



Designation: F1783 – 97 (Reapproved 2021)

## Standard Guide for Performance of an Ice Rescuer—Level II<sup>1</sup>

This standard is issued under the fixed designation F1783; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

*This standard has been approved for use by agencies of the U.S. Department of Defense.*

### 1. Scope

1.1 This guide covers minimum requirements for the scope of performance of an ice rescuer who performs cold water and ice rescues from the surface, assists with support for ice rescue divers, and provides initial patient care at a cold water or ice rescue incident.

1.2 This guide is one of a series that, together with Guide F1739, describes the minimum performance requirements of an ice rescuer.

1.3 Individuals who will operate in the cold water or ice rescue setting need to be aware of the equipment and physical requirements necessary to be able to perform all identified objectives and necessary skills in the setting.

1.4 The values stated in both inch-pound and SI units are to be regarded separately as the standard. The values given in parentheses are for information only.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

F1739 Guide for Performance of a Water Rescuer—Level I

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee F32 on Search and Rescue and is the direct responsibility of Subcommittee F32.03 on Personnel, Training and Education.

Current edition approved Nov. 15, 2021. Published November 2021. Originally approved in 1997. Last previous edition approved in 2013 as F1783 – 97 (2013). DOI: 10.1520/F1783-97R21.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

### 3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *drysuit, n*—a protective suit that encompasses the wearer, prohibiting water from entering. A drysuit may provide no buoyancy or thermal protection without insulation undergarments or a buoyancy compensating device.

3.1.2 *floating tether, tag line, n*—a water rescue technique which stretches a line across a body of water. This line has a flotation device attached to it to keep the rope on the surface of the water and to provide a buoyant object for the victim to grab hold.

3.1.3 *ice awls, n*—a device used for rescue on ice consisting of a sharp spike with a handle.

3.1.4 *ice staff, n*—a stick, pole, or rod with a sharp spike in one end used to traverse on ice or rescue on ice.

3.1.5 *immersion suit, n*—designed to provide cold water protection and buoyancy by one person in cold water emergencies. These devices should conform to standards set by the appropriate national regulatory authority, that is, the U.S. Coast Guard in the United States.

3.1.6 *personal flotation device, PFD, n*—a buoyant device suitable for use by one person in water emergencies. These devices should conform to standards set by the appropriate national regulatory authority, that is, the U.S. Coast Guard in the United States.

3.1.7 *sinking tether, snag line, n*—a water rescue technique that stretches a weighted line across a body of water to snag or support fully or partly submerged objects and people.

3.1.8 *vessel, n*—includes every description of watercraft, including nondisplacement craft and seaplanes, used or capable of being used as a means of transportation on water.

### 4. Significance and Use

4.1 This guide is to be used to expand the performance of water rescuers and improve the emergency response and patient care delivered to victims in the cold water and ice rescue environment.

4.2 All persons who are identified as ice rescuers shall meet the requirements of this guide.

4.3 This guide is not intended to be used in isolation, but as a component guide acknowledging many duties of response at a cold water and ice rescue emergency. It also establishes a minimum scope of performance and encourages the addition of optional knowledge, skills, and attitudinal objectives.

4.4 This guide does not establish medical protocols, nor does it authorize invasive procedures without specific authorization and medical control.

4.5 This guide is intended to assist government agencies, state, local, or regional organizations, fire departments, rescue teams, and others who are responsible for establishing a minimum performance for personnel who respond to cold water and ice emergencies.

4.6 An ice rescuer shall be wearing an immersion suit, drysuit with PFD, or equivalent cold water protection and buoyancy to perform these rescues.

## 5. Objectives

5.1 The ice rescuer shall be able to perform the objectives in Guide **F1739**.

5.2 The ice rescuer shall be able to:

5.2.1 Swim continuously 274.32 m (300 yd),

5.2.2 Escape from a water/ice victim's grasp or hold,

5.2.3 Turn a disabled, passive, or unconscious water/ice victim's face up in such a manner that the chances of aggravating injuries or medical condition is minimized,

5.2.4 Identify ice characteristics, types of ice, and openings in the ice,

5.2.5 Identify factors which influence the strength of ice,

5.2.6 Identify the ice rescue sequence,

5.2.7 Perform a scene evaluation which includes evaluating ice conditions and assessing the scene for hazards, number of victims, victims' condition, need for additional personnel, and need for additional equipment, and then take appropriate action following the rescue sequence by utilizing risk benefit analysis,

5.2.8 Walk and traverse on ice,

5.2.9 Walk and traverse on ice utilizing the ice staff,

5.2.10 Perform the ice awls self-rescue technique on ice,

5.2.11 Perform the ice staff self-rescue technique on ice,

5.2.12 Identify the factors in selecting clothing for thermal protection of the ice rescuer,

5.2.13 Demonstrate the technique utilized when ice starts to break, that is, lay down and roll to safety or stronger ice,

5.2.14 Perform reaching and extension rescue techniques on ice,

5.2.15 Perform throwing rescue techniques using a throw-bag and coiled rope throws on ice,

5.2.16 Perform the floating tether (tag line), weighted tether (snag line), and stabilization line techniques on ice,

5.2.17 Perform the boat rescue technique utilizing a 14 to 16 ft (4.26 to 4.87 m) jonboat, small inflatable, or other vessel which the agency owns or utilizes for ice rescue emergencies on ice,

5.2.18 Perform the tethered swimmer rescue technique utilizing an immersion suit, drysuit with PFD, or equivalent on ice,

5.2.19 Provide initial patient care, and

5.2.20 Move the victim(s) in conjunction with patient care activities in such a manner that the chance of aggravating injuries or medical condition is minimized.

5.3 *Optional Objectives*—The territory, bodies of water (ice), equipment, personnel, and resources vary among ice rescuers in agencies. When emergency response capabilities are limited, the ability of an ice rescuer to perform the tasks in **5.1** and **5.2** may be sufficient to ensure satisfactory care. When an ice rescuer has a greater variety of responses, territory, and equipment demands, the scope of performance must be expanded accordingly.

## 6. Keywords

6.1 ice; ice rescue; ice rescuer; rescue; water rescue; water rescuer

*ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.*

*This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.*

*This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; http://www.copyright.com/*