

**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**Bureau of Land Management**  
**Oregon State Office**  
**P.O. Box 2965**  
**Portland, OR 97208**

**In Reply Refer to:**

1112 (OR-950) P  
Manual 1112-1

July 8, 2003

EMS TRANSMISSION 07/10/2003  
Instruction Memorandum No. OR-2003-093  
Expires: 9/30/2004

To: DMs, DSDs, Staff and Branch Chiefs

From: State Director

Subject: Oregon/Washington Off-Highway Vehicle (OVH) Policy

**Program Area:** Safety and Occupational Health

**Purpose:** To establish requirements and procedures for Bureau of Land Management (BLM) employees who use all terrain vehicles (ATVs) and/or off-highway motorcycles (OHMs) to accomplish field work. To assure the safe operation of these types of vehicles, specialized training, equipment and proper operating procedures are required. This policy outlines qualifications and required training for employees, lists appropriate personal protective equipment that must be used with each type of vehicle, specifies safe operating procedures for use and transport, and identifies safe procedures for loading and unloading of both ATVs and OHM as appropriate. Examples of a risk management matrix and an inspection check sheet for ATVs are illustrated. Additionally, several examples of Job Hazard Analysis (JHAs) for both types of Off-Highway Vehicles (OHV) are included in the policy.

**Policy/Action:** In order to provide for the safe operation of OHVs, the following initiatives will be implemented. (Reference the attached policy for specific requirements.)

1. Supervisors will ensure that all employees are properly trained and certified prior to ATV/OHM use. All required personal protective equipment will be provided. (Note: The use of three-wheeled ATVs by BLM employees for Government business is not authorized.)
2. Employees will comply with all requirements of this policy. To ensure safety, employees will consistently establish and maintain reliable communication links with the field office when in remote field locations. Check-out/check-in procedures are required.

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3. Supervisors will ensure that a reliable search and rescue procedure is in place as part of the safety plan.

**Timeframe:** Immediately

**Background:** The Oregon/Washington BLM has not had a comprehensive OHV policy in place. This policy

establishes minimum requirements for the state office and all districts. Districts may use this policy as a template to create an OHV policy specific to their needs.

**Manual/Handbook Sections Affected:** Supplemental to the BLM Manual Handbook 1112-1 Safety and Health Management

**Coordination:** Safety and Health

**Contact:** Peggy Tribble, Oregon State Office Safety Manager, 503-808-6202.

**Districts with Unions** are reminded to notify their unions of this IM and satisfy any bargaining obligations before implementation. Your servicing Human Resources Office or Labor Relations Specialist can assist you in this matter.

Signed by  
Charles E. Wassinger  
Associate State Director

Authenticated by  
Mary O'Leary  
Management Assistant

1 Attachment(s)

1 - [Off-Highway Vehicle \(OHV\) Policy](#) (19 pp)

Distribution

WO-740

**United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
OREGON STATE OFFICE**

**Robert Duncan Plaza Building  
333 SW 1<sup>st</sup> Avenue  
Portland, Oregon 97204**



**ALL TERRAIN VEHICLES (ATV)  
And  
OFF HIGHWAY MOTORCYCLE (OHM) POLICY**

OR/WA Supplement to BLM Manual Handbook 1112-1  
Safety and Health Management

**June 2003  
Oregon/Washington**

# ALL TERRAIN VEHICLES OFF HIGHWAY MOTORCYCLES SAFE OPERATION POLICY

## 14.4.1 Purpose

Oregon and Washington BLM employees use all terrain vehicles (ATVs) and off highway motorcycles (OHMs) as field resource tools. When used properly, these vehicles allow greater efficiency in work assignments. However, both types of vehicles can present significant safety hazards to employees not properly trained in their operation and use. To assure safe operation of ATVs and OHMs, specialized training, equipment and proper operating procedures are required. The use of three-wheeled ATVs by BLM employees for Government business is prohibited. (Reference BLM Manual Handbook 1112-2)

## 14.4.2 Training and Qualifications

All employees who intend to use ATVs or OHMs while performing work assignments are required to complete a comprehensive training course prior to operation. Instructors certified by the ATV Safety Institute and/or Motorcycle Safety Foundation or equivalent will provide training. This training will include information and demonstration of safe operating procedures as well as proper selection and use of personal protective equipment (e.g., helmets, gloves, goggles, chest protectors, knee and elbow pads, and boots). Supervisors are responsible to schedule training for each employee.

