



Standard Guide for Training for Personnel Operating Small Land Off Road Vehicles (ATV-ROHV Ops Endorsement)¹

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1. Scope

1.1 This guide establishes the minimum training requirements, including general and field knowledge, skills, and abilities, for personnel who operate ATVs or ROHVs as part of their duties.

1.2 This guide applies only to ATVs and ROHVs as defined below.

1.3 An ATV-ROHV Ops Endorsement alone is not sufficient to indicate that an individual has the knowledge, skills, or abilities to perform any specific duties, including search and rescue operations, other than those defined within this guide.

1.4 ATV-ROHV Ops Endorsed individuals may, under qualified supervision, perform their normal duties safely and effectively on ATVs or ROHVs.

1.5 ATV-ROHV Ops Endorsed individuals operate on the surface of the land only, including urban or disaster areas that may be isolated or have lost supporting infrastructure.

1.6 This guide alone does not provide the minimum training requirements for SAR personnel to operate ATVs or ROHVs while in partially or fully collapsed structures, in- or on-water, in confined spaces, underground (such as in caves, mines, and tunnels), or in a mountain or alpine environment.

1.7 Human land SAR resources that may utilize personnel trained to this guide are classified in Classification [F1993](#).

1.7.1 Further training may be required before ATV-ROHV OPS Endorsed personnel may participate on a particular *Category* or *Kind* of SAR resource, depending on local needs, regulations, or policies of the authority having jurisdiction.

1.8 Personnel trained only to this guide are not qualified to perform search or rescue. No training in land search, patient evacuation, rope use, or other rescue skills is included in this guide.

1.8.1 Basic search skills and knowledge are found in Guide [F2209](#).

1.8.2 Basic rescue skills and knowledge are found in Guide [F2751](#).

1.9 Personnel trained only to this guide are not qualified to operate in leadership positions.

1.10 ATV-ROHV Ops Endorsed personnel must work under qualified supervision, as deemed appropriate by the Authority Having Jurisdiction (AHJ).

1.11 *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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

[F1773 Terminology Relating to Climbing, Mountaineering, Search and Rescue Equipment and Practices](#)

[F1993 Classification System of Human Search and Rescue Resources](#)

[F2209 Guide for Training of Land Search Team Member](#)
[F2751 Guide for Training of a Land Search and Rescue Team Member](#)

[F2890 Guide for Hazard Awareness for Search and Rescue Personnel](#)

[F3068 Guide for Contents and Use of a Position Task Book \(PTB\)](#)

[F3103 Specification for Testing Off-Road Motorcycle and ATV Helmets](#)

2.2 Other Documents:

[ANSI SVIA 1-2010: American National Standard for Four Wheel All-Terrain Vehicles—Equipment, Configuration, and Performance Requirements](#)³

¹ 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.

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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 <http://www.svia.org/Programs/Standard.aspx>

ANSI/OPEI B71.9-2012: American National Standard for Multipurpose Off-Highway Utility Vehicles⁴

ANSI/ROHVA-1-2011: Recreational Off-Highway Vehicles⁴

Snell Memorial Foundation: 2015 Standard For Protective Headgear For Use with Motorcycles and Other Motorized Vehicles⁵

State laws pertaining to operation of ATVs

3. Terminology

3.1 Definitions:

3.1.1 *all terrain vehicle (ATV), 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.⁶

3.1.1.1 *ATV, Type I, n*—an ATV intended by the manufacturer for use by a single operator and no passenger.

3.1.1.2 *ATV, Type II, n*—an ATV intended by the manufacturer for use by an operator and a passenger, and equipped with a designated seating position behind the operator.

3.1.2 *authority having jurisdiction (AHJ), n*—(1) the organization, agency, or other entity which is using this guide; (2) the organization, agency, or other entity to which a person being trained, tested, or evaluated belongs, if the instructor, evaluator, or tester is not a member of the same organization.

