

**FISH AND WILDLIFE SERVICE
OCCUPATIONAL SAFETY AND HEALTH**

Occupational Safety and Health Part 243 Motor Vehicle and Equipment Operator Program
Chapter 6 Off-Road Utility Vehicles (ORUV) 243 FW 6

6.1 What is the purpose of this chapter?

A. This chapter establishes safety requirements for U.S. Fish and Wildlife Service (Service) off-road utility vehicles (ORUVs).

B. Use this chapter in conjunction with:

(1) The other chapters in Part 243, and

(2) The most current version of the [Interagency Standards for Fire and Fire Aviation Operations](#) (NFES 2724).

6.2 What are the authorities and responsibilities for this chapter? See [243 FW 1](#) for a list of the authorities and the general responsibilities for all the chapters in Part 243.

6.3 What vehicles fall within the scope of this chapter? We consider the following to be ORUVs:

A. Off-road motorcycles;

B. Amphibious vehicles (wheeled or tracked) with a curb weight of 1,900 pounds or less, e.g., an Argo;

C. Utility vehicles (multi-tired or tracked), commonly called UTVs, with a Gross Vehicle Weight Rating (GVWR) of 3,750 pounds or less (see [American National Standards Institute \(ANSI\)/ROHVA1-2014](#)), e.g., Gator, Mule, Ranger. This does not include electric golf carts ([ANSI/NGCMA Z130.1](#)) or personal transportation vehicles ([ANSI/NGCMA Z135](#)), e.g., Cushman, CarryAll, E-Z-Go;

D. Snowmobiles, and

E. All-terrain vehicles (ATVs). ATVs are off-highway vehicles that have a seat that the operator straddles, handlebars for steering control, and are specifically designed to travel on four low pressure tires (see [ANSI/SVIA 1-2010](#)). ATVs include vehicles that are manufactured for use by a single operator and:

(1) No passenger, or

(2) One passenger (called 2+ seating).

6.4 When may Service employees use ORUVs?

A. Employees may operate ORUVs only after receiving their Project Leader's, supervisor's, or facility manager's authorization on [FWS Form 3-2267](#). Only employees who are 18 years old or older and who have successfully completed required training can use ORUVs. See [321 FW 1](#) and [section 6.5](#).

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- B.** Employees may only use Government-owned, rented, or leased ORUVs for official purposes.
- C.** Employees must operate ORUVs in accordance with State/local/municipal regulations governing operation on roads, trails, and sidewalks. ORUVs are intended for off-road use and may not be licensed or driven on the highway except for short distances traveling to or from the off-road destination in accordance within State/local/municipal requirements.

6.5 What are the training requirements for ORUV operators? At a minimum, employees must:

- A.** Complete the training described in [321 FW 1](#) and document the training in the Department’s Learning Management System (i.e., DOI Learn);
- B.** Complete all operational or safety training the manufacturer requires for the specific equipment they are using; and
- C.** If operating an off-road motorcycle, successfully complete the training the issuing State requires for an individual to hold a motorcycle class or endorsed license.

6.6 What personal protective equipment (PPE) is necessary? Table 6-1 describes the required PPE for operating an ORUV. Employees may only get an exception to these requirements with concurrence from both the Regional Heavy Equipment Coordinator and Regional Safety Manager. They will grant exceptions on a case-by-case basis. The responsible Project Leader/supervisor/facility manager must submit the request that specifically describes why use of the required PPE is unnecessary or increases the health and safety risks of operators or passengers. The request must include a Job Hazard Assessment (see [240 FW 1](#)).