After completing course requirements, all operators will have training documented. A certification card may be issued to accompany the certificate of training. Refresher training is conducted a minimum of each three (3) years. (Refresher training is considered to be a “check ride” with a certified trainer/coach.)

For ATV/OHM operation, minimum training includes, but is not limited to the following:

- Safety requirements
- ATV components and controls
- Pre-operational checks
- ATV operation
- Use of trailers, racks [this is a job-specific attachment) and spray equipment
- Environmental considerations
- Loading/Unloading and Transporting Operations [ATV specific] (*See Appendix 1*)
- Trail Etiquette

The supervisor will ensure that a Job Hazard Analysis (JHA) is in place for all projects or activities using ATVs. Supervisors will further ensure that all operators possess the skills required for the assigned work activity.



### **14.4.3 Personal Safety and Mechanical Equipment**

The use of proper personal protective equipment (PPE) is required during all ATV/OHM operations. At a minimum, the following is required:

- Approved helmet for vehicle use (approved by ANSI<sup>1</sup>)  
(This helmet is substantially different from a “hard hat.”)
- Eye protection appropriate for ATV/OHM use such as goggles (recommended for OHM) or a face shield [Note: typical safety glasses are not adequate]
- Sturdy, protective gloves
- Appropriate footwear (e.g., work boots: 8” leather or MX-style boots)
- Long pants and long-sleeved shirt or jacket
- Additional items as identified in the JHA (e.g., kidney belt, chest protector, knee and elbow pads when employee is engaged in patrols, law enforcement, and all OHM operations)

The items listed below will be carried on the vehicle at all times:

- First aid kit
- Tools for emergency repairs (e.g., a manufacturer’s tool kit)
- Fire extinguisher (for ATV use only)

### **14.4.4 Communications**

All employees who operate ATVs/OHMs in remote locations must establish and maintain reliable communication links with the field office/dispatch. Check out/check in procedures as well as a specific search and rescue plan for overdue employees is required. Supervisors will ensure employees are held accountable for following specified procedures.

### **14.4.5 Safe Operation**

Operators will not engage in any of the following:

- Side hilling on slopes in excess of 5% grade
- Operation of an ATV/OHM on roads open to regular vehicle traffic (specifically paved roads such as county and state highways) [Note: This stipulation is not to be confused with the roads within the BLM trail system that are open to “regular” traffic. These “shared use” roads are signed.]
- Hauling of unsecured tools and equipment
- Transporting passengers
- Riding Alone

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<sup>1</sup> ANSI – American National Standards Institute



#### **14.4.6 Assignment and Checkout**

Dependent upon work assignments and supervisory need, ATVs/OHMs are pooled or assigned to an individual employee or a work group. Regular service checks and scheduling of maintenance is the responsibility of the individual or group. Prior to use, operators will perform a thorough safety check of the vehicle and report/repair any deficiencies. Upon return, the operator will note any mechanical difficulties experienced and ensure repairs are completed prior to future use.



## Appendix 1

### **ATV/OHM Safe Operating Procedures Loading, Unloading, and Transport**

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The loading, unloading and transport of ATVs/OHMs are high-hazard operations. Only qualified (trained) operators are permitted to load, unload, and transport ATVs. A Risk Assessment must be completed prior to all load and transport operations. (See Appendix 2 for Risk Assessment example for ATV operations.)

The preferred method of transporting ATVs is via a tilt bed trailer. Trailers normally have built-in ramps and are set lower to the ground, decreasing the loading angle. If operational reasons require transport of an ATV via truck, it is strongly recommended that a winch be mounted either on the ATV or the truck (pick-up) and that the winch is used for all loading and unloading operations. If the ATV must be driven on to a truck bed, the following procedures govern BLM personnel.

The preferred method for transporting OHMs is a rail-type or flat bed trailer. If an OHM is to be transported in the bed of a truck, it must be pushed rather than ridden into the truck.

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#### **Personal Protective Equipment (PPE)**

All required PPE as determined by the Risk Assessment or JHA, and/or manufacturer's recommendations, must be worn while loading and unloading ATVs or OHMs to/from vehicles. This includes at least an approved motor vehicle helmet, leather boots (MX-style), appropriate gloves, and eye protection.

#### **Loading Ramps – Type and Size**

Loading ramps must be of welded aluminum or steel construction. Ramps may be composed of one, two or three pieces and may be rigid or folding design. Ramp loading surfaces must have closely spaced cross members or mesh construction with a high traction surface. Wooden and plastic ramps **are not approved** for loading and unloading ATVs/OHMs.

