

RAAM Cycling Challenge Endurance Racing – a Primer

Endurance bicycle racing - general

Endurance racing balances speed and endurance.

Races often employ a “parade start” – racers are escorted through congested areas out onto the open road. Endurance racing is “open road racing” – racers must obey all traffic laws. Failure to do so may result in time penalties.

Race officials will be ever-present. They may not always be visible. Race officials have the responsibility of ensuring 1) safety; 2) level playing field; and 3) protecting the integrity of the race.

Endurance racing is “non-drafting” – racers cannot ride in groups or pelotons other than for brief periods. Doing so may result in time penalties.

Events generally have divisions based on gender, age and bike type. The events are open to both solo racers and teams. Teams can have one or more riders on the road at a time. They can draft their own team-mates but not other riders. While there may be different start times for the various divisions, all are on the road at the same time. The start times are designed so the various divisions finish at roughly the same time. This allows everybody to party and share stories together at the post-event awards ceremony.

Endurance events are described as timed (6, 12 or 24-hours) or distance (200, 400, 500-miles or more). Generally, endurance events do not have aid stations. Riders must provide for their own needs while on the road. This is done by either self-supporting or using a crew. Since racing is on open roads and frequently at night, steps are taken to insure rider safety.

RAAM Challenge Series Events

RAAM Challenge Series events generally include 2 rides (60 and 120 miles) and 2 endurance races (200 and 400-miles). The 120-mile ride is a Gran Fondo – a somewhat longer and more challenging than a century ride. The rides are supported with aid stations every 15-20 miles. The 200-mile race may have aid stations every 50 mile or in key locations. The 200-mile race can be ridden with or without a support crew. The 400-mile race has no aid stations and requires a support crew.

The racers must follow a pre-determined route. There are designated time stations along the route. Racers need not stop at the time stations. But, the racer or a racer’s crew member must call or text race headquarters when the racer reaches the time station. Failure to do so may result in a time penalty.

Racers

Racers must take steps to insure they consume adequate fluids, calories and electrolytes. This becomes increasingly important as the race distance increases. And they must be prepared for a variety of weather conditions. Races will be held regardless of weather conditions. For the most part, the 200-mile race will be ridden in daylight. The 400-mile racers will typically ride all day and through the night if necessary.

RAAM Challenge Series events allow solo racers as well as 2 and 4-person teams. Generally, faster race times are achieved by minimizing time off the bike. Solos, of course, stop occasionally. Teams generally race relay-style - somebody is always on the bike moving down the road. The shorter the "pulls", the faster the team can go. This way, speed can be maintained over great distances. Pulls can vary from 10 minutes to 3 or 4 hours. But 20 to 30 minutes works best for most teams.

Bicycles

The bicycles ridden by the 400-mile racers at night must have adequate front and rear lights. They must be equipped with reflective tape on the wheels, front forks, seat stays and crank arms. Do not put tape on the braking surfaces. It is highly recommended that you put electrical tape on the bike first and put the reflective tape on top of the electrical tape. (See photo) This facilitates easy removal. Aero-bars are recommended, but not necessary.



Racers must have their own lights. Racers are encouraged to have their own electrical and reflective tape and prepare their bikes prior to race inspection. However, we will have tape available.

Support Crews

The primary role of the support crew is to keep the rider on the bike and moving. The support crew provides the following:

- Route navigation
- Communication
- Food, fluids and electrolytes
- Clothing
- Mechanical repairs
- Medical assistance

The support crew “leapfrogs” the rider during the daytime. While leap frogging, the support vehicle must find safe places to pull over and stop and when doing so must be completely off the road – generally 5’ to the right of the “fog line.” The support crew should try to stay within sight distance of the rider - never much more than a mile from the rider. At night the support crew must follow directly behind the rider – as far to the right as possible. At night the rider cannot advance along the course without the support vehicle. The goal is to insure rider safety without impeding the normal flow of traffic. Support vehicles must obey all traffic laws and cannot obstruct the normal flow of traffic. Obstructing the normal flow of traffic may result in time penalties.

The race crew typically phones or texts race headquarters when the racer they are supporting passes through a time station. Failure to do so may result in a time penalty.

The support crew for a solo racer is generally 2-3 people. For 200 and 400-mile events, teams generally self-support, although having 1 or 2 extra people per vehicle can be helpful.

Crewed Endurance Racing – Challenges

There are many combinations of team size, number of support vehicles and number of support crew. The key to team racing – going really fast – is to work out the optimal combination of size, vehicles and crew, figuring out the length of the pulls, and then working as a team. The better teams and race crews have the ability to adapt to changing conditions and solve problems on the fly. Keeping it simple is best.

Support Vehicles

One support vehicle is sufficient for solo racers. Teams may race with 1 or 2 support vehicles. Teams with 2 support vehicles are faster because they do not lose time during a rider exchange.

Most ordinary passenger vehicles will suffice as a support vehicle. Mini-vans are ideal.

Support vehicles must have 2 amber flashing roof lights, a slow-moving vehicle triangle, a “Caution Bicycles Ahead” sign and racer numbers. The racer numbers go on all four sides of the vehicle. Do not affix the “Caution Bicycles Ahead” sign directly to the vehicle. Do not remove the backing. Place the clear contact paper over the signage. (See photo) This facilitates easy removal.



The roof mounted amber flashing lights must be on at all times during the race. The roof mounted amber flashing lights must not be visible from the front. If your lights are the rotating type, the front half must be covered with several layers of tape so as to be not visible to oncoming traffic. It is wise to have extra batteries for those lights.

Racers are encouraged to obtain their own flashing amber lights and slow moving vehicle triangle. We will supply “Caution Bicycles Ahead” sign, racer numbers and clear contact paper. We will have a limited number of flashing amber lights, extra batteries and slow moving vehicle triangles available for purchase or rent.

Time Penalties

Time penalties are assessed after the race finish. Penalties may result in changes to the actual finishing order.

Have fun!

This may seem a bit intimidating if you've never done it before. But, it's actually pretty straight forward. Support crews have a great deal in common with auto racing pit crews. It's all about providing the racer with everything needed to go as fast as possible over a longer distance - keep the racer moving.

Like everything in life, the more you do it, the better you get, the faster you go. It's all about going really fast and having a lot of fun!

Questions? Please do not hesitate to call, text or email:

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