Table 6-1: PPE Required for Operating ORUVs		
Type of ORUV	The operator must wear...	Details
A. ORUVs with no Rollover Protective Structure (ROPS)	A securely fastened motorcycle-type helmet (full or ¾) that bears the Department of Transportation (DOT) label or Snell Memorial Foundation label. Shorty helmets (i.e., half helmets) are prohibited.	The face shield must meet or exceed the ANSI Z87.1 standards or Vehicle Equipment Safety Commission Regulation VESC-8, Minimum Requirements for Motorcyclists’ Eye Protection. Wildland fire operators must consult the current Interagency Standards for Fire and Fire Aviation Operations (Redbook) for specific guidance on the types of helmets to use when supporting wildland fire activities.
	Eye protection, if the operator is not wearing a full-face helmet with a face shield in place.	Eye protection devices (goggles or glasses) must meet or exceed the ANSI Z87.1 standards or VESC-8, Minimum Requirements for Motorcyclists’ Eye Protection. If the eye protection does not have the applicable standard stamped on the product, the documentation it came

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Table 6-1: PPE Required for Operating ORUVs		
Type of ORUV	The operator must wear...	Details
		<p>with must include the manufacturer specification that states the product meets or exceeds ANSI Z87.1 or VESC-8.</p> <p>Eye protection must be shatterproof, securely fastened, and well ventilated to prevent fogging and provide clear vision.</p>
	Clothing prudent for the conditions and terrain.	<p>Must include, at a minimum:</p> <ul style="list-style-type: none"> • Full-fingered gloves, and • Over-the-ankle boots with heels to prevent feet from slipping off pegs or pedals. <p>May include, depending on the weather conditions, hazards, and environmental issues:</p> <ul style="list-style-type: none"> • Long sleeve shirt, and • Long pants. Although we recommend operators wear long pants, it will depend on the weather conditions, hazards, and environmental issues evaluated during the risk assessment for the ORUV operation.
	Wildland firefighters must meet the requirements in the Interagency Standards for Fire and Fire Aviation Operations (Redbook) .	Not applicable (N/A).
B. ORUVs with ROPS and seat belts	A securely fastened hard hat with an integral fastened chinstrap.	The hard hat must meet the ANSI standard for Industrial Head Protection (Type 1, Class B) with chinstrap unless the risk assessment for the operation dictates wearing a securely fastened motorcycle helmet.
	The same eye protection and clothing as required for an ORUV without ROPS (click here).	N/A.
	Wildland firefighters must meet the requirements in the Interagency Standards for Fire and Fire Aviation Operations (Redbook) .	N/A.
C. Off-Road	A securely fastened	The face shield of the motorcycle-type

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Table 6-1: PPE Required for Operating ORUVs		
Type of ORUV	The operator must wear...	Details
Motorcycles	motorcycle-type helmet (full or ¾) that bears the DOT label or the Snell Memorial Foundation label. Shorty helmets are prohibited.	helmet must meet or exceed the same standards as for an ORUV without ROPS (click here).
	Eye protection, if the operator is not wearing a full-face helmet.	The eye protection must meet or exceed the same standards as for an ORUV without ROPS (click here).
	Protective clothing.	Clothing must include: <ul style="list-style-type: none"> • Full-fingered gloves, • Over-the-ankle boots with heels to prevent feet from slipping off the pegs, • Long sleeve shirt, • Long pants, and • Knee, shin, and elbow pads.
D. Snowmobiles	A securely fastened motorcycle-type helmet designed for snowmobile operation that bears the DOT label or the Snell Memorial Foundation label.	The face shield of the helmet must meet or exceed the same standards as for an ORUV without ROPS (click here).
	Eye protection, if the operator is not wearing a full face helmet with a face shield in place.	The eye protection must meet or exceed the same standards as for an ORUV without ROPS (click here).
	Clothing prudent for the conditions and terrain.	May include sunglasses, facemask, gloves, snowsuit, and snowmobile boots.
E. Amphibious Vehicles	Personal Flotation Device (PFD).	Must meet the requirements in 241 FW 1 (or it must be immediately accessible during the operation of the equipment).
	All the same PPE as for an ORUV without ROPS (click here).	N/A.

6.7 What are the requirements for transporting ORUVs? There are two methods of transporting an ORUV—towing it on a trailer and transporting it in a truck bed. We prefer you use a trailer to transport ORUVs because trailers normally have built-in ramps and are set lower to the ground. Loading and unloading an ORUV in a truck bed is a hazardous operation, and you should use it only if there is no other option available.

