

Southeast Coast Network

National Park Service
Inventory & Monitoring Program



Standard Operating Procedure (SOP) #3.1.8

Safe Operations of Off-Highway Vehicles (OHV)

Please cite this as:

Southeast Coast Network. 2013. Safe operations of Off-Highway Vehicles (OHV). Southeast Coast Network Standard Operating Procedure NPS/SECN/SOP-3.1.8. National Park Service, Athens, Georgia.

Summary

Off-highway vehicles are critical to the many operations of the Southeast Coast Network, including vegetation mapping and coastal shoreline monitoring efforts. It is critical that every operator use these vehicles in a safe and appropriate manner.

Revision Log

Previous Version #	Revision Date	Author	Changes Made	Reason for Change	New Version #

Policy

OHVs are official Government vehicles and are for the use of park employees and volunteers while they are conducting Government business. Any other usage of Government vehicles by unauthorized riders during duty or non-duty hours without the express written authorization of the Superintendent is prohibited. Penalties for misuse of Government vehicles are severe.

Maximum park speed limit for OHV use is 25 MPH.

Procedure

SECN utilizes several different types of OHVs. These include all-terrain vehicles (ATV), multiple use vehicles (MUV) and utility terrain vehicles (UTV).

An ATV is any motorized, off-highway vehicle 50 inches or less in width, having a dry weight of 600 pounds or less, traveling on three or more low pressure tires, and having a seat to be straddled by the operator and handlebars for steering control as defined by the ATV Safety Institute. For general Department of Interior use, DOI employees will use only four-wheeled ATVs.

MUVs are side-by-side vehicles used in off-road conditions, having low pressure tires and vary in size. SECN operates a Honda Big Red, which has a 675 cc liquid cooled four stroke engine with four low pressure tires, and is 115 inches long and 64 inches wide. It is capable of carrying two passengers and gear, with a maximum weight capacity of 1,690 pounds. Curb weight is 1,433 pounds. The MUV operates similar to a car or truck, steering with a wheel and powering by foot accelerator, and brakes with a foot brake.

The SECN also operates an amphibious UTV, ARGO Avenger EFI, an eight wheeled amphibious UTV for coastal shoreline surveys. This vehicle operates on different principals with regard to turning and braking compared to the vehicles above. The ARGO is eight wheel driven, turning by braking one side of four wheels. Braking is accomplished by braking the drive chain and not wheels. This vehicle has no suspension system, is powered by a Kohler 747cc liquid cooled engine, dry weight of 1,195 pounds and can accommodate, as rigged, one driver and one passenger in the rear. The ARGO is 119 inches in length, 60 inches wide and has a 3 × 2 meter antenna array on top.

1. Qualifications.

- a. Any person operating a DOI NPS owned ATV, or a personally owned ATV being used for official government business, must have successfully completed the ATV Safety Institutes “*ATV ridercourse*” in order to operate that ATV in SECN parks. Certificate of a completed course is required.
- b. Supervisors shall ensure that every OHV user receives a copy of this SOP **AND** signs the employee accountability form.
- c. The supervisor shall ensure that a Job Hazard Analysis (JHA) is prepared for all projects or activities using OHVs and the operators possess the skills required for the work project or activity.
- d. Only qualified and authorized employees shall operate OHVs. Qualifications include being trained by the supervisor or park personnel for terrain and job to be completed and a thorough review of the OHV manufacturer’s operating manual.
- e. Prior to use of the OHV, the supervisor or park representative shall conduct an evaluation to identify the proficiency level of the operator.
- f. Operators shall receive training in the use of and the loading/unloading of OHVs that includes classroom instruction and practical field exercise or demonstration of proficiency.

2. Personal Protective Equipment.

Personal protective equipment (PPE) REQUIRED for ATV use is as follows:

- a. Approved helmets will be issued by the park.
- b. Appropriate footwear, steel-toed boots or boots a minimum of 6 inches high.
- c. Eye protection (glasses, goggles, or face shield) issued by the park, or personally owned eye protection.
- d. Full coverage gloves.

Personal protective equipment (PPE) REQUIRED for MUV and UTV use is as follows:

- a. Approved helmets will be issued by the Network.
- b. Approved hearing protection during prolonged use.
- c. Approved impact resistant goggles or eyeglasses if operating without the installed windscreen.

Personal protective equipment (PPE) RECOMMENDED for ATV use is as follows:

- d. Long-sleeved shirts.
- e. Long Pants.

3. Other Required Equipment.

- a. First-aid kit.
- b. Personal communication device.
- c. Manufacturer's recommended tool kit.
- d. Fire extinguisher in both the MUV and UTV.
- e. Quart of engine oil and funnel.
- f. Tow strap.
- g. Hand operated ratchet lever winch or power winch.
- h. Soil anchor, as appropriate.

4. Loading and Hauling.

- a. Use a hauling vehicle of adequately rated capacity and capability. A tilt/bed trailer designed especially for ATVs is generally best for hauling ATVs.
- b. Because of the manufacturer installed windscreen, use a box or container trailer designed specifically for hauling the MUV and UTV.
- c. When loading into truck beds, use loading ramps that are sufficiently wide and that secure firmly to the truck bed.
- d. While transporting an OHV, put it in gear, set the parking brake, securely attach to designative tie-down points or in the event of using a truck, to the hauling vehicle and close the tailgate.

5. Operations

- a. All operators are required to be 16 years or older.
- b. All operators are required to follow state laws regarding operating ATVs.
- c. All operators are required to follow park policies and regulations regarding operations of OHVs.
- d. Become familiar with local hazards.

