superintendent of Documents, United States Government Information, PO Box 371954, Pittsburgh, PA 15250-7954. Phone: 202-512-1800. Fax: 202-512-2250. Website: www.gpo.org

72 COLREGS - International Regulations for Preventing Collisions at Sea and/or the Navigation Rules:
International – Inland

1.4 DEFINITIONS

For the purposes of this standard the following definitions apply.

1.4.1 Aft Sector of Visibility - the aft horizontal arc measured between 90° to port from straight astern and 67.5° to starboard from straight astern (see [FIGURE 1](#)).

1.4.2 Forward Sector of Visibility - the forward horizontal arc measured between 90° to port from straight ahead and 112.5° to starboard from straight ahead (see [FIGURE 1](#)).

1.4.3 High Eye Position -

1.4.3.1 standing – a single point 68 in (173 cm) above the standing surface at the operator's position (see [FIGURE 2A](#)).

1.4.3.2 seated - a single point 33 in (84 cm) above the surface of the compressed seat (see [FIGURE 2B](#)).