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Iron Butt
Association's
"Archive of
Wisdom" (AOW)



1. Know your limits and plan your trip around them.

If the longest ride you have ever taken is 300 miles in a day, don't plan a trip with a string of endless five- hundred mile days. Iron Butt Association surveys also warn of an important trend in long distance trip planning (see Chart A). Discounting weather or other problems; after an initial mileage peak on days one and two, daily average mileage will steadily drop during trip days three to seven. On day seven of a trip, the typical long distance rider will comfortably ride about 65% of the average daily mileage that they would book on a two day trip. If the pros have this type of mileage attrition rate, would you plan on any less?

Also include large easy-to-cut loops into your trip plan. If you do get behind schedule, this is the easiest way to skip part of your trip without ruining the rest of it.

Whether you are capable of riding 300 miles per day, or 1,000, the ability to make miles tends to decrease as the length of the trip increases. The most severe loss is in days 3 through 7, where Iron Butt types then level out to about 65% of their peak capacity.

2. Forget about high speeds.

Forget what you've been told; high speeds and long-distance riding have little in common. A steady rider can book more miles, enjoy more mountain vistas and ride more twisty miles than a canyon carver bent on making the best times across a mountain pass. Besides the obvious effects on fuel mileage, which means more time wasted looking for gas, and the fatigue caused by fighting the effects of pushing a motorcycle through the wind, riding much beyond the flow of traffic will land you a hefty speeding ticket. While you are on the side of the road having a spirited discussion with a Police officer about your 10/10ths riding style, the turtle-like rider on the Honda 250 will wave as he sets himself up for the next set of corners.

3. Leave your drugs and coffee supply at home.

It's this simple, drugs and other stimulants do not work! If you need No-Doze or other drugs to stay alert (the Iron Butt Association includes coffee and colas on this hot list), it's time to stop for the day and get some serious rest.

4. Prepare your motorcycle before the trip.

With vacation time in short supply, why would you waste time during a trip to have your tires replaced? It is often cheaper to replace tires and chains at home rather than squeezing the few remaining miles from them to only find that they are not available. Additionally, quality motorcycle oils can go the distance. It is not unheard of Iron Butt types grinding away 10,000 or more miles between oil changes. Running hours between oil changes and work load means more than miles. A motorcycle ridden around town will need more frequent changes than one used on a long trip.

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5. Avoid adding accessories or doing maintenance immediately before a trip.

If it can be avoided, don't use a trip as a test bed for a new exciting accessory. This is particularly true for electrical system farkles. It's asking for trouble to install new auxiliary lights or perform other mission-critical electrical modifications right before a rally. This leaves no time to thoroughly exercise the system for proper behavior before having to depend on them during a long night ride.

And don't forget, even the best mechanic can make a mistake. Try and avoid picking up your motorcycle and heading out directly on a 10,000 mile trip. A trip is also not the best time to try out that new rainsuit, helmet or packing technique!

6. Use an electric vest.

Even on the warmest summer nights, after a few days of 100+ temperatures, a 75 degree evening ride can send a chill through your body. Add in a cool, wet day and the benefits of an electric vest mean that no serious rider would leave home without it.

For more information on Electrically heated clothing, visit Widder Enterprises home page.

7. Pack wisely; keep personal supplies handy.

While many riders use a tank bag, what they pack in them is not always well thought out. Sun screen, skin lotions, eye cleaner, eye lubricant, a flash light, a tire gauge, maps and other essentials should all be kept in a handy location. If these items are not on-hand when you need them, you won't use them. That can lead to costly mistakes like missing a road because you didn't want to find your map or roasting your face and then facing painful sun burn for days into a trip (ever try wearing a helmet over a sun-burnt head? - do it once and you will never forget to pack the sun screen where it is handy).

On the other hand, things like registration and insurance papers should be kept in a secure water tight area of the motorcycle. Assuming you probably will only need these items while talking to the Law, having them stowed away gives you time to talk to the officer and convince him you are human and not some crazed-biker - that could work to your advantage.

8. Be ready before you leave, don't waste time shopping on the road.

The same rules that applies to your motorcycle should apply to your riding gear and essentials. Maintain a check list of items to carry and then check it before you leave. Buying toothpaste at 7-11 is no big deal, but having to shop around for a sweater or swimsuit or specialty medicines that you left at home can eat up valuable riding or rest time.