Ramps must have a minimum rated capacity of 1000 pounds. For 500cc ATVs and larger, or an ATV fitted with an external spray tank or other heavy accessory, ramps must be at least rated for the estimated load plus a 10% safety margin.

One piece, bi- or tri-fold ramps must be a minimum of 46 inches wide when extended for loading. One-piece ramps must be wider than the distance between the ATV tires as measured from the outside of the left tire to the outside of the right tire. For two-piece ramps, each ramp must be a minimum of 10 inches wide. Ramp length must be a minimum of 84 inches (7 feet) long when extended for loading.



All ramps must have chains or straps to secure the ramp to the vehicle tailgate via the vehicle's trailer hitch or rear bumper. The use of ramp chains or straps during loading and unloading is mandatory to prevent rearward movement of the ramps.

Tie downs sufficient to secure the ATV/OHM to the vehicle must be available. Eyebolts installed in the vehicle must be capable of holding 1500 pounds. Stake pocket tie downs, available at many auto or trailer retail stores, are an alternative to eyebolts. Stake pocket tie downs must have a 1500-pound capacity.

### **Vehicle/Ramp Position**

The ramp angle from vehicle to ground greatly influences the level of risk when loading/unloading ATVs/OHMs. If the angle is reduced, and all other conditions remain the same, the risk is reduced. The truck should be positioned to take advantage of any terrain features that will help reduce the ramp angle. The operator should consider the following methods to reduce the ramp angle.

- The use of a loading wall, if available, or positioning the rear of the truck near a berm will reduce the ramp angle from truck bed to ground. If the loading wall is the correct height, it may eliminate the need for ramps and allow roll-on/roll-off loading.
- The truck may be positioned with the rear wheels in a depression (e.g., a ditch) to reduce the ramp angle. This lowers the bed of the truck and allows the ramps to be located on higher ground on the far side of the depression.

Loading ramps must be secured to the truck bed with chains or straps designed for that purpose. When in position for loading, the chains/straps must be taut with no slack or sag. Two piece loading ramps must be positioned parallel and spaced so the ATV tires are centered on the ramp. One-piece ramps must be centered on the truck bed and the ATV driven on the center of the ramp. Ramps must be positioned to ensure level ground contact. Uneven ramps may cause side tip over hazards.

### **Loading/Unloading Technique**

The ATV racks should be unloaded prior to transport. Heavy cargo must be removed and spray tanks emptied. If these items cannot be removed, sandbags or other heavy objects should be secured to the opposite cargo rack to ensure balance. The best method of loading an ATV with attachments is by use of a winch.

Padding should be placed at the front of the vehicle bed to provide protection to the vehicle and the ATV and to assist in absorbing impact during loading. (A rimless tire may be used.) ATV wheels should be carefully aligned with the ramp. When preparing to load/drive the ATV into the bed of a vehicle, the operator should be standing with feet positioned on the footrests. This position ensures a more balanced center of gravity. Always load an ATV with the front facing the front of the vehicle. The operator should apply throttle smoothly and climb the ramp at



low speed to maintain control and avoid contacting the front of the vehicle bed. The operator should lean toward the uphill direction (toward the ramp) to maintain balance.

The safest method of unloading an ATV is to push the machine down the ramp; applying brakes to maintain control. When riding the machine down a ramp, ensure proper alignment of the wheels with the ramp. The operator should apply sufficient throttle to start the roll down and then allow the ATV to roll backward while using light pressure on the brakes. The rear brake should **not** be used when backing down a ramp as this may lock the rear wheels and cause the machine the flip backwards.

ATVs/OHMs with manual transmissions must be transported in first gear with the brake set. ATVs with automatic transmissions should be transported in the “park” position with the brake set. In addition, the ATV/OHM ignition key should always be turned off and removed, the run/stop switch left in the “stop” or “off” position, and the fuel lever switch turned to the “off” position. Employees should not load or unload OHMs into truck beds that cannot be accessed easily (step up) from the ground while pushing the bike up the ramp. Two individuals are required for loading; one person should be in the bed of the truck to receive the bike and operate the front brake to prevent the bike from rolling backward, and, a second person on the ground to push the bike up the ramp.

### **Securing of Load**

Blocking devices must be installed in the front, back and on both sides of the wheels to prevent the ATV from rolling. Use of blocks is an additional safety precaution in addition to the strap requirement.