3.1.3 *qualified supervisor, n*—an individual with demonstrated knowledge or competence in a task, to whom the AHJ has granted the authority to observe and oversee an individual performing that task.

3.1.4 *recreational off-highway vehicle (ROHV), n*—a motorized off-highway vehicle (also ROV, UTV or “Side-by-Side”) designed to travel on four or more tires:

- (1) A steering wheel for steering control;
- (2) Non-straddle seating;
- (3) Maximum speed capability greater than 30 MPH (48 km/h);
- (4) Gross Vehicle Weight Rating (GVWR) no greater than 3,750 lb (1700 kg);
- (5) Less than 2030 mm (80 in) in overall width, exclusive of accessories;
- (6) Engine displacement equal to or less than 1,000cc (61ci).⁷

3.2 For definitions of other terms used in this guide, see Terminology **F1773**, Guides **F1993**, **F2209**, and **F2751**.

4. Significance and Use

4.1 This guide establishes the minimum training criteria for ATV-ROHV Ops Endorsed personnel.

4.2 At no time will this standard supersede any established protocols of international, national, federal, state, tribal, local, or regional governments.

4.3 Every person who is identified as an ATV-ROHV Ops Endorsed individual shall have met the requirements of this guide.

4.4 Though this guide establishes only minimum standards, it does not imply that an ATV-ROHV Ops Endorsed individual is a “trainee,” “probationary,” or other similarly termed member of an agency or organization.

4.4.1 The AHJ is responsible for determining the requirements and qualifications for its team member ratings.

4.4.2 Nothing in this guide precludes an AHJ from adding additional requirements for its own members.

4.5 A person meeting the requirements of this guide does not necessarily possess adequate field skills and knowledge to make mission-critical decisions.

4.6 This guide by itself is not a training document. It is an outline of the topics required for training or evaluating ATV-ROHV Ops Endorsed personnel.

4.7 This guide is an outline of the topics required for training or evaluating ATV-ROHV Ops Endorsed personnel and may be used to assist in the development of a training document or program.

4.8 This guide can be used to evaluate a document to determine if its content includes the topics necessary for training individuals to be ATV-ROHV Ops Endorsed personnel. Likewise, this guide may be used to evaluate an existing training program to see if it meets the requirements in this guide.

4.9 The knowledge, skills, and abilities presented in the following sections are not in any particular order and do not represent a training sequence.

4.10 This guide does not stand alone and must be used with other ASTM Standards to identify the knowledge, skills, and abilities needed for ATV-ROHV Ops Endorsed personnel to perform safely and effectively.

4.11 ATV-ROHV Ops Endorsed personnel shall document training by completion of a position task book, compliant with ASTM **F3068**, or by field demonstration under qualified supervision.

4.11.1 Where proficiency in a skill or ability must be demonstrated, unless stated otherwise it shall be demonstrated for initial qualification, and as often as required by the AHJ.

4.11.2 Proficiency shall be demonstrated to a qualified observer as defined by the AHJ.

5. Operator’s Equipment

5.1 ATV-ROHV Ops Endorsed individuals shall wear the following personal protective equipment (PPE) while operating an ATV or ROHV:

5.1.1 A full face or open face helmet which meets at least one of the following approvals or certifications:⁸

5.1.1.1 Certified in accordance with ASTM **F3103**;

⁴ <http://www.ansi.org/>

⁵ <http://www.smf.org/standards/m/2015/M2015FinalFinal>

⁶ Definition from ANSI SVIA 1-2010.

⁷ Definition from ANSI/ROHVA-1-2011: Recreational Off-Highway Vehicles.