A. Towing a Trailer. All vehicle, trailer, and hitch components used for transportation must conform to applicable Federal and State DOT regulations and [243 FW 5](#). The motor vehicle operator must inspect them for compliance before, during, and after transporting operations.

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Operators towing trailers must have experience and training before transporting an ORUV as required in [485 DM 16](#), "Motor Vehicle Safety," [243 FW 5](#), and [Part 320](#) of the Service Manual.

- (1) Using a spotter (if available), drive the ORUV slowly onto the trailer using the trailer's ramp.
- (2) Set the ORUV parking brake.
- (3) Secure the ORUV with appropriate load securement assemblies (see [243 FW 5](#)) and stow all loose cargo.

B. Transporting in a Truck Bed. In addition to the requirements in this section, you must follow the bed loading procedures in the truck's owner's manual. If you must transport an ORUV inside the bed of a truck, you must load and unload the ORUV using a one piece bi-fold or tri-fold ramp specifically designed and load rated for that purpose. Never use wooden ramps, two individual wheel ramps, or load the ORUV on top of the truck bed cover.

- (1) Novice riders must not attempt loading until they are trained and familiar with this type of loading/unloading operation.
- (2) Turn off the engine and set the parking brake of the truck. The vehicle should have a flatbed surface wide enough between the wheel wells so that you can roll the ORUV onto the bed without riding over the wheel wells. **Never load an ORUV into a vehicle by driving it over the wheel wells.**
- (3) The truck must have a GVWR and tire load rating capable of transporting the ORUV. It must also be equipped with a cargo barrier (headache rack) as required in [243 FW 5](#).
- (4) We highly recommend that you remove the tailgate before loading. However if this is not feasible, then inspect the tailgate, tailgate hinges, and tailgate cables or supports for signs of wear that would compromise the structural integrity of the tailgate system. If you identify any signs of wear, before beginning to load the ORUV, replace tailgate system components with manufacturer-rated components.
- (5) Inspect the truck bed corner tiedown points for signs of wear and stress. Do not use the tiedown points if there is any indication that their structural integrity is impaired.
- (6) Following the manufacturer's instructions, place the loading ramp on the truck bed or the tailgate with the support brackets firmly resting in place, spaced parallel, and even. Secure each side of the ramp to the truck bed/tailgate using the manufacturer-supplied cables, straps, or chains. You may only use a one-piece, bi-folding or tri-folding ramp with a manufactured load rating for the ORUV you are loading or unloading.
- (7) If possible, load at an embankment or hill to decrease the angle of ascent. Remove any heavy cargo and any items not permanently affixed to the ORUV (e.g., spray tanks, etc.) before loading or unloading the ORUV. Empty any permanently affixed spray tanks before loading.

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(8) Drive the ORUV up the ramp slowly using a spotter, if available. If you are loading it alone, drive slowly up the ramp, stay in gear, and use proper body weight distribution, keeping the heaviest weight uphill at all times.

(9) Once loaded in the truck bed, set the ORUV parking brake and secure the vehicle with four proper load securement assemblies, meeting the requirements in [243 FW 5](#). All of the ORUV's tires must maintain contact with the bed surface and not rest on the tailgate. We recommend that you close the tailgate after you load the ORUV.

C. Securing the ORUV. See [243 FW 5](#) for towing, load securement, inspection, and training requirements. To secure the ORUV to the trailer or truck bed, you must use four load securement assemblies with an Aggregate Working Load Limit (AWLL) of at least 50% of the weight of the ORUV, regardless of the method of transportation. For example, if the ORUV weighs 1,200 lbs. with all gear and accessories, then 50% of the AWLL of all four of the load securement assemblies must equal a minimum of 600 pounds. When using synthetic webbing tape with a ratchet locking device type of tiedown component to secure an ORUV, you must comply with [243 FW 5](#), specifically Table 5-1. The ORUV operator must wear appropriate PPE (see [section 6.6](#)) when loading and unloading the vehicle.

