

Southeast Coast Network

National Park Service
Inventory and Monitoring Division



Standard Operating Procedure 3.1.08

Safe Operations of Off-Highway Vehicles—Version 2.0

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Summary

The following standard operating procedure (SOP) details protocols for the use of off-highway vehicles (OHVs). Off-highway vehicles are critical to operations of the Southeast Coast Network (SECN), including vegetation mapping and coastal shoreline monitoring. Every operator must use these vehicles in a safe and appropriate manner.

Revision Log

Previous Version #	Revision Date	Author	Changes Made	Reason for Change	New Version #
1.0	12/23/2016	Editor	Editorial review	Protocol publication	2.0

Policy

Off-highway vehicles are official government vehicles, and are for the use of park employees and volunteers while they are conducting government business. Any other use of government vehicles by unauthorized riders during duty or non-duty hours without the express written authorization of the program manager (for SECN-owned vehicles) or superintendent (for park-owned vehicles) is prohibited. Penalties for misuse of government vehicles are severe.

Maximum park speed limit for OHV use is 25 miles per hour (mph) (40 kilometers per hour [kph]).

Procedure

The Southeast Coast Network uses 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 (DOI) use, DOI employees will use only four-wheeled ATVs.

Multiple use vehicles are side-by-side vehicles used in off-road conditions, which have low pressure tires and vary in size. The network owns a Honda Big Red, which has a 675 cubic centimeter (cc) liquid cooled four-stroke engine with four low-pressure tires, and is 115 inches (2.9 meters [m]) long and 64 inches (1.6 m) wide. It is capable of carrying two passengers and gear, with a maximum weight capacity of 1,690 pounds (1,766.6 kilograms [kg]). Curb weight is 1,433 pounds (650 kg). The MUV operates similarly to a car or truck; it steers with a wheel, is powered by a foot accelerator, and brakes with a foot brake.

Qualifications

- Any person operating a network-owned ATV, or a personally owned ATV being used for official government business, must have successfully completed the ATV Safety Institutes *ATV rider course* in order to operate that ATV in SECN parks. Certificate of a completed course is required.
- Supervisors will ensure that every OHV user receives a copy of this SOP **AND** signs the employee accountability form.
- The supervisor will 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.
- Only qualified and authorized employees will operate OHVs. Qualifications include being trained by the supervisor or park personnel for the specific terrain and job to be completed and a thorough review of the OHV manufacturer's operating manual.
- Prior to use of the OHV, the supervisor or park representative will conduct an evaluation to identify the proficiency level of the operator.
- Operators will receive training in the use of and the loading/unloading of OHVs that includes classroom instruction and practical field exercise or demonstration of proficiency.

Personal Protective Equipment

- Personal protective equipment (PPE) **REQUIRED** for ATV use is as follows:
 - Approved helmets (issued by the park)
 - Appropriate footwear—steel-toed boots, or boots a minimum of six inches (15 cm) high
 - Eye protection (glasses, goggles, or face shield) issued by the park, or personally owned eye protection
 - Full coverage gloves
- Personal protective equipment (PPE) **REQUIRED** for MUV and UTV use is as follows:
 - Approved helmets (issued by the network)
 - Approved hearing protection during prolonged use
 - Approved impact resistant goggles or eyeglasses if operating without the installed windscreen
- Personal protective equipment (PPE) **RECOMMENDED** for ATV use is as follows:
 - Long-sleeved shirts
 - Long pants

Other Required Equipment

- First-aid kit
- Personal communication device
- Manufacturer's recommended tool kit
- Fire extinguisher in MUVs and UTVs
- One quart of engine oil and a funnel
- Tow strap
- Hand operated ratchet lever winch or power winch
- Soil anchor, as appropriate

Loading and Hauling

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

Operations

- All operators must be at least 16 years old.
- All operators must follow state laws regarding the operation of ATVs.
- All operators must follow park policies and regulations regarding the operation of OHVs.
- Become familiar with local hazards.
- Before riding always perform a pre-ride inspection (check owner's manual for recommended inspection). Otherwise check the following:
 - Tires, wheels
 - Controls, clutch, brake, throttle
 - Lights
 - Oil, fuel
 - Chassis, suspension, nuts, bolts
- 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.**
- Passengers are not allowed to ride in the cargo bed of an MUV or UTV.
- Always turn off the engine when the OHV is parked. Remove the ignition key and set the brake.