⁸ Helmets that are only certified in accordance with ANSI Z90.4 or DOT FMVSS 218 are not recommended. For more information see: <http://www.motorhelmets.com/htm-resources/dot-helmet/>

5.1.1.2 Approved by the Snell Memorial Foundation per their M2015 standard;

5.1.1.3 Certified by the Consumer Product Safety Commission (CPSC).

5.1.2 Safety goggles or a face shield, if an open face helmet is used;

5.1.3 Riding gloves with knuckle padding;

5.1.4 Cut and abrasion resistant over the calf protection.

5.2 An ATV-ROHV Ops Endorsed individual shall carry additional mission-specific equipment, as determined by the AHJ.

6. Operator's Vehicle

6.1 The ATV or ROHV operated by an ATV-ROHV Ops Endorsed individual must be certified to be in compliance with the requirements of ANSI SVIA 1-2010, ANSI/ROHVA-1-2011, or ANSI/OPEI B71.9-2012, as applicable.

6.2 The ATV or ROHV shall be properly sized for the age, height, and weight of the operator, in accordance with the relevant provisions of ANSI SVIA-1 2010, ANSI/ROHVA-1-2011, or ANSI/OPEI B71.9-2012, as applicable.

6.3 The ATV or ROHV shall be equipped with a vehicle-specific tool kit.

6.4 The ATV or ROHV shall be equipped with spare parts for field repairs. Refer to [Appendix X1](#) for a list of recommended spare parts.

6.5 The ATV or ROHV shall be equipped with emergency equipment for use in the event the vehicle is stuck or disabled in the field. Refer to [Appendix X2](#) for a list of recommended emergency equipment.

6.6 The ATV or ROHV shall be equipped with a basic first aid kit.

6.7 An ATV or ROHV to be operated in remote areas shall be equipped with a basic survival kit. Refer to [Appendix X3](#) for a list of recommended survival equipment.

7. Operator Skills and Abilities

7.1 ATV-ROHV Ops Endorsed personnel shall have successfully completed one of the following ATV or ROHV operator's safety training courses, suited to the vehicle type:

7.1.1 ATV Safety Institute⁹ ATV RiderCourseSM;

7.1.2 VFIS¹⁰ UTV/ATV Safety Training course;

7.1.3 ROV eCourse¹¹ and a ROV Basic Driver Course (RBDC);

7.1.4 State-, agency-, or AHJ-approved ATV or ROHV operator's safety training course.

7.2 ATV-ROHV Ops Endorsed personnel shall demonstrate the ability to perform a pre-ride inspection of an ATV or ROHV, checking the following:

7.2.1 Drive chain (if present) properly adjusted and lubricated;

7.2.2 Drive chain (if present) shows little or no wear;

7.2.3 Drive shaft (if present) has correct amount of lubricant and no lubricant leaks;

7.2.4 Handlebars are secure and properly aligned;

7.2.5 Foot rests are secure;

7.2.6 Throttle moves smoothly, closes when released, and works properly throughout the full range of motion of the handlebars or pedal;

7.2.7 Ignition switch works smoothly and is not worn;

7.2.8 Engine stop switch works correctly;

7.2.9 Brakes, including hand brake, work smoothly and correctly, and brake handles or pedals are positioned to suit the operator;

7.2.10 Gear shift is firmly attached and properly positioned for safe operation;

7.2.11 Headlights function properly;

7.2.12 Tail lights, including brake lights, function properly;

7.2.13 Pressure is correct in all tires and equal on both sides;

7.2.14 Tires show no cuts, punctures, or other damage which could lead to leaks;

7.2.15 Axle nuts are tight and securing pins are in place;

7.2.16 Wheel lug nuts are tight;

7.2.17 Wheel bearings show minimal play or looseness;

7.2.18 Fuel tank is full and fuel system has no evident leaks;

7.2.19 Oil level is correct and no leaks are evident;

7.2.20 Spark arrestor or muffler is firmly attached and working properly;

7.2.21 Air filter is clean, not damaged, and is not blocked.

7.3 ATV-ROHV Ops Endorsed personnel shall demonstrate the ability to perform at least the following on an ATV or ROHV in the field:

