



Designation: F1993 – 16 (Reapproved 2022)

Standard Classification System of Human Land Search and Rescue Resources¹

This standard is issued under the fixed designation F1993; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This classification is intended to identify the common functional units and single resources used in search and rescue operations; to aid search and rescue (SAR) managers and Authorities Having Jurisdiction (AHJs) in assembling or ordering resources for search, rescue, or search and rescue incidents; and to aid in identifying the tasks for which crews have been trained.

1.2 This classification is intended as a supplement to the resource typing specifications of the Incident Command System and specifically as a means of typing human resources used in land search and rescue activities.

1.3 This classification is suitable for classifying search and rescue crews for land search and rescue incidents.

1.4 This classification does not attempt to classify individuals or put forth standards of performance or training for individuals, nor is it meant to convey certification, skill proficiency, or other measures of the level of performance of the resource. These qualifications are the responsibility of the local agencies responsible for utilizing the resource.

1.5 This classification identifies human-based resources. Canine crew (or team) classifications are defined in Classification F1848.

1.6 This classification does not classify air resources (Guides F2958 and F3026) or water resources (Guides F1739, F1783, and F1824).

1.7 *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:²

F1633 Guide for Techniques in Land Search (Withdrawn 2017)³

F1739 Guide for Performance of a Water Rescuer—Level I

F1783 Guide for Performance of an Ice Rescuer—Level II

F1824 Guide for Performance of a Water Rescuer—Level II

F1848 Classification System for Canine Search Resources

F2209 Guide for Training of Land Search Team Member

F2685 Guide for Training of a Land Search Team Leader (STL)

F2751 Guide for Training of a Land Search and Rescue Team Member

F2752 Guide for Training for Basic Rope Rescuer Endorsement

F2794 Guide for Level 1 (Basic) Mounted Search and Rescue (MSAR) Responder

F2852 Practice for Training a Land Search Tracker

F2954 Guide for Training for Intermediate Rope Rescuer Endorsement

F2955 Guide for Training for Advanced Rope Rescuer Endorsement

F2958 Guide for Helicopter Inland Search and Rescue (SAR) Technician

F3024 Guide for Training of a Land Search and Rescue (SAR) Strike Team/Task Force Leader

F3026 Guide for Helicopter Inland Search and Rescue (SAR) Crew Chief

F3027 Guide for Training of Personnel Operating in Mountainous Terrain (Mountain Endorsement)

F3028 Guide for Training of Search and Rescue Personnel Operating in the Alpine Environment (Alpine Endorsement)

F3098 Guide for Training of Non-Wilderness Land Search Team Member

F3175 Guide for Training and Equipping Search and Rescue Personnel Operating on Mountain Bikes (Mountain Bike SAR Endorsement)

¹ This classification is under the jurisdiction of ASTM Committee F32 on Search and Rescue and is the direct responsibility of Subcommittee F32.02 on Management and Operations.

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² 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 The last approved version of this historical standard is referenced on www.astm.org.

F3193 Guide for Training of a Land Search and Rescue Team Leader

F3194 Guide for Training for Personnel Operating Small Land Off Road Vehicles (ATV-ROHV Ops Endorsement)

2.2 *ANSI Standard*.⁴

ANSI/SVIA 1-2010 Four Wheel All-Terrain Vehicles—Equipment, Configuration, and Performance Requirements

3. Terminology

3.1 Definitions:

3.1.1 *ATV-ROHV, n*—a motorized off-highway vehicle designed to travel on four low-pressure tires, having a seat designed to be straddled by the operator, and handlebars for steering control. ATVs are subdivided into two types as designated by the manufacturer. **ANSI/SVIA 1-2010**

4. Significance and Use

4.1 Classification of human land search and rescue resources is based upon the training of the personnel and their ability to perform specific tasks.

