



ADVENTURE RACING WORLD SERIES MANDATORY EQUIPMENT LIST

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ARWS events require that mandatory equipment be carried, for safety or competition purposes. This list provides a definition of common required items for ARWS adventure races or sections of those races.

Each event will specify which of these items of equipment will be required for the event.

Additional items may be added by race organizers where they are specific to their location, conditions or laws of the host country. Competitors will want to carry additional items of their own choice.

PERSONAL RESPONSIBILITY AND ASSUMPTIONS - You and your team together are responsible for carrying suitable and appropriate equipment, clothing and sustenance for the climate, conditions and activities in the event. This Mandatory Equipment List is NOT a list of the only items you should take. It contains the mandatory items that you and your team must carry with you, at specified times, to meet minimum safety requirements by law, prevent and/or treat SOME potential injuries, and short-term survival purposes (for example a seriously injured team member, in a stationary position, overnight in bad weather). It assumes your team members will NOT separate during the race and that you may share between members the mandatory equipment that must be carried. You will certainly need additional equipment, clothing, food and drink for your participation in the event.

RECOMMENDED AND INFERRED ITEMS

The following items, categories of equipment or related items, are either strongly recommended by organisers, or assumed to be an inferred requirement as competitors must understand adventure racing, the activities they will be participating in, and general outdoor adventure knowledge and experience.

- ▶ Backpacks and water carrying containers/ bladders/ bottles.
- ▶ Foods and sustenance, sufficient until the next re-supply, including quantity for unexpected circumstances.
- ▶ Personal race clothing and footwear suitable for extreme conditions (including accessories such as hats/ gloves, eye protection, watch/altimeter as required and clothing for water activities such as wetsuits).
- ▶ Paddles for kayak, canoe or packraft
- ▶ Cycle repair kit (including pump, tubes, tools and spare parts).
- ▶ Waterproofing/ dry bags to keep personal and team equipment as dry as necessary.
- ▶ Water purification device or chemicals - to avoid illness from drinking contaminated water.
- ▶ Personal medications (not in contravention of anti-doping rules) permitted analgesics, therapeutic medicines, medical insurance certificates, allergy or illness identification tags, sun protection creams.
- ▶ Money/ Credit card, personal identification card/ Passport, immigration or visa certificates.
- ▶ Pens and instruments for marking maps,
- ▶ Zip ties.
- ▶ Trash bag
- ▶ Additional and back up Mandatory/ Recommended and Inferred items in re-supply boxes as permitted.

RULES - As a competitor in the AR World Series event using this list, you and your team are required to carry the mandatory equipment items with you at the specified times. Checks of mandatory equipment may occur during the race and missing equipment may result in penalties or disqualification as per the race rules. If any items are used/ consumed/lost during a leg, they must be replaced at the next transition point.

The mandatory equipment is divided into two categories, equipment you and your team must carry at ALL times, and equipment you and your team must carry during a specific DISCIPLINE.

PROHIBITED ITEMS - Prohibited items are outlined in the ARWS Rules of Competition. There are specific rules on items containing GPS, communications/ internet capabilities and items that could potentially assist with navigation.