9. Learn how to avoid boredom.

Long rides usually mean riding across areas you might not consider prime riding spots. To some riders U.S. 50 across Nevada is a beautiful ride. To a canyon carver it can be a long, hot boring, dull highway to hell. For times like this, carrying a tape player with your favorite music can prove invaluable. Some of the other tricks of the trade are to stock up your tank bag with a supply of tart candies that you can munch on while riding. A sour lemon drop will shock your senses and keep you going another twenty miles!

10. Join a towing service!

Break downs happen and there is nothing like being stuck with no one to turn to for help. MTS, AMA, Cross-Country motor club, some insurance companies and some auto clubs

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have plans that will tow you out of trouble. This is not a matter of just money (the cost of the plan versus the risk of the cost of a later tow), these clubs have contracted with tow companies around the U.S. Skip the insurance and you can spend hours burning up the phone looking for a tow company. Pay a little now or pay a lot later in the form of money and wasted trip time.

11. Learn to Stop to go Faster.

On the surface this tip may not make sense, but the successful long distance rider uses this strategy to their advantage. Since each rider is different, no one can predict a comfortable speed average for every rider. What is important is to know what speed your internal riding clock runs by and when your speed falls below that average, take time out and get some serious rest. Wasting time on coffee stops or milling about gas stations is time that could be better spent in a comfortable room sleeping or even better, taking a walk to stretch tired and sore muscles and get some oxygen pumping back into your brain.

12. Know when to stop!

As soon as you are tempted to close an eye, even "for just a second", find the nearest safe place to pull over and take nap!

Other symptoms to watch for:

Inability to maintain a desired speed. If you find yourself slowing down and constantly having to speed back up, you are ready to fall asleep!

Forgetting to turn high beams down for oncoming traffic.

Indecision. Can't decide to stop for gas or continue? Can't decide what turn to take? These are all a result of fatigue.

13. Maintain a good mental attitude.

If you really hate rain, you just may be better off taking a time-out and hold-up in a motel for a day. The same goes for excessive heat (if possible, try riding at night) or a host of other conditions that can put you in such a bad mental state that riding is no longer fun (if you are concentrating on being miserable, you are not concentrating on the road). Yes, answering to your boss why you are a day or two late can cause some stress, but at least you might make it safely home!

14. Eat healthful foods.

Fast foods and a big road trip are a bad combination, but realizing that this is the real world, try these time-proven combinations:

In the mornings stick to oatmeal, cereals or one egg with toast (no butter please!). Lunch should be skipped in favor of a light, healthful snack. Dinner should include a salad with a light pasta dish (quickly and readily available at the long distance riders all-time place to hate; Dennys and most Wendys).

If all else fails, our motto is, "If you can't eat right at least try and eat light!" Consider having a freshly made Subway sandwich instead of that grease-dripping Quarter-Pounder!

15. Eat at the right times of the day.

On weekdays, eating breakfast after 9 a.m. is usually the best time to beat the working stiffs

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not lucky enough to be out on a ride. The opposite is true on weekends, when people tend to sleep in and crowd restaurants later in the morning. Dinner is best eaten early (remember, we skipped lunch) to beat the dinner crowd. Additionally, eating after dark with a long ride ahead is a bad idea - it will put you to sleep.

Whenever we speak of eating out, the subject of time management always comes up. Specifically, how can the long distance rider afford to waste time sitting around while a restaurant cooks their meal? Here is a time proven method that works: After you enter the restaurant and get a seat (if the restaurant is crowded, try the counter for faster service) explain to your waitress that you are in a hurry. In extreme cases, we recommend giving her a generous tip up front and quickly give her your order, ask her to leave the check with the meal and explain that you will be back shortly. This is now your free time to take care of important business.

Although riders differ in technique, most will go to the bathroom and wash up (even if you are not "dirty", washing your face with warm water is a refreshing experience) and reapply sun screen or skin lotion. If you have phone calls to make, quickly make them now. In most cases, your meal will be sitting for you ready to eat. With this technique, meal stops can be cut to a reasonable twenty to thirty minute window - that may sound fast for a full meal, but when handled properly with good time management, you will have a relaxing hot, meal while your fellow riders are choking down a cold sandwich standing around a gas station.

16. Separate gas stops from food stops.

After getting gasoline (a mini rest-stop in itself), it takes just as long to suit-up to ride across the street to eat as it does to ride twenty miles down the road and then eat. The result is two mini rest-stops for the price of one.