One-inch wide nylon straps with metal end hooks and ratchet buckles with a minimum rated capacity of 1500 pounds are required to secure the ATV/OHM to the vehicle. (The use of cam lock type tie downs is not recommended.) Cam action, non-ratcheting buckles or rope tie downs will not be used to secure ATVs.

A minimum of four (4) tie downs will be used to secure an ATV to the vehicle. Two tie-down straps will be used at the front and the remaining two will secure the rear of the ATV to the vehicle. Hooks on the tie-downs should be attached to the frame tubing of the ATV. Do not attach hooks to the cargo racks of the ATV. Hooks on the other end must be attached to vehicle cargo anchors or similar suitable anchor point.

A minimum of two (2) tie downs will be used to secure the OHM to the vehicle. Hooks on the tie-downs should be attached to the handlebars (Note: Take care not to pinch electrical wires or control cables). Hooks on the other end must be attached to the vehicle cargo anchors. Once all hooks are secure, pull or ratchet the tie downs to compress the front forks, securing the bike against the front of the truck bed or upright front of the trailer. This will eliminate side-to-side movement of the bike. If a rail type trailer is being used, an additional cam type strap should be wrapped around the rear wheel and trailer rail to prevent the rear wheel from jumping out of the rail on rough roads.



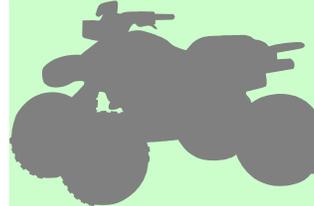
## Appendix 2

### Risk Management – ATV Operation

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**Step 1: IDENTIFY THE HAZARDS:** Look at the hazards associated with ATV operations:

- Experience of operator
- Accidents (falls, rollovers, collisions)
- Weather (wind, cold, and heat)
- Location (river, stream, forest, hilly and rocky terrain)
- Wildlife (moose, bears, wolves, and insects)
- Exceeding limitations (operator or ATV)
- Fueling (spills, vapors, and explosions)
- Lost or stranded
- Drinking



**Step 2: ASSESS THE RISK:** Then assess the impact of each hazard in terms of potential loss and severity:

- Has the operator received required training
- Injuries associated with accidents and collisions: sprains, fractures, lacerations, head injuries, contusions, burns, etc.
- Incidents related to the weather and water: dehydration, hypothermia, exposure, and drowning
- Animal attacks, insect-borne diseases, and skin irritations
- Possible accident injuring the operator or damage to the ATV
- Fire or explosions
- Is your riding area marked, are you prepared to spend the night
- Intoxication, impaired judgment, and reaction time

**Step 3: ANALYZE RISK CONTROL MEASURES:** Once you have identified the hazards and assessed the associated risk, identify controls that can be employed to reduce or mitigate the hazards:

- Training: Take an approved ATV/OHM operator training course. Be thoroughly familiar with the machine and proper operation. Read and comply with manufacturer's instructions for safe operations
- Start with a good plan. Always plan to avoid costly errors. Consider all the possibilities of something going wrong and be prepared.
- Check the weather prior to starting. Depending on duration and location of travel, get a forecast of the weather and plan accordingly. Remember the weather can change abruptly, so always prepare for the worst
- Inspect the ATV/OHM prior to operating. Ensure it is mechanically sound.



- Familiarize yourself with the area and respect to the terrain. Travel ONLY in areas authorized for ATV/OHM use. Avoid streams, rivers, muddy trails, and steep hillsides. Never operate an ATV on paved surfaces, they are designed for off road use only
- Do not travel alone in remote, unpopulated areas, and avoid splitting up if traveling with a group. Let someone know where you are going and when to expect your return. Have a map and/or Global Positioning System (GPS)
- Never ride with passengers and do not attempt wheelies, jumps, or stunts
- Ensure Personal Protective Equipment is worn (helmet, goggles, boots, gloves, long sleeve shirt or jacket, long pants, chest protector, and elbow and knee pads)
- Know your physical limitations and the limitations of the ATV/OHM and do not exceed them. Do not operate an ATV/OHM at excessive speeds
- Use extreme care when fueling. Fuel in well-ventilated areas and take precautions against static discharge
- Be familiar with the kinds of wildlife around you; their behavior and the actions to take if you encounter them
- Never consume alcohol or drugs before or while operating an ATV/OHM

**Step 4: MAKE CONTROL DECISIONS:** Accept the risk, avoid the risk, reduce the risk, or spread the risk. Do not make uninformed decisions.