6.8 What are the requirements for cargo carriers and accessories that come with ORUVs?

A. Some ORUVs come equipped with cargo carriers. The carriers can either be front- or rear-mounted, and some models provide both. The carriers are designed to carry cargo in a specific manner that varies depending on the manufacturer. It is important to know what design and load limits the manufacture has placed on the ORUV. Operators must:

(1) Not exceed the design and load limits, and

(2) Securely fasten all cargo to the cargo carrier with an appropriate securement device(s) rated for the total weight of the cargo.

B. Manufacturers of ORUVs offer other accessories that facilitate hauling, such as trailer hitches. The operation must remain within the design limitations set by the manufacturer for any accessory.

C. While cargo carriers and accessories can increase the ability of the ORUV to perform varied tasks, the additional complexity requires increased knowledge and caution on the part of the operator. The stability and handling characteristics of the ORUV are affected when operating it with cargo in the cargo carrier or when hauling a load. Do not exceed the manufacturer's recommended weight rating of cargo carriers, axles, or total vehicle weight. It is essential that operators hauling cargo, either in a cargo carrier or in an attached trailer, receive appropriate hands-on training in accordance with the requirements in [321 FW 1](#) and the Service's *Heavy Equipment and Off-Road Utility Vehicle Safety Training Handbook*.

D. Ensure that any cargo extending over the edge or side of the ORUV will not strike the operator if it becomes entangled with an obstruction.

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D. Fire extinguisher rated not less than a 2.5 lb. ABC type rated at 1A:10BC. The extinguisher must be securely fastened to the ORUV, if practical. You may:

(1) Strap or clamp the brackets around a ROPS. **Do not** bolt or weld fire extinguisher brackets to or through ROPS components; or

(2) Securely stow the fire extinguisher in the ORUV's storage area.

E. Properly stocked tool kit. Most ORUVs are equipped with a properly stocked tool kit supplied by the manufacturer.

F. Survival kits appropriate to the environment. A survival whistle and a signal mirror are examples of communications tools that should be in a survival kit.

6.11 What are the requirements for operating an ORUV in remote and hazardous areas?

A. At least two operators, riding separate machines, should be assigned to work together in remote or hazardous areas. If operating in an area where emergency medical response will take 1 hour or longer, at least one operator must be currently certified in first aid and cardiopulmonary resuscitation (CPR).

B. The Project Leader/supervisor/facility manager must complete a Job Hazard Assessment that identifies the potential hazards and required control measures (see [240 FW 1](#)).

C. The operator must provide a trip plan in writing or verbally to other staff so they know where the operator is going and when he/she is expected to return. The operator may use the "Trip Plan" section in [FWS Form 3-2391](#) for a written trip plan.

6.12 What are the requirements related to using an ORUV when spraying pesticides or herbicides?

A. The Project Leader/supervisor/facility manager must evaluate the use of an ORUV to spray pesticides or herbicides to ensure that:

(1) The operator has been approved to apply the pesticides/herbicides in an effective and efficient manner, and

(2) The method of application is not exposing the operator to unacceptable health hazards when done in conjunction with wearing the approved PPE for the type of ORUV.

B. The Project Leader/supervisor/facility manager must complete a Job Hazard Assessment for each pesticide/herbicide spraying operation to document potential hazards and necessary corrective measures. See [240 FW 1](#) and [242 FW 7](#).

C. The ORUV operator must:

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(1) Maintain control of the handlebars with both hands during spraying operations unless the Project Leader/supervisor/facility manager has completed a Job Hazard Assessment to address spraying with one hand. Operators may then only spray while the ORUV is in motion when:

- (a) The ground is level,
- (b) The operator has a clear view of the travel path to avoid hidden hazards, and
- (c) The operator does not exceed 5 miles per hour.

(2) If the operator has to stop and get off the ORUV to do spot spraying, he/she must put the machine in neutral and engage the parking brake before dismounting (see [section 6.14D](#)).