4.2 Human search and rescue resources are classified by *category, kind, and duration*.

5. Classification of Human Land Search and Rescue Resource Categories

5.1 *Category* identifies the specific task for which a human resource is trained:

5.1.1 *Land Search*—Crews trained in land search techniques.

5.1.2 *Land Rescue*—Crews trained in land rescue techniques.

5.1.3 *Land Search and Rescue*—Crews trained in both land search and rescue techniques.

5.1.4 *Untrained*—Crews untrained in either land search or rescue techniques.

6. Classification of Human Land Search and Rescue Resource Kinds

6.1 *Kind* further defines a human land search and rescue resource's capabilities in regard to a particular category:

6.2 *Land Search*:

6.2.1 *Non-Wilderness*:

6.2.1.1 A crew (or team) that operates in the non-wilderness environment.

6.2.1.2 The crew (or team) consists of two to eight individuals operating as a single resource trained and tasked for land search.

6.2.1.3 All of the crew (or team) members meet the requirements of Guide **F3098**, **F2209**, **F2751**, **F2685**, **F3193**, or **F3024**.

6.2.1.4 The crew (or team) leader meets the requirements of Guide **F2685**, **F3193**, or **F3024**.

6.2.2 *Wilderness*:

6.2.2.1 A crew (or team) that operates in the wilderness environment.

6.2.2.2 The crew (or team) consists of two to eight individuals operating as a single resource trained and tasked for land search.

6.2.2.3 All crew (or team) members meet the requirements of Guide **F2209**, **F2751**, **F2685**, **F3193**, or **F3024**.

6.2.2.4 The crew (or team) leader meets the requirements of Guide **F2685**, **F3193**, or **F3024**.

6.2.3 *Mountainous*:

6.2.3.1 A crew (or team) that operates in mountainous terrain.

6.2.3.2 The crew (or team) consists of two to eight individuals operating as a single resource trained and tasked for land search.

6.2.3.3 All crew (or team) members meet the requirements of Guide **F2209**, **F2751**, **F2685**, **F3193**, or **F3024**.

6.2.3.4 The crew (or team) leader meets the requirements of Guide **F2685**, **F3193**, or **F3024** and has a Guide **F3024** (mountain) or **F3028** (alpine) endorsement.

6.2.3.5 Prior to crew (or team) assignment, the number of personnel with Guide **F3024** (mountain) or **F3028** (alpine) endorsements shall be considered, with the understanding that a crew (or team) is exposed to increased risk when few members possess one or both of these endorsements.

6.2.4 *Alpine*:

6.2.4.1 A crew (or team) that operates in alpine terrain.

6.2.4.2 The crew (or team) consists of two to eight individuals operating as a single resource trained and tasked for land search.

6.2.4.3 All crew (or team) members meet the requirements of Guide **F2209**, **F2751**, **F2685**, **F3193**, or **F3024**.

6.2.4.4 The crew (or team) leader meets the requirements of Guide **F2685**, **F3193**, or **F3024** and has a Guide **F3028** (alpine) endorsement.

6.2.4.5 Prior to crew (or team) assignment, the number of personnel with Guide **F3028** (alpine) endorsements shall be considered, with the understanding that a crew (or team) is exposed to increased risk when few members possess this endorsement.

6.2.5 *Tracking*:

6.2.5.1 A crew (or team) consists of one to three individuals operating as a single resource trained and tasked in tracking.

6.2.5.2 All personnel actively tracking on the team meet the requirements of Practice **F2852**.

6.2.5.3 The crew (or team) leader meets the requirements of Guide **F2685**, **F3193**, or **F3024**.

6.2.5.4 Prior to crew (or team) assignment in mountainous terrain or the alpine environment, the number of personnel with Guide **F3024** (mountain) or **F3028** (alpine) endorsements shall be considered, with the understanding that a crew (or team) is exposed to increased risk when few members possess one or both of these endorsements.

6.2.6 *Mounted*:

6.2.6.1 A crew (or team) that consists of one to three individuals operating as a single resource deployed on horseback.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.