

ATV 1 Operations Guide

Wintergreen Fire & Rescue

ATV Operator (ATVO)

The ATV Operator uses All Terrain Vehicle (ATV) or Utility Terrain Vehicle (UTV) class off-road vehicles to complete fire management or rescue activities, including scouting and preparation, fire operations and post-burn monitoring and follow-up. The following standards are designed to ensure operational safety and proficiency have been taught and exhibited in a consistent manner.

Training

The ATV Operator must have appropriate training to operate ATV or UTV equipment. ATV/UTV training must cover the following subject areas:

1. Basic ATV/UTV design: controls, warning labels, operator's manual and equipment safety features.
2. Routine inspection and maintenance.
3. Hazards associated with ATV/UTV use.
4. Personal Protective Equipment (PPE) and safe riding practices.
5. Hands-on demonstration of safe riding skills, including: starting, braking, turning, traversing terrain and obstacles, and parking.
6. Operation of pump and associated equipment.

Instructors for training must be proficient in the subject matter, experienced in demonstrating and coaching safe riding skills and operation of equipment. An instructor may be approved by the relevant Fire Officer for instructing staff and volunteers, based on review of the individual's knowledge, experience, and completion of relevant hands-on ATV/UTV training.

Recognition of prior experience

It is recognized that staff and volunteers may have considerable experience and knowledge in the use of ATV/UTV equipment, but lack documentation of training. The relevant Fire Officer may review an individual's knowledge and experience and certify them as ATV Operator.

Currency

ATV Operator must annually complete training. ATV Operators should bring up safety and lessons learned from mistakes or near-miss incidents from the past year during that portion of annual refresher trainings.

Personal Protective Equipment

In addition to PPE required during fire operations a helmet is required on open or cab-less ATV's that meets or exceeds your state's safety standards. Standard fire hard hats may be used on the fireline when chin straps are in use and equipment operating speeds are kept low relative to the hazards and terrain of the local setting.

Operations

Every geographic region has its own site-specific hazards and challenges for ATV Operators. Safety and operational briefings should mention such local hazards, and fireline supervisors should consider an individual's familiarity with the local setting when making assignments. All ATV Operators, regardless of experience level and local familiarity, are expected to exercise caution and good judgment when operating an ATV or UTV. Operators should examine their vehicle for any special equipment (water spray devices, etc.) and be familiar with relevant safety and function prior to vehicle use. Operators should also pay frequent attention to the security and balance of any tools, water, or fuel loaded on their vehicle.

Care should also be given during the loading or unloading of ATV/UTVs from trucks or trailers. The Ranger should be loaded nose first on the trailer. Ramps should be load-rated, sized appropriately, and secured during use per manufactured design. While transporting ATV/UTVs on public roadways, drivers should ensure that straps or tie-downs of suitable size and number are in use and comply with all applicable motor vehicle laws.

When a fire skid with water is in use the ATV shall be kept in low range.

When changing a skid unit, be sure all four anchors are connected and tight.

The Fire Skid unit: The fire skid unit consists of a 100 gpm pump, 80 gallon water tank, 5 gallon foam tank with an around the pump foam induction unit. The fire skid also has the ability to carry a Stokes basket with a patient should the need arise.

The pump will flow approximately 105 gpm at about 92 psi.

Although the pump is a "self priming pump" it needs to be filled with water in order to draft or draw water. The lift should be no more than 20 feet. Be careful not to run the pump dry as it will damage seals and could seize the bearings.

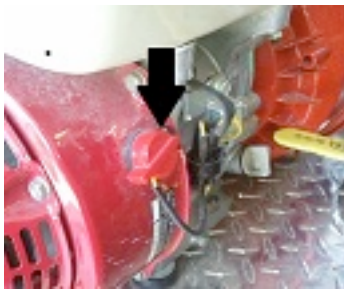
If water is not being flowed, water should be circulated through the pump, back into the tank in order for it to keep from overheating the pump. When circulating water through the tank be careful not to introduce foam into the water tank. Should the pump overheat it is recommended not to open valves until the pump cools down. The pump should not be

run over 3,600 RPM's for extended periods. Normal firefighting operations will probably not fall into "extended operations"

There are miscellaneous hose adapters and connections on the unit that you should familiarize yourself with.

The pump has a cut off switch on the right side of the motor housing. This needs to be in the on position to start the motor for the pump. The fuel shut off switch is kept in the off position and needs to be turned on prior to starting the motor.

When operating the pump for fire operations the throttle should be fully opened. Again care should be taken to not run the pump dry.



Shut off switch



Throttle choke and fuel shut off

There are 2 rubber boots that are part of the intake piping. These boots also act as a sort of pressure relief and should not be tightened too tight. They should also be watched for expansion and leaking. If it is noticed they are starting to bulge or leak this means there is too much intake pressure and the gate valve should be closed appropriately to reduce intake pressure.



rubber boots

The Foam system: The foam system is an around the pump induction system that introduces foam into the system so that it can be released through any discharge.

There are 2 active parts to the system, the foam shut off valve and a proportioning valve.



Shut off valve for foam



foam proportioning valve

The foam nozzle will flow 10 gpm of straight water and anywhere up to 100 gpm of foam.

The blue valve needs to be turned inline to get foam, then the proportioning valve needs to be set for foam generation. There is a table on the side of the proportioner that tells where to set the knob with the arrow and what percentage of foam you will be producing. For normal firefighting a setting of "A" or "B" should be sufficient. If you are trying to lay a blanket to protect a fire line you will have to go at least one full turn or two maybe more.

The Rescue Skid: Be sure the skid is secured properly before putting a patient on the unit, then be sure the patient is secured well and properly. Extreme caution should be taken when transporting a patient.

The driving course: There is a driving course that has been set up so you can be evaluated on your handling of the ATV.

With an evaluator you will run the following course.

The first thing you have to do is back the ATV out of its ridiculously tight parking spot.

ATV1 Practical Application

Note: Must be completed with a Chief or Captain to be released.

Begin at Station One and drive to Grassy Ridge. Access Eagles Swoop off of Grassy Ridge near the fuel tanks. Go up the right side of Eagle. I would advise that you switch to 6x6 when you leave the asphalt. You will eventually need it, and you can't really shift on the fly. Travel down the right side of Tyro. Bring the vehicle to a complete stop a few times. At the base of Tyro do a hard 90 degree turn and you will be facing two slopes. (Sunrise and Big Acorn) Travel up Big Acorn. Be advised there is at least one water bar that will rock you severely. Go past the lift shack and travel down the right side of Eagles Swoop. Stop on the steep pitch and note that the emergency brake will not hold the vehicle. When working incidents on steep pitches, the driver will have to remain belted with the brake pedal depressed or have your partner set the wheel chock located in the rear storage of the vehicle. Approximately half way down Eagle you will see a road on your right which heads up through the woods. Go to the end of that road and circle around the snowmaking and hydrant, then return to Eagle. There is a log across the road which you should run over for practice, if not find one. (You could drive around it) Continue down the right side of Eagle until you reach the parking lot of the Lookout building. Return to Station One.

The last thing you have to do is park the ATV in its ridiculously tight parking spot.

Signature:

Driver

Officer

Print and return a copy to Chief 3 to be placed in your file. Thanks!