17. Get gas before you need it.

You only have to run out of gas one time, or take a five mile detour in search of gas to blow the time you saved by not stopping. When gas is handy, stop and get it!

That having been said, keep in mind that gas stops can be a major time-sink if not managed properly. While wasting 5 minutes loitering at the fuel pump might not be to detrimental on multi-day events, it can be devestating on 24-hour rides, where maintaining a certain minimum average speed is critical. Whenever possible, always use "pay-at-the-pump" service stations. And have more than one credit card handy, in case your financial institution's automated systems "shut down" your card for unusually heavy use.

18. Put on your rain suit before it rains!

If you have less than a half tank of gas, why not stop, fill-up and put on your suit all in one, quick, safe stop? Whether you take the fill-up advice or not, we strongly recommend you avoid putting your rain suit on along side the road. The dangers are too numerous to outline, but think about this when planning to dodge the rain under an overpass; do you really want to be standing just three feet (or about an arms length) from traffic zooming by at 60 mph and up? And if it is raining, do you want to be standing that close to drivers half-blinded by the rain themselves? And keep in mind that some of those drivers will be looking for a covered place of their own to wait out a hard rain - just like the place you are putting on your rainsuit.

While hard statistics on this subject are hard to come by, roadside shoulder accidents do happen. For example, we witnessed this tragic accident in May of 1995; on a clear nights while stopping a vehicle for a traffic violation an Illinois state Trooper had his blue police lights in full gear (anyone that has ever gotten stopped can attest to the intensity of these lights). Although both vehicles were on the shoulder of the Interstate, a tired driver managed came off the road and rammed into the rear of the Illinois state highway patrol car causing it to explode and kill the trooper inside.

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19. Carry a flat repair kit and know how to use it!

The majority of tubeless tires punctures can be repaired in just a few minutes! There is no excuse for not carrying a repair kit, but even more importantly, you should know how to use it. Practice at home on an old tire so you are not trying to figure the process out on the side of the road! While tube-type tires are more of a hassle, once your learn how to patch a tube, it can be done a lot faster than trying to arrange a tow.

Further, you should periodically inspect your tire repair kit to ensure the glue has not leaked out. If your kit has CO2 cartridges as its means of inflation, do you know how many cartridges it will take to inflate your tire to a safe level? Find out **before** you hit the road!

20. Carry a Cellular phone.

They may not work in Death Valley, but you may be surprised at the number of locations they do work. Thanks to our aggressive farm communities desire to ride the tractor and be able to call mom at the house, the cellular industry has cell cites in many places that would surprise you. A cell phone combined with towing insurance, can make what was once a trip ruining event a tolerable experience.

21. Upgrade your tool kit.

The tool kit in most motorcycles are at best junk. Use the tool kit as a guide and purchase quality replacement tools from Snap-On or Sears' Craftsman. Also add a compact digital voltmeter (Radio Shack sells a pocket model for less than \$20) and a ratchet and socket set.

In May of 1997, the late, great Ron Major published to the LD Riders list what is undoubtedly the most comprehensive tool listing ever devised:

ALL:

In my leather Travelcade tool bag, 4 X 5 1/2 X 11 inches:

10 in. Channelock pliers

6 in. Channelock pliers

6 in. needle nose pliers

5 in. flush cutting wire cutters

5 in. wire strippers

6 in. locking surgical forceps

4 in. 1/8 flat blade screwdriver

4 1/2 3/16 flat blade screwdriver

4 in. 00 Phillips screwdriver

6 in. #1 Phillips screwdriver

7 1/2 in. #2 Phillips screwdriver

7 1/2 in. 1/4 in. flat screwdriver

Xcelite four way driver

Magnet, general use, small

6 in. Crescent Wrench

Short 1/2 - 9/16 in. open end wrench

M 10 X M 11 open end wrench

M 12 X M 14 open end wrench

M 10 X M 11 box end wrench

M 12 X M 14 box end wrench

M 17 X M 19 box end wrench

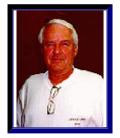
MAC combination six point Flex Box End/Open End, M 10, M 12, M 14, M 17 wrenches

4 oz. ball pien hammer, with handle shortened to 7 in.

M 5 hex key - short arm

M 6 hex key - short arm

M 5 Ball end hex key - "T" handle - 8 in.