**Step 5: RISK CONTROL IMPLEMENTATION:** Once you select appropriate controls, use them consistently and review them for effectiveness.

**Step 6: SUPERVISE AND REVIEW:** As always, the situation is subject to change quickly. Monitor the situation and adjust as necessary to keep things under control. Summer is a great time to have fun and we all deserve a break every now and then. From now on, use risk management to make your summer fun, memorable, and safe. No one wants a summer outing to turn into a tragedy.



# Appendix 3

## OREGON STATE OFFICE ALL TERRAIN VEHICLES/OFF HIGHWAY MOTORCYCLES INSPECTION SHEET

Date \_\_\_\_\_ District/Resource Area \_\_\_\_\_

<b>ATV/OHM INSPECTION SHEET</b>			
	Satisfactory	Unsatisfactory	COMMENTS
1. Periodic Service (as required)			
2. Head and Brake Lights (operational and clean)			
3. Battery (corrosion and connections)			
4. Drive Chain/Shaft (serviceable and operational)			
5. Suspension, Springs, Shocks (serviceable and tight)			
6. Tires - Air Pressure (inflated and tread)			
7. Wheels - Breaks and Cracks			
8. Lug Nuts (tight)			
9. Exterior (clean)			
10. Gauges, Speedometer, Odometer (operational, proper indications)			
11. Brakes (effective and adjusted) [brake fluid level]			
12. Steering (tight)			
13. Frame Nuts, Bolts, Fasteners (pre-ride)			
14. Air-Filter - Pre-cleaner			
15. Air Box Sediment Tube			
16. Radiator (clean)			
17. Fuel			
18. Coolant/Level Inspection			
19. Engine Oil (engine oil or 2-cycle oil)			
20. Road Test			
		<p><b>NOTE:</b> ALL personal protective gear must be checked for damage and serviceability, dependent upon type of vehicle to be used</p> <p><b>COMMENTS:</b> _____</p>	



# Illustration 14.4 - 1

## All Terrain Vehicle/Off Highway Motorcycle Operator Card Example

(Use of this card as an addition to the ASI or MSF certificate of training is optional.)



**ALL TERRAIN VEHICLE  
OFF HIGHWAY MOTORCYCLE  
OPERATOR CARD**

Name \_\_\_\_\_

District/RA \_\_\_\_\_

Cardholder has received required training  
and is authorized to operate an ATV/OHM  
as required for work assignments.

Issue Date \_\_\_\_\_ Expiration Date \_\_\_\_\_

Instructor's Signature \_\_\_\_\_



## Illustration 14.4 - 2 ATV/OHM – Job Hazard Analysis Example

Department of the Interior Bureau of Land Management JOB HAZARD ANALYSIS  ALL TERRAIN VEHICLES		Date _____  Page _____ of _____	New _____ Revised _____  Reviewed By _____
Work Group	Supervisor	Qualifications, training, experience required:	
Personal Protective Equipment:			
<b>BASIC JOB STEPS</b>	<b>POTENTIAL HAZARDS</b>	<b>SAFE JOB PROCEDURES</b>	
Operation of ATV/OHM           Loading/Unloading & Transporting ATVs/OHMs           Preparations for Use of ATV/OHM           Operation in rough terrain, on steep slopes           Transporting equipment & supplies	Personal injury or death           Personal injury or death, damage to ATV/OHM truck, or trailer           Personal injury or death, damage to equipment and environment           Personal injury or death; damage to ATV/OHM, environment           Personal injury or death; damage to ATV/OHM, equipment, supplies	Engineering Controls-Substitution-Administrative Controls-PPE Adhere to standard and safe operating procedures. PPE required; ANSI approved crash helmet, safety goggles, gloves, lace-up/non-skid boots, long pants, and long sleeved shirt. All ATV/OHM operators will have successfully completed a ASI/MSE certification class (or other) and have in possession a certificate of qualification. The operator will also have this qualification noted on the ATV operator card A review of safe ATV operating procedures will be conducted prior to projects requiring the use of ATVs, including the appropriate JHA, Health & Safety Code, owner’s manual, warnings and other industry and manufacturer’s publications.           Securely attach a properly designed ramp to vehicle to eliminate slippage from tailgate or use the natural terrain when loading and unloading from truck or trailer. When traveling on natural terrain, avoid a large gap from tailgate to ground. When transporting, ATVs shall be in gear, parking brake set and secure in place with ropes for tie downs. Ensure the ATV will not roll and hit rear window. Trailer must have safety chains and properly working lights.           Perform pre-trip inspection; check tires & wheels; controls & cables; lights& electrics (ignition switch, engine stop switch); oil & fuel; drive shaft; chain; and chassis. Engage in warm-up exercises to assist in preventing muscle strain & injury. When refueling, allow machine to cool. Avoid spills. Refer to MSDS as required.           Watch for low limbs, holes, large rocks. Slow down when in rough terrain; avoid traversing side slopes that are steep, slippery or very bumpy. Drive straight up or down slope for safety when possible. Use body weight to balance ATV. If a tip over seems likely, turn front wheels downhill if terrain allows. Otherwise, attempt to shift weight uphill. If not successful, quickly dismount to the uphill side, avoiding the hot areas of the engine and exhaust system. When approaching unknown terrain, slow to a speed that will allow for a complete stop within the limit of visibility. In extremely rough terrain, dismount and scout travel route on foot. Always use parking brake when dismounting ATV.           Follow the principles of <i>“Light on the Land”</i> & <i>“Tread Lightly”</i> Tie loads securely to racks properly fastened to ATV. Ensure that the load does not exceed the design capability of racks and manufacturers weight limits. The center of gravity shall be as low as possible. Distribute weight evenly between front & rear axles. Exercise caution when loading, ensuring load does not interfere with operation of ATV and the rider’s ability to dismount in an emergency. Avoid working alone. Carry a radio or other communication device.	
LINE OFFICER SIGNATURE		TITLE	DATE



