

# TOP SECRET ENDURO TIPS



## Sneaky things you should know if you want to win



By [Pete Denison](#)

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These are tips I learned and developed from racing and working with the top riders in the sport. I've spent 20 years racing on the club circuit, and five years on the national circuit as computer programmer and timekeeping coach for Steve Hatch and Kelby Pepper. We won the national title in '94, and came damn close in '93 and '95. When we were racing nationals, I never would have told these tips to anybody, but since I'm off of the circuit now I can let the cat out of the bag. (I guess I still have a few more, but they're the illegal tips, and I'll never admit to knowing any of those!).

Since my company, A-Loop Offroad, makes the Pacemaker P3 enduro computer, any of the references I give below to timekeeping equipment is going to shamelessly plug the P3. If you don't have a P3, that's fine; most every one of these tips will apply even if you're using