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Machinist's scribe, self storing point

6 Straight edge razor blades

6 C.C. tube of Locktite

6 Oz. tube of RTV clear silicone sealer

Two Tube 5 Minute Epoxy

Zip-lock bag of Anti-Seize Compound

Zip-lock bag of rear spline lube, Honda 60% moly paste (for rear tire change)

The two above items stored in 35 MM film containers, clean, dry, protected!

Top quality padlock - with keys

2 spare electric vest wire connectors - wired

12 feet of two conductor electric wire

35-40 small zip ties - 3 1/2 in.

12 medium zip ties - 8 in.

8 in. Tire Iron

6 electricians tapes, roll ends only, very easy to carry/use

12 Pre-Packaged alcohol wipes, for general clean-up

6 Pre-packaged "Handy-Towels" for your hands, etc.

clean up towels, terrycloth

ALL - Snap-On, Craftsman, Mac, Xelite, etc., PROFESSIONAL TOOLS!

Not In The Above Kit:

Stock ST1100A Honda Tool-kit

siphon hose, 5 /16 in. I.D., 6 feet long

1/4 in. Nylon rope, 15 feet long

12 in. Crescent Wrench

M 5, M 6 long arm, ball end hex drivers

Spare fuses for "EVERYTHING"

Re-chargable, 2-D Cell flashlight

AA cell Maglight, on neck lanyard, for walking bonuses/back-up

Two AAA cell Maglights

Eye glass repair kit

Sewing kit

Safety pins

Lensatic, Engineer Compass

2 Magnifying glasses, 2X, and 5X

Small mirror

Swiss Army Knife

Wavetek, DM78A Digital Multimeter

Digital tire gauge

Spare keys for "everything"

6 new Micro-Point ball point pens

MANY spare batteries for flashlights, clock/timers, shaver, Screaming-Meanies!

Buck TITANIUM locking blade knife, 3 3/4 in. blade

Spare headlight, driving light, license plate, and other bulbs

Spare throttle cables

These items are ALWAYS in my ST1100!

AND the MOST IMPORTANT ITEM:

The Skill, Knowlege, and Ability to use them!!!!!!!!!!

Ron, well prepared, Major

P. S.

You should see my "First Aid Kit", and other necessary things, such as three different tire repair methods, and two means of inflation!

P. S. S.

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We must have an un-scheduled "TANK BAG SHOOT-OUT" someday!!!!! Many eyes would be opened, for sure, if they saw what the "Old Timers" actually carried in their tank-bags!!!!! This is very private, and personal, like a LADY's PURSE!

My \$0.50 worth.

- Ron Major

22. Carry at least one-half gallon of water.

You don't have to be riding in the desert to listen to this advice. For example, pushing a broken motorcycle a short distance up a hill to get it to a safe parking place on a cool night can generate a thirst that cannot be described.

Your water supply should be kept in two sources. One should be used for casual drinking (i.e., whenever you are thirsty, you drink from that bottle) and the remainder should be packed away for true emergencies such as breakdowns. The theory here is straightforward. Once riders start carrying water, they will use it. Unfortunately, if you drink your emergency supply away, then you will not have it for an emergency. Do yourself a favor and pack the emergency supply in an area that is inconvenient to get to and save it for when you really need it. On a health note, although bottled water has a fairly long shelf life, to insure that tap water is safe to drink, it should be changed every few days.

Although it may seem extreme, we also recommend that during the long rides, you give up local tap water and use purified bottled water. Changes in the local make-up of the water supply can lead to upset stomach, diarrhea and in some extreme cases require hospitalization. Besides those concerns, in 1995 the federal government issued a warning that Cryptosporidium, a disease-carrying parasite, can slip through most municipal water treatment systems. While a healthy individual can fight off this bug, we recommend avoiding it, and other potential water-born parasites while on the road by using purified water. For more information on bottled water brands that use production processes that are free from parasites contact the International Bottled Water Association at (800) 928-3711 or NSF International (a product testing organization) at (800) 673-8010.

23. Carry aspirin for aches and pains.

Note: While aspirin enjoys an almost cult-like following in the riding community (riders claim it alleviates a variety of pains and helps prevent muscle spasms), it is important to remember to consult your physician for side-effects related to its use.

For example, aspirin can lower your body's core temperature. So those riders choosing to use it for aches along the way should be aware they may be cooling themselves down as well. Additionally, aspirin acts as an anti-coagulant (something to worry about should you crash and suffer wounds that cause severe bleeding). Some brands of aspirin contain caffeine (it is sometimes added to help the aspirin take effect more quickly). A quick review of active ingredients on the packaging will let you know if caffeine is part of the formula.