6.13 What are the requirements for ORUVs with ROPS?

A. When purchasing an ORUV for an operation where we recognize that a rollover is a possible hazard, we require a factory installed, certified ROPS and seat belts on the vehicle. ROPS must be certified by the manufacturer using existing International Organization for Standardization (ISO), Society of Automotive Engineers (SAE), ANSI, or SAE International consensus standards.

B. Operators of ORUVs with ROPS must wear seat belts at all times during vehicle operation. Operators must inspect seat belts and replace them per manufacturer recommendations.

C. Manufacturers do not design ATVs (see [section 6.3E](#)) to have ROPS or seat belts. Project Leaders/supervisors/facility managers must issue appropriate PPE (see [section 6.6](#)) to the operator and ensure that he or she uses it.

6.14 What other requirements are associated with ORUVs?

A. Operators must not use ORUVs to carry passengers unless the manufacturer's model is designed for transportation of both operator and passenger. If the ORUV is designed to carry passengers, then the passenger must wear the same PPE as the operator (see [section 6.6](#)).

B. We do not allow use of three-wheel ATVs in any Service operation.

C. When not in operation, operators must secure ORUVs to prevent unauthorized use or theft.

D. Never dismount from an ORUV while its engine is still running unless the machine is in neutral and the parking brake is engaged.

E. The operator of an ORUV must maintain control of the handlebars with both hands during operation.

F. All ORUVs must have a spark arrester of the type that is qualified according to the U.S. Department of Agriculture, [Forest Service Standard for Spark Arresters for Internal Combustion Engines, 5100-1c](#), September 1997.

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G. We must maintain all ORUV exhaust systems to meet sound level limits established by the U.S. Environmental Protection Agency in [40 CFR 1051.107](#).

H. When operating ORUVs on lands not under Service control, operators must conform to applicable State and local laws and regulations in addition to the requirements in this chapter.

6.15 When must ORUV operators complete the inspection checklist section of [FWS Form 3-2391](#), ORUV Trip Plan and Inspection Checklist?

A. ORUV operators must complete the Inspection Checklist section of [FWS Form 3-2391](#) before each trip to a remote or hazardous area. A properly conducted pre-ride inspection minimizes the chance of injury, helps the operator identify damaged equipment, and reduces the chances of the operator getting stranded. Should the operator identify a safety item in need of repair, it must be repaired before the ORUV is put into service. [FWS Form 3-2391](#) specifies which ORUV the inspection is for and is kept on file with the vehicle and equipment maintenance files.

B. Although not required, we recommend that operators document the pre-ride inspection on [FWS Form 3-2391](#) for those ORUV trips in areas that are not remote or hazardous.

6.16 What additional guidance covers use of ORUVs in prescribed and wildland fire operations? The use of ORUVs in prescribed and wildland fire operations must conform to the requirements in this chapter, [321 FW 1](#) and the [Interagency Standards for Fire and Fire Aviation Operations](#).

6.17 What additional guidance covers use of ORUVs during law enforcement operations? The use of ORUVs in law enforcement operations must conform to the requirements in this chapter and [321 FW 1](#) during routine operations. We encourage compliance, but do not require it, for undercover law enforcement operations and during emergency situations.

6.18 May members of the public use personal ORUVs on Service lands? The public may use personal ORUVs on Service lands only by conforming to established policies, regulations, and other public use directives, such as brochures and informational signs. Helmets and other PPE must be worn according to State and local requirements. Hunts on Service lands designed for disabled visitors using ORUVs as a means of conveyance require the Project Leader to document a risk management assessment in the operational plan for the lands.

6.19 Can supervisors suspend or revoke operator privileges?

A. Supervisors must suspend or revoke operator privileges if operators fail to maintain their qualifications or demonstrate a careless disregard in operating motor vehicles or motor equipment.

B. ORUV operators must complete refresher training and reauthorization within 3 years after their last training session and authorization. Failure to do so results in suspension or withdrawal of operating authority (see [321 FW 1](#)).