**Illustrations 14.4 – 3, 4 and 5**

**3 JHA – ATV Tow Trail Drags (2 pgs) 4 JHA – Motorcycle Operations (2 pgs) 5 JHA – ATV Operations (3 pgs)**

FS-6700-7 (2/98)			
U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY <b>Trail Drags</b>	2. LOCATION <b>COHVOPS</b>	3. UNIT
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and -12 (Instructions on Reverse)	4. NAME OF ANALYST <b>Sarah Schartz</b>	5. JOB TITLE <b>OHV Coordinator</b>	6. DATE REVISED <b>6/4/03</b>
7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS <i>Engineering Controls * Substitution * Administrative Controls * PPE</i>	
<b>Personal Safety</b>	<b>Unqualified Personnel</b>  <b>Personal Protective Equipment</b>	<p>All operators must be graduates of an approved ATV rider course in addition to having an endorsement on their government driver's license. Operators will need to have additional training to operate ATV's with trail grooming equipment.</p> <p>All operators shall wear helmets, goggles, long-sleeved shirts, long pants, boots over the ankle, dust mask if appropriate and gloves.</p>	
<b>Communications</b>	<b>Being Stranded/ Confusion</b>	<p>At least one rider in each group will carry a hand held radio and spare clamshell for communications. Cell phones are optional. Let people know your destination and expected return time. Make contact with other persons occasionally as to your location and status. During operations identify people trained in first aid who will provide care in case of accident and/or injury. Be aware of your location at all times</p>	
<b>Drag Operations</b>	<b>Injury/Equipment Damage</b>  <b>Trail Collisions</b>	<p>Tow trail drags in low range, four-wheel drive. Become familiar with how drags follow the ATV. Be aware of different handling characteristics of ATV when towing drags.</p> <p>If possible, close the trail or place "Cation, groomer ahead" signs at appropriate intervals. High visibility flags on the grooming implements increase visability for riders.</p>	
<b>Maintenance</b>	<b>Accidents/Injury/ Burns</b>	<p>Check over equipment before use. Do not use equipment if it is damaged. Check fluid levels in hydraulic cylinders periodically. Check nuts, bolts, and any moving parts to see that they are operating correctly. Understand service procedure before doing work. Keep all parts in good condition and properly installed. Fix damaged parts immediately. Clean grease, oil, and debris buildup on machine daily. Report damage or malfuntions to Operations Foreman.</p>	