 ALL TIMES - ALL DISCIPLINES – ALL ARWS RACES				
Yes/No	Name	Image	Quantity	Description
✓	Official Race Bib (Vest/ Jersey/ Bib) Team number/ name to be pinned to pack and bike		1 x per competitor (No share)	Organiser to provide. The official race bib must be worn by each competitor at all times as the outermost garment except when a PFD is being worn. Vest/packs that cover the front of the bib are not permitted. Race bibs are provided by the race organisers. An alternate identification may be provided by the race organisers for use with the PFD in which case it must be worn or attached by each competitor as specified.
✓	Passport. Maps. Course Information.		1 x per team	Organiser to provide. Course maps, course notes and passport/ control card. Teams must carry appropriate for the section of the race on which they are travelling.
✓	GPS Tracker/ Emergency Communications.		1 x per team	Organiser to provide. Specific device provided by race organisers. Must be carried and used in accordance with direction of race organisers.
✗	Strobe		1 x per team	Must be flashing white light 360 degree visibility, waterproof to 1m or greater, rated for visibility beyond 1nm (1.9km) and with charged batteries. Normal flash rate 60 per minute. Can be used in an emergency situation (on both land and sea) to alert others to your location. Headlamps or cycle lamps that flash are not acceptable.
✓	Cell Phone		1 x per team	Cell phone with fully charged battery. For emergency use only. Race organiser will provide advice on specific cell network and will seal phone in security bag before race. Camera function may be used to photograph in case of missing checkpoint.
✓	Digital Camera		1 x per team	Camera or electronic recording device (e.g., video camera), waterproof, shockproof with charged battery. Used to photograph in case of missing checkpoint. Accessible location/GPS information is not permitted.
Mobile Phone with camera function can be substituted for a separate digital camera				
✓	Magnetic Compass		2 x per team	Quality compasses for accurate navigation. Compass must have a needle balanced to the magnetic zone of the race. Watch compasses do not meet these requirements.
✓	Fire Starting Device		1 x per team	Waterproof matches, gas lighter, flint and steel are all acceptable fire-starting devices.
✓	Knife		1 x per team	Minimum blade length 50mm and sharp enough to cut rope or webbing in an emergency. Folding blade for safety. Must be easily accessible while kayaking.

✓	First Aid Kit		1 x per team	First Aid contents specified separately. Must be contained in waterproof bag.
✓	Whistle		1 x per competitor (no share)	Each competitor must carry at all times a whistle that is pea-less and functional in wet conditions. It must be easily accessible at all times to sound an alert if required.
✓	Light Source (Headlamp)		1 x per competitor	Light source (such as headlamp), waterproof with the required batteries for the section of the race. Different light sources may be used in different disciplines e.g., headlamp, cycle lights.
✓	Shell Layer Top (Jacket)		1 x per competitor	The shell/ outer layer jacket must be waterproof, windproof, breathable as specified by the manufacturer. Jacket must have a hood, seams tape sealed and suitable for potentially extreme conditions in an adventure race.
✓	Shell Layer Bottom (Pants)		1 x per competitor	The shell/ outer layer pants must be waterproof and windproof as specified by the manufacturer. Pants must be suitable for potentially extreme conditions in an adventure race. Optional Rain Kilts can be substituted for pants
✓	Mid Layer Top (Fleece)		1 x per competitor	The mid layer top is used between the baselayer and shell layer to provide additional insulation in cooler conditions. Long sleeve top of synthetic or wool fabric. Mid weight (greater than baselayer), moisture wicking/ quick drying. When tested on scales the weight of the top must be 175 grams or greater. Optional
✓	Base layer Top		1 x per competitor	Long sleeve or short sleeve with arm warmers. Close fitting, synthetic or wool fabric. Lightweight, moisture wicking/ quick drying, and worn next to your skin.
✓	Base Layer Legs. (Leggings/Tights)		1 x per competitor	Long leg or short leg with leg warmers. Close fitting, synthetic or wool fabric. Lightweight, moisture wicking/ quick drying, and worn next to your skin. Optional
✓	Base layer Head (Beanie or buff)		1 x per competitor	Beanie (or buff) must be close fitting and of synthetic or wool fabric. Lightweight, moisture wicking/ quick drying, and worn over your hair/skin.
✓	Survival Blanket (Space Blanket)		1 x per competitor	Sheet or bag of material coated in a metallic reflective agent. Used in emergencies to reflect heat. Can be used to counter hypothermia, but also provide shade or aid in visibility. (Note bags can deteriorate over time).
✗	Sleeping Bag/ Bivy Bag		1 x per competitor	Full length sleeping bag or heat reflective breathable bivy bag. When tested on scales the weight of the bag must be 150 grams or greater. Primary purpose is warmth. (enclosed survival/space blanket is not accepted)

	Emergency Shelter (Tent or Bothy Bag)		1 x per team	TENT - Must have sewn in floor and minimum floor area of 2.5m ² or 27ft ² . Tent design must include poles. All the required poles, pegs, ropes etc must be carried with the tent. Must be suitable for potential conditions of the race. or BOTHY BAG - Single Bothy bag rated for 4 people (not e.g. 2 x 2 person bags) made from waterproof & windproof material and containing air vents. When tested on scales the weight of the bag must be 400 grams or greater
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 ALL TIMES – MOUNTAIN BIKE DISCIPLINE – ALL ARWS RACES				
Must be taken on all bike sections. May be cached and retrieved.				
Yes/No	Name	Image	Quantity	Description
	Mountain Bike		1 x per competitor	Mountain bike. Must have approximately straight handlebars. (Not drop bars) and at least ONE of these two features.... • Mechanical suspension (not just a flexible frame). • Tire size of 44mm (1.75inch) or greater
	Helmet		1 x per competitor	Cycle helmet with an approved safety standard certification. (e.g., CE, UIAA or country equivalent)
	Front Light		1 x per competitor	Front facing white light. May be head or handlebar mounted. Must be turned on from sunset to sunrise or in reduced visibility when the bicycle is on a road that may have vehicles.
	Rear Light		1 x per competitor	Rear facing red light. Must be mounted on the bicycle. Must be clearly visible from behind, on both sides, at a distance of 100 meters. If the light cannot be mounted centrally, two lights may be required. Must be turned on from sunset to sunrise or in reduced visibility at all times when the bicycle is being ridden. Must also be turned on from sunset to sunrise or in reduced visibility when the bicycle is on a road that may have vehicles. Recommended: spare rear light carried by team.

 ALL TIMES - PADDLING DISCIPLINE – ALL ARWS RACES				
Must be taken on all paddle sections. May be cached and retrieved.				
Yes/No	Name	Image	Quantity	Description
	Boat(s)		As per race organiser	Each team must bring enough pack rafts to safely paddle down a river.

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	Personal Flotation Device (PFD/ Lifejacket)		1 x per competitor (No share)	Correctly sized for the competitor and must meet safety standards of the country of the race. Worn at all times while paddling. Inflatable type vests not acceptable. Foam deteriorates over time and loses buoyancy.
	Whistle		1 x per competitor (No share)	Must be attached to the PFD/ Lifejacket.
	Helmet		1 x per competitor	Organiser to specify if river helmet is mandatory for any white-water rivers, or if cycle helmet is acceptable. Worn as directed by race organisers.
	Throw Bag Rope		1 x per boat	Rescue device with length of rope stuffed loosely into a bag so it can pay out through the top when thrown to a person. Minimum rope length 10m/ 30ft. Also useful for towing other boats in an emergency.
	Illumination (Glow Stick/ Chemical light)		1 x per competitor 1 x per boat	One glow stick (100mm) attached to PFD in a highly visible position at all times (i.e. shoulder position). One glow stick attached to boat (bring cable tie). Glow sticks must be glowing when dark. Multiple sticks may be required, bring spares.

 ALL TIMES - ROPEWORK DISCIPLINE – ALL ARWS RACES				
All equipment must be certified for climbing use.				
Yes/No	Name	Image	Quantity	Description
	Helmet		1 x per competitor	Climbing Helmet. In some events a cycle helmet may be acceptable.
	Harness.		1 x per competitor	Any harness of competitor's choice.
	Descending device		1 x per competitor	Rope of varying diameters may be used on events. 9,10, 11mm. Device choice may depend on ropes to be used.
	60 cm safety sling		2 x per competitor	
	Carabiner		3 x per competitor	

 FIRST AID KIT - ALL TIMES – ALL ARWS RACES				
First Aid kit should be complete when leaving the start or any TA with gear boxes. Items may be used during the section.				
Yes/No	Name	Image	Quantity	Description
✓	Pressure Bandage (Elastic/ Crepe)		2m long x 7.5cm wide	Total length of bandage is minimum of 2 meters and minimum width is 7.5cm un-stretched. Multiple bandages are permitted. Used to create localised pressure to site of injury or wound.
✓	Triangular Bandage		1 x	This bandage in shape of right-angle triangle can be used to make a sling, as normal bandage and other applications.
✓	Wound Dressing (Sterile)		2 x	Dressing minimum dimensions 7.5cm x 7.5cm each. Applied to wound to prevent further harm and promote healing. Self-adhesive or used in conjunction with a bandage. Gauze dressing with nonstick film recommended.
✓	Strapping Tape (Adhesive/ surgical tape)		1 x	One roll of strapping tape. Can be used to secure bandages or dressings and in improvised splints.
✓	Antihistamine (strong)		4 x adult doses minimum	Antihistamine tablets inhibits the action of histamines and can be taken in event of allergic reaction. Further medical attention may be required.
✓	Anti-diarrheal Medication		4 x adult doses minimum	Medication to provide symptomatic relief for diarrhea to help reduce excessive fluid loss. Note Antidiarrheals do not eliminate the cause of diarrhea. Further medical attention may be required.
✓	Medical Gloves		1 x	To protect the wearer and/or the patient from the spread of infection or illness. Use medical gloves when your hands may touch someone else's body fluids (such as blood, respiratory secretions, vomit, urine or feces)

Recommended: Two team members should have basic first aid knowledge.

Recommended Items: Additional first aid items that are highly recommended include (not in contravention of anti-doping rules) analgesics, anti-inflammatory, electrolyte replacements, disinfectant solutions/creams, blister treatment, CPR face shield.

 RACE SPECIFIC ITEMS				
Additional items may be specified by race organisers.				
Yes/No	Name	Image	Quantity	Description & Required Discipline

 Standard ARWS TA Boxes and Bags				
May be provided by organisers. See each specific event.				
Yes/No	Name	Image	Quantity	Description & Required Discipline
	Gear boxes		2 x per team	Waterproof. 110 liters. Max weight 25kg.
	Bike Boxes		1 x per competitor	140 cm long, 30 cm wide, 80 cm high. Max weight 30kg. Fluted plastic or cardboard. Hand cutouts for lifting on or near each end.. No sharp edges or protruding buckles, fixings or wheels.
	Kayak bag		1 x per team	50cm diameter by 150cm long. Max weight 30kg. Teams must bring their own paddle bags, dimensions may vary from above but maximum weight is 50 pounds.

QUESTIONS CLARIFIED:

Q. Can I leave my 'All Times – All disciplines' gear at any point? **NO. You must have the 'All Times' mandatory gear with you and your team at all times.** Potential exceptions will be stated in the Race Rules of Travel

Q. Can I leave my bike or boat during a section?.**YES, Bike mandatory gear can be left with the bike or carried with the team.** Paddling mandatory gear can be left with the boat or carried with the team. (for instance to get a CP that is more convenient on foot). 'All Time-All Discipline' gear must be taken with you.

Q. Can a team mate carry my backpack? **YES** however each competitor must always wear their race bib and carry a whistle.

Q. Can I use a device to measure distance on a race map? **YES.**

Q. Can I use a powered device to inflate my raft? **YES.**

Q. Am I required to carry an additional base layer top or bottom if I am wearing them during the race? **NO.**

Q. Does a cycle top and arm warmers (or cycle tights and leg warmers) meet the requirement for base layer top and base layer bottom? **YES**

Q. Can I use a headlamp (light mounted on a person's head) as a bicycle front light? **YES.**