- When carrying equipment, equalize the load to maintain balance, stability and center of gravity. Never exceed the recommended gross vehicle weight.
- Avoid driving on pavement whenever possible.
- Do not drive recklessly or engage in horse play.
- Do not ford deep (≥ 8 inches [20 cm]) or any swift moving water.
- Always avoid operating ATV and UTV in salt water.
- When operating an MUV or UTV, wear seat belts, keep doors closed, and keep safety side nets closed and secure.
- Do not operate an OHV for trail blazing or off approved soft surface roads and jeep trails.
- When parking the OHV, always maintain vehicular passage. Do not block roads or trail ways.
- Do not operate on pedestrian or horse trails.
- Modify an OHV only with the manufacturer's written approval.

OHV Checklist

Items Needed

- OHV keys
- OHV tool boxes
- OHV safety box (must be prepared prior to departure)
- Park radio or other working communication device
- Safety gear for each person (helmets, goggles, gloves, boots, long pants)
- ATV Safety Institute (ASI) ATV Rider course completion card as appropriate
- Spare gasoline (one five-gallon [20-qt]) container of regular unleaded gasoline) as necessary
- Check log book for comments from previous user (in OHV tool box)

OHV Pre-ride Check

- Check level of engine oil and add if necessary; check for oil leaks. The OHVs use SAE 10W-30 four-stroke engine oil.
- Check fuel level and add fuel if needed (regular unleaded); check for fuel leaks.
- Check tires and air pressure; adjust if needed. Recommended tire pressure is 3.6 pounds per square inch (psi) for ATV tires, 2 psi for UTV tires and 10 psi for MUV. Also look for signs of damage.
- Make sure all axle nuts are tight.
- Check driver-shaft boots and tie rods. Look for damage or leaks.
- Check the air cleaner housing; clean if needed and replace air cleaner if needed.
- 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.
- Walk around the OHV and look for anything unusual, such as a leak or loose cable.
- Check cable housings and chains for wear. Check the fittings for looseness. Tighten or replace as needed.
- Check battery (under the seat); make sure it is completely charged. Check volts with the voltmeter/load tester. Check battery water. This should also be done prior to leaving headquarters.
- Make sure the headlights, brake lights, and tail lights are working properly.

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

Trailer Check

- Check trailer tire pressure. Note tire-specific psi maximum.
- Ensure tire hubs are greased. Hubs should be greased prior to any trip over 25 miles (40.2 km) and every six months, at minimum.
- Properly attach trailer to tow vehicle. Make sure truck has the appropriate ball, and attaching safety chains/wires are crossed forming an X under the hitch.
- Make sure trailer lights are connected and working. This includes brake lights, running lights, turn signals, and hazard lights.

Before Departing

- Notify your branch chief (protocol lead) program manager, and appropriate park contacts before and after each trip.
- Always bring sufficient food and plenty of water.
- Note location of tow vehicle and trailer lock keys.

Daily Cleanup and Maintenance

- Check OHV for damage.
- Check oil and fluids as appropriate.
- Fill fuel as necessary.
- Wash 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 tires, wheels, hubs, struts, shocks, axles, and all exposed areas are free of sand, salt and dirt.
- Wash windscreens with only soap and water, never using a chemical based glass cleaner. Dry the windscreen with a clean, dry cloth.
- Remove all personal gear, and clean the interior.
- Spray all exposed metal features with an approved anti-corrosive spray.
- Clean and lube all drive chains. Note manufacturer owner's manual for additional information.
- Check and verify that all safety equipment is in sound operating condition.
- Stow gear and park OHV in a safe location, ready for use the next day.

Literature Cited

U.S. Department of Labor. 2015. OSHA Regulations: 29 CFR 1910.132, General Requirements. Available at:

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9777 (last accessed December 2016).

National Park Service (NPS). 2015. Occupational Safety and Health Program. Chapter 19. Available at <http://www.nps.gov/policy/RM50Bdoclist.htm> (last accessed December 2016).

ATV Safety Institute 2015. <http://www.atvsafety.org/> (last accessed December 2016).

EMPLOYEE ACCOUNTABILITY FORM

I certify that I have read and I am familiar with SECN Standard Operating Procedure 3.1.08 *Safe Operations of Off-Highway Vehicles—Version 2.0*.

I understand that non-compliance with this SOP may result in disciplinary action.

Name

Date