<p align="center"><b>Driving On Slopes</b></p>	<p align="center"><b>Rollovers</b></p>	<p>Be aware of slope restrictions. Exaggerate weight transfer when dragging super-elevated curves.</p>
<p align="center"><b>ATV Tow Trailer Drags - Page 2</b></p> <p align="center"><b>Driving On Rough Or Uneven Ground</b></p>	<p align="center"><b>Accidents</b></p>	<p>Watch for rock or log hazards that can make a drag become high-centered or roll over. Raise drags to clear obstacles. Maintain safe operating speed. Keep center of gravity as low as possible</p>
<p align="center"><b>Driving On Roads/Traffic</b></p>	<p align="center"><b>Accidents</b></p> <p align="center"><b>Parking Accidents</b></p> <p align="center"><b>Backing Accidents</b></p>	<p>Be cautious when crossing roads. Stop, look and then proceed. When driving on roads always drive on edge of roadway keeping alert of traffic. Always give other forest users the right-of-way. Try to drive to the side of paved roads on the shoulders with caution and at slower speeds.</p> <p>Always park well off roadway or trail. Leave vehicle parked in gear with parking brake set.</p> <p>While backing the ATV be aware of the ground hazards and that the steering is reversed and at a much quicker reaction time than operating in the forward mode. Be aware of difficulty backing a drag. Also note that some ATV'S automatically disengage the four wheel drive system in reverse. Use override button if 4X4 is needed.</p>
<p align="center"><b>Trailer</b></p> <p align="center"><b>Trailer</b></p>	<p align="center"><b>Loading Accidents</b></p> <p align="center"><b>Travel Accidents</b></p>	<p>Always proceed slowly and in low gear. Make sure trailer is fully secured to tow vehicle before loading. Remove snow, ice, and dirt from trailer and ramps before loading. Transfer weight forward while climbing ramps by leaning over handlebars. When loaded set parking brake, lower drags. Secure the ATV's and drags with approved tie-downs.</p> <p>Make sure all trailer lights are working and trailer is properly hooked up to tow vehicle. Check tires. Make sure ramps are secure. Drive defensively at all times</p>



**Illustrations 14.4 – 3, 4 and 5**

**3 JHA – ATV Tow Trail Drags (2 pgs) 4 JHA – Motorcycle Operations (2 pgs) 5 JHA – ATV Operations (3 pgs)**

FS-6700-7 (2/98)			
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<b>Personal Safety</b>	<b>Unqualified Personnel</b>  <b>Over Confidence</b>  <b>Personal Protective Equipment</b>	<p>All operators must have an endorsement on their government driver's license. Know the specific controls and handling characteristics of the motorcycle you are riding.</p> <p>Do not ride when fatigued. When using a motorcycle and the situation is deemed unsafe, an alternative method shall be used or the task canceled. There is no shame in saying "no".</p> <p>All operators should be physically capable of riding. All operators shall wear helmets, goggles, long-sleeved shirts, long pants, appropriate footwear and gloves. Additional PPE is required when riding alone.</p>	
<b>Communications</b>	<b>Being Stranded/ Confusion</b>	<p>Operators should work in pairs. At least one rider in each group will carry a hand held radio and a clamshell. Cell phones are optional. Someone in COHVOPS should know your location and expected return time. Make contact with other persons occasionally as to your location and status. During operations identify people trained in first aid who will provide care in case of accident and/or injury. Be aware of your location at all times</p>	
<b>Fueling</b>	<b>Fire/Engine Damage</b>  <b>Spills</b>	<p>Wait for machine to cool before fueling. Never smoke while fueling any piece of equipment. If machine requires mixed fuel, mix it according to manufacturers guidelines.</p> <p>Do not overfill tank, leave at least one inch of airspace beneath cap. If a minor spill occurs clean up site. If a spill occurs isolate and clean up.</p>	
<b>Maintenance</b>	<b>Accidents/Injury/ Burns</b>	<p>Never maintain motorcycle while engine is running. Allow motorcycle to cool down before working around engine and other hot parts. Understand service procedure before doing work. Keep all parts in good condition and properly installed. Fix damaged parts immediately. Clean grease, oil, and debris buildup on machine daily. Report damage or malfunctions to Operations Foreman.</p>	