24. Pack a variety of vitamins.

We have to defer this exact advice to a doctor, but in general a minimum recommendation is to take a one- a-day vitamin. Seek the advice of your doctor as to what vitamins are best for the type of conditions you are riding through (hot summer-time conditions has different requirements than winter riding).

For long distance riding, look for vitamins that will prevent muscle cramps.

25. If you own a computer, consider purchasing a mapping program.

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ways that defy logic. For example, they may send you on a U.S. highway, which in many places are not a highway at all, but surface streets, through a busy city instead of bypassing the city in favor of the Interstate, they can quickly and with a high degree of accuracy calculate point-to-point mileage's. Anyone that has ever tried accurately reading mileages from an Atlas and combining them only to find out the map was wrong or that they missed 25 miles here or there, will love any of the popular mapping programs (we use Automap Professional, which is no longer available).

DeLorme Map-N-Go and Microsoft Streets & Trips are two examples of popular standalone mapping software packages within the Long Distance community, as well as a few others. The DeLorme package has a satellite link with various GPS navigation tools, and also a interface with the internet to obtain real-time weather and road construction advisories along your proposed route. Another trick DeLorme feature is "Exit Services", which outlines all available services (fuel/food/lodging/etc) at each Interstate exit.

26. When riding back roads, be extra cautious when crossing county lines!

In many states, road maintenance is the responsibility of the county. That means every fifty miles or so you may be dealing with different pavement mixes and different engineers ideas of what is a good design. After crossing a county or state line, take notice of subtle signs of how the local road department operates. Has the pavement gone from asphalt to concrete? Are the turns well marked? Do they use decreasing radius turns? Are road repairs done with rubber sealer (the kind that flexes slightly when hot, which can cause some riders to panic if they are not used to a motorcycle moving around underneath them when leaned over), gravel or other hazardous methods? Is vegetation trimmed back from the side of the road? Do fences exist to keep animals on the sidelines?

Find out how the locals do it before you get the surprise of your life!

27. Never ride faster than you can stop!

Imagine riding down the Interstate in a heavy fog at 50 mph when all of a sudden you come across a stopped car in the fast lane. Can you stop before you hit the car? You may think this is a ridiculous question, but it has happened. Don't be the next rider killed by out-riding your eyes.

This same tip applies to good weather as well. Is making 10 mph more around a corner you can't see through worth spending six months in a hospital? Think about it like that and you may live to ride another day.

Always remember the Absolute Number 1 priority when participating in a long-distance ride or endurance rally: cross the Finish Line alive. Everything else is just gravy!

28. Do you want to live? Stay away from trucks!

Truck drivers hate having anyone follow them. When you are behind a truck, you become a liability. Instead of paying attention to the road, a trucker will start worrying about the people on their tailgate. From a bikers standpoint, it is not uncommon for a truck tire to explode. Iron Butt veteran and professional truck driver Mary Sue Johnson warns, "A blowout can blast off the truck's heavy mudflap with the force of a bowling ball going 60 m.p.h." Suzy goes on to warn that should the truck run over tailpipe or muffler in the road, you probably won't see it until too late leading to disaster." Additionally, if a trucker has to get on the brakes hard because of a of something in the road or someone has cut them off, (it happens to me once a day or more) AND you aren't alert back there, you will hit the trailer - it happens all the time!"

Least you think this is all great theory but will never happen to you, this real-life incident of

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the forces involved with truck tires comes from the June 3, 1997 Chicago Sun-Times titled "Teen dies when wheel fly off truck..." Two wheels broke loose from an 18-wheel semi-trailer truck on the Eisenhower Expressway...killing an 18-year-old youth. One wheel rolled up and over a concrete barrier and struck the sport utility vehicle in which the teen was sitting in the front passenger seat.

29. Eliminate all distractions/irritants.

Eliminate all distractions and potential irritants *before* the ride, no matter how minor they may seem. The cost in stamina and energy used in fighting off the effects of irritants while tired can be enormous. Even minor aggravations are magnified during a long-distance ride, robbing you of precious energy in the form of stress.

Key to your ability to fight off irritants is a well prepared bike that is set up properly with resulting excellent ergos for the rider. Long term rider comfort while underway is the true secret in how seasoned veterans can safely garner big mileage.

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