- e. Before riding always perform a pre-ride inspection (check owner's manual for recommended inspection). Otherwise check the following:
 - i. Tires, wheels
 - ii. Controls, clutch, brake, throttle
 - iii. Lights
 - iv. Oil, fuel
 - v. Chassis, suspension, nuts, bolts
- f. For general-use ATVs, never carry passengers. Only under justifiable emergency circumstances, one passenger may accompany the driver. Passengers must face forward straddling the driver or riding "side saddle." **MAXIMUM SPEED WITH A PASSENGER ON BOARD IS 15 MPH.**
- g. MUV and UTV are designed for a driver and one passenger only. This is a design specification for the MUV and a Network configuration of the UTV. No passengers are allowed to ride in the cargo bed of the MUV.
- h. Always turn off the engine when the OHV is parked. Remove the ignition key and set the brake.
- i. When carrying equipment, equalize the load to maintain balance, stability and center of gravity. Never exceed the recommended gross vehicle weight.
- j. Avoid driving on pavement.
- k. Do not drive recklessly or engage in horse play.
- l. Do not ford deep (≥ 8 ") or swift moving water.
- m. ATV and UTV should always avoid operating in salt water.
- n. When operating the MUV, seat belts shall be worn, doors remain closed, and safety side nets closed and secure.
- o. Do not operate an OHV to trail blaze, perpendicular to dunal systems, or off approved soft surface roads and jeep trails.
- p. When parking the OHV, always maintain vehicular passage. Do not block road/trail ways.
- q. Do not operate on pedestrian or horse trails.
- r. Modify an OHV only with the manufacturer's written approval.

OHV Go/No Go Checklist

Items needed:

- A. OHV keys.
- B. OHV tool boxes.
- C. OHV safety action packer (must be prepared prior to departure)
- D. Park radio or other working communication device.
- E. Safety gear for every person (helmets, goggles, gloves, boots, long pants).
- F. ASI ATV Rider Course Completion Card as appropriate.
- G. Spare gas (one 5 gal. container of regular unleaded) as necessary.
- H. Check log book for comments from previous user (in OHV tool box).

OHV Pre-ride Check:

- A. Check level of engine oil and add if necessary, check for oil leaks. The OHVs use SAE 10W-30 4 stroke engine oil.
- B. Check fuel level and add fuel if needed (regular unleaded), check for leaks.
- C. Check tires, air pressure, adjust if needed. Recommended tire pressure is 3.6 psi for ATV tires, 2 psi for UTV tires and 10 psi for MUV. Also look for signs of damage.
- D. Make sure all axle nuts are tightened.
- E. Check driver-shaft boots and tie rods. Look for damage or leaks.
- F. Check the air cleaner housing, clean if needed and or replace air cleaner if needed.
- G. Check for deposits in the drain tube, clean if needed. The clear drain tube hangs in the rear underside of the ATV, next to the underside of the air cleaner housing.
- H. Walk around the OHV and look for anything unusual, such as a leak or loose cable.
- I. Check cable housings and chains for wear. Check the fittings for looseness. Tighten or replace as needed.
- J. Check battery (under the seat), make sure it's completely charged. Check volts with the voltmeter/load tester. Check battery water.
- K. Make sure the headlights, brake lights, and taillights are working properly.

- L. Start the OHV engine to ensure everything is working properly.
- M. For more specific information please refer to the OHV owner's manual located in the OHV tool box, inside the cargo box.

Trailer Check:

- A. Check trailer tire pressure. Note tire specific psi maximum.
- B. Ensure tire hubs are greased. Hubs should be greased prior to any trip over 25 miles and every 6 months minimum.
- C. Properly attach trailer to tow vehicle. Make sure truck has the appropriate ball, and that the attaching safety chains/wires are crossed forming an X.
- D. Make sure the trailer lights are connected and working. This includes brake lights, running lights, turn signals, and hazard lights.

Before Departing:

- A. Notify your branch chief, network coordinator, and appropriate park contacts before and after each trip.
- B. Always bring a large lunch and plenty of water.
- C. Whereabouts of tow vehicle and trailer lock keys.

Daily Cleanup and Maintenance:

- A. Check OHV for damage.
- B. Check oil and fluids as appropriate.
- C. Fill fuel as necessary.
- D. Wash the OHV thoroughly. This includes top to bottom, inside and out. Saline conditions are detrimental to long-term use of the vehicle. When washing, ensure that the tires, wheels, hubs, struts, shocks, axles, and all exposed areas are free of sand, salt and dirt.
- E. Wash windscreens with only soap and water, never using a chemical based glass cleaner. Using a clean cloth, dry the windscreen.
- F. Remove all personal gear, and clean the interior.
- G. Spray all exposed metal features with an approved anti-corrosive spray.

- H. Clean and lube all drive chains. Note manufacturer owner's manual for additional information.
- I. Check and verify that all safety equipment is in sound operating condition.
- J. Stow gear and park OHV in a safe location, ready for the next days use.

References

29 CFR 1910.132, General Requirements

National Park Service Health and Safety Code Handbook, Chapter 19

ATV Safety Institute, <http://home.att.net/~atvsafety/>

Honda MUV700 Owners Manual.

Argo Operators Manual, Manual No. 671-05-1

EMPLOYEE ACCOUNTABILITY FORM

I certify that I have read and I am familiar with SECN Standard Operating Procedure 3.1.8 for off highway vehicles.

I understand that the lack of compliance with this SOP will result in possible disciplinary action.

Name

Date