<p><b>Motorcycle Operations Page 2</b></p> <p><b>Riding On Slopes</b></p>	<p><b>Rollovers</b></p>	<p>Observe procedures recommended for uphill and downhill use in the manufacturer's operating manual.</p>
<p><b>Riding On Rough Or Uneven Ground</b></p>	<p><b>Accidents</b></p>	<p>Reduce speed when riding on rough ground. Watch for rock or log hazards that can make a motorcycle become high-centered. Drive around obstacles. Do not transport equipment on a motorcycle. Maintain safe operating speed. When crossing cattleguards, cross as close to 90 degrees as possible and be aware of wet or icy conditions. Ride defensively. Look through the turns. Have light on, if so equipped. Do a thorough pre-operation check before riding. Make sure kickstand is up and stays up. Use correct tire pressure for the soil conditions.</p>
<p><b>GPS work</b></p>	<p><b>Accidents</b></p>	<p>Secure GPS unit so you can keep both hands on the handlebars. Keep focused on driving, not on the GPS unit.</p>
<p><b>Riding On Roads/Traffic</b></p>	<p><b>Accidents</b></p>	<p>Be cautious when crossing roads. Stop, look and then proceed. When driving on roads always drive on edge of roadway keeping alert of traffic. Always give other forest users the right-of-way. Try to drive to the side of paved roads on the shoulders with caution and at slower speeds.</p>
<p><b>Parking</b></p>	<p><b>Parking Accidents</b></p>	<p>Always park well off roadway or trail. Leave vehicle parked in gear, put the kickstand (if so equipped) down.</p>
<p><b>Trailer</b></p>	<p><b>Loading Accidents</b></p> <p><b>Travel Accidents</b></p>	<p>Secure ramps to trailer or pick-up with tie downs before loading motorcycles. Make sure trailer is fully secured to tow vehicle before loading. Remove snow, ice, and dirt from trailer and ramps before loading. Transfer weight forward while climbing ramps by leaning over handlebars. When loaded turn off fuel. Secure the motorcycles with approved tie-downs and make sure the loads are secured.</p> <p>Make sure all trailer lights are working and trailer is properly hooked up to tow vehicle. Check tires. Secure ramps. Drive defensively at all times.</p>





<p><b>ATV Operations - Page 2</b></p> <p style="text-align: center;"><b>Maintenance</b></p>	<p style="text-align: center;"><b>Accidents/Injury/ Burns</b></p>	<p>Always perform a pre-ride inspection. Never exceed recommended tire pressures. Use a pressure guage when inflating tires. Never maintain ATV while engine is running. Allow ATV to cool down before working around engine and other hot parts. Understand service procedure before doing work. Keep all parts in good condition and properly installed. Fix damaged parts immediately. Clean grease, oil, and debris buildup on machine daily. Report damage or malfunctions to Operations Foreman. Always carry a screwdriver, spark plug wrench and a spare spark plug.</p>
<p style="text-align: center;"><b>Carrying Loads/Tools/GPS Equipment</b></p>	<p style="text-align: center;"><b>Accidents/ Distractions</b></p>	<p>Secure tools in racks whenever possible. Place loads/tools so they do not interfere with driving. Keep both hands on the handlebars. Be aware that loads affect handling of the ATV. Maintain safe operating speeds. Focus on driving, not the load.</p>
<p style="text-align: center;"><b>Driving On Slopes</b></p>	<p style="text-align: center;"><b>Rollovers</b></p>	<p>Avoid sidehilling whenever possible. Shift wieght to the uphill side. When sidehilling, avoid crossing rocks and logs. Be aware of slope restrictions. Observe procedures recommended for uphill and downhill use in the manufacturer's operating manual. NEVER put your foot down when operating an ATV.</p>
<p style="text-align: center;"><b>Driving On Rough Or Uneven Ground</b></p>	<p style="text-align: center;"><b>Accidents</b></p>	<p>Reduce speed when riding on rough ground. Watch for rock or log hazards that can make an ATV become high-centered or roll over. Drive around obstacles. NEVER put your foot down when operating an ATV</p>
<p style="text-align: center;"><b>Driving On Roads/Traffic</b></p>	<p style="text-align: center;"><b>Accidents</b></p>	<p>Be cautious when crossing roads. Stop, look and then proceed. When driving on roads always drive on edge of roadway keeping alert of traffic. Always give other forest users the right-of-way. Turn lights on when driving. Try to drive to the side of paved roads on the shoulders with caution and at slower speeds.</p>
<p style="text-align: center;"><b>Driving On Roads/Traffice (continued)</b></p>	<p style="text-align: center;"><b>Parking Accidents</b></p> <p style="text-align: center;"><b>Backing Accidents</b></p>	<p>Always park well off roadway or trail. Leave vehicle parked in gear with parking brake set.</p> <p>While backing the ATV be aware of the ground hazards and that the steering is reversed and at a much quicker reaction time than operating in the forward mode. Also note that some ATV'S automaticly disengage the four wheel drive system in reverse. Use the override button if 4X4 is needed.</p>