7.3.1 Repair a flat tire;

7.3.2 Replace a spark plug;

7.3.3 Adjust drive chain (if present).

7.4 ATV-ROHV Ops Endorsed personnel shall demonstrate the knowledge and skills:

7.4.1 With no other assistance safely lift and stabilize an ATV or ROHV in the following situations:

7.4.1.1 Vehicle sitting upright;

7.4.1.2 Vehicle rolled on its side;

7.4.1.3 Vehicle overturned on roof or handlebars.

7.4.2 With assistance, safely and properly right an overturned ATV or ROHV;

7.4.3 Use a winch, come-a-long, or other mechanical device to free a stuck ATV or ROV;

7.4.4 Properly rig and tow a disabled ATV or ROHV.

7.5 ATV-ROHV Ops Endorsed personnel shall demonstrate the ability to properly load, unload, and secure an ATV or ROHV for transport.

7.6 ATV-ROHV Ops Endorsed personnel shall demonstrate the ability to carry a passenger, or passengers, on an ATV or ROHV intended for that use.

7.7 ATV-ROHV Ops Endorsed personnel shall demonstrate the ability to brief a passenger, or passengers, on how to safely ride on an ATV or ROHV.

⁹ <http://www.atvsafety.org>

¹⁰ <http://www.vfistx.com/training.html>

¹¹ <http://www.rohva.org/Courses.aspx>

7.8 An ATV-ROHV Ops Endorsed individual shall have the ability, and shall be equipped, to be self-supporting in the field for a minimum of 24 hours.

8. Keywords

8.1 all terrain vehicle; ATV; ROHV; ROV; side by side; utility vehicle; UTV

APPENDIXES

(Nonmandatory Information)

X1. RECOMMENDED SPARE PARTS, TOOLS, AND EMERGENCY EQUIPMENT

X1.1 Recommended Spare Parts

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| X1.1.1 Spark plug (2); | X1.1.5 Tire pressure gauge – low pressure; |
| X1.1.2 Headlight bulb (2); | X1.1.6 Hose clamps – multiple sizes; |
| X1.1.3 Water, for cooling water refill – 2 qt. (2 liter) minimum; | X1.1.7 Nylon zip ties – multiple sizes; |
| X1.1.4 Motor oil – 1 qt. (1liter) minimum; | X1.1.8 Duct tape; |
| | X1.1.9 Electrical tape. |

X2. RECOMMENDED EMERGENCY EQUIPMENT

X2.1 Recommended Emergency Equipment

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| X2.1.1 Tow strap or rope; | X2.1.8 Road flares – 3 minimum; |
| X2.1.2 Shackles or cable links rated for equipment weight; | X2.1.9 Handheld spot lamp or equivalent; |
| X2.1.3 Snatch block; | X2.1.10 Small shovel; |
| X2.1.4 Straps for securing gear; | X2.1.11 Parachute cord – 50 ft (15m); |
| X2.1.5 Non-slip loading ramps; | X2.1.12 Drinking water – minimum 2 qt (2 liters); |
| X2.1.6 Fire extinguisher – ABC; | X2.1.13 Map; |
| X2.1.7 Horn – canned air; | X2.1.14 Compass. |
| | X2.1.15 Tools for tire repair, tire patch kit and tire inflation device. |

X3. RECOMMENDED SURVIVAL KIT

X3.1 Recommended Survival Kit Contents

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| X3.1.1 Additional clothing suitable for overnight conditions in the normal area of operations; | X3.1.6 Tarp for shelter; |
| X3.1.2 Food and water for 2-3 days; | X3.1.7 Emergency blanket; |
| X3.1.3 Equipment or chemicals for water purification; | X3.1.8 Hand ax or saw; |
| X3.1.4 Weatherproof matches or other dependable means for starting a fire; | X3.1.9 Knife; |
| X3.1.5 Flashlight; | X3.1.10 Plastic whistle; |
| | X3.1.11 Pocket mirror; |
| | X3.1.12 Signal flares; |
| | X3.1.13 Snowshoes (winter conditions only). |

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