ENDLESS MOUNTAINS ADVENTURE RACE
MANDATORY EQUIPMENT LIST

Version 1.5 dated 18 February 2022.

The AR World Series members using this list have collectively agreed on standard mandatory equipment, and definitions of this equipment, that individuals and teams must carry while participating in an AR World Series adventure race. They have also agreed on the rationale and logic for the inclusion of items on this list. Additional items may be added by race organizers where they are specific to their location, conditions or laws of the host country.

PERSONAL RESPONSIBILITY AND ASSUMPTIONS - You and your team together are responsible entirely 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 organizers, or assumed to be an inferred requirement as competitors must have an understanding of adventure racing, the activities they will be participating in, and general outdoor adventure knowledge and experience.

- Backpacks and water carrying containers/ bladders/ bottles.
- Food 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).
- 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), epipens, inhalers, 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.
- Additional and back up mandatory/ recommended and Inferred items in re-supply boxes as permitted.

GEAR BOXES/BAGS

- Bike Box - Max dimensions 140cm x 80cm x 30cm. Fluted plastic or cardboard. No sharp edges or protruding buckles, fixings or wheels. Unless otherwise specified by event organizer, max weight 30kg.
- Paddle Bag - Unless otherwise specified by event organizer, dimensions are tubular bag 50cm diameter x 150cm long and max weight 30kg.
- Gear Trunk - Unless otherwise specified by event organizer, volume up to 110 liter and max weight 25kg.

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 https://arworldseries.com/resources/ 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)		1 x per competitor (no sharing)	The official race bib must be worn by each competitor at all times as the outermost garment except when a PFD is being worn. Race bibs are provided by the race organizers. An alternate identification may be provided by the race organizers for use with the PFD in which case it must be worn or attached by each competitor as specified.
✓	**Whistle**		1 x per competitor	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. Required even if racer is not carrying a pack.
✓	**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.
✓	**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. Top may be carried or worn. When tested on scales the weight of the top must be 175 grams or greater. (subject to weather conditions; bring to be prepared)
✓	**Baselayer Top**		1 x per competitor	Long sleeve or short sleeve with arm warmers. Close fitting of synthetic or wool fabric. Lightweight, moisture wicking/ quick drying, and worn next to your skin. Top may either be carried or worn.
✓	**Baselayer Legs** (Leggings/ Tights)		1 x per competitor	Long leg or short leg with leg warmers. Close fitting bottom of synthetic or wool fabric. Lightweight, moisture wicking/ quick drying, and worn next to your skin. Bottom may either be carried or worn. (subject to weather conditions; bring to be prepared)
✓	**Baselayer Head** (Beenie)		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. Beanie may either be carried or worn.
✓	**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.

✓	**Course Information and Maps**		1 x per team	Course maps, course notes and passport/ control card, provided by organizers, appropriate for section of the race teams are completing. Adequate waterproofing e.g. laminated or waterproof paper, clear adhesive (Contact) or waterproof map bag shall be provided by teams.
✓	**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).
✓	**First Aid Kit**		1 x per team	First Aid contents specified separately. Must be contained in waterproof bag.
✓	**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 2 inches and sharp enough to cut rope or webbing in an emergency. Folding blade for safety. Must be easily accessible while paddling.
✓	**Strobe Light**		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.
✓	**Sleeping Bag / Bivy Bag**		1 x per competitor	Full-length sleeping bag or heat reflective breathable bivvy sack. (not an enclosed survival/space blanket) When tested on scales the weight of the bag must be 150 grams or greater. Primary purpose is warmth. The SOL Escape bivvy bag does meet these requirements.
✓	**Emergency Shelter - TENT**		1 x per team	TENT - Must have sewn in floor and minimum floor area of 2.5m² or 27ft². 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. You will be required to carry your tent for select stages during the event. All teammates must fit into the tent and be able to lie down.
✓	**Cell Phone**		1 x per team	Cell phone with fully charged battery, turned off and sealed in opaque and waterproof bag/container for emergency use only. Race organizers will provide advice on specific cell network (if required) and seal phones in security bags before the race.
✓	**GPS Tracker/ Emergency Communications**		1 x per team	Specific device provided by race organizers. Must be carried and used in accordance with direction of race organizers.

	ALL TIMES - MOUNTAIN BIKE DISCIPLINE - ALL ARWS RACES			
	Name	**Image**	**Quantity**	**Description**
✓	**Mountain Bike**		1 x per competitor	Mountain Bike appropriate for adventure racing. No road or cyclocross bikes.
✓	**Helmet**		1 x per competitor	Cycle helmet with an approved safety standard certification. (e.g. CE, UIAA or country equivalent). Worn at all times while cycling.
✓	**Front Light**		1 x per competitor	Front facing white light. May be head or handlebar mounted. Must be on between sunset and sunrise and in reduced visibility.
✓	**Rear Light**		1 x per competitor	Rear facing red light. Must be mounted on the bicycle. Must be on between sunset and sunrise and in reduced visibility. Recommended spare rear light is carried amongst team.
✓	**Reflective Triangle**		1 x per competitor	Must be mounted on rear of bicycle or pack (and must be visible) for all bike stages. **Example**

	ALL TIMES - PADDLING DISCIPLINE - ALL ARWS RACES			
	Name	**Image**	**Quantity**	**Description**
✓	**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	Must be attached to the PFD/ Lifejacket.
✓	**Paddle**		1 x per competitor	
✓	**Packrafts**		1-4 x team	Teams must supply their own packrafts. Raft selection should match your team size; for a team of four: 4 singles or 2 doubles or 1 double and 2 singles. You may not squeeze two racers into a boat marketed as a single. Canoes/kayas will be provided by the organizers for certain stage(s) of the race
✓	**Illumination** (Glow Stick/ Chemical light)		3 x (1 x per competitor 2 x per boat)	One glow 12-hour stick attached to PFD in a highly visible position at all times (i.e. shoulder position). Two glow sticks attached to boat (bring zip ties). Glow sticks must be glowing when dark. Multiple sticks may be required; bring spares.

	FIRST AID KIT - ALL TIMES - ALL DISCIPLINES - ALL ARWS RACES			
	Name	**Image**	**Quantity**	**Description**
These are the minimum requirements for your first aid, BUT you should build a proper first aid kit considering some sections are remote. We strongly encourage you to use your first aid training and a list such as this one to build a more robust kit considering that there is a measurable chance that someone could suffer a more legitimate injury in a remote setting such as a laceration or broken bone, requiring proper cleaning, stabilization, and care. Please don't shirk on first to save a pound of weight.				
✓	**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 localized 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 First Aid Items - Additional first aid items that are highly recommended include (not in contravention of anti-doping rules) analgesics, anti-inflammatory, electrolyte replacement, disinfectant and antiseptic solutions/creams, blister treatment, CPR face shield, wound closing bandages, irrigation syringes, etc.

QUESTIONS CLARIFIED:

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 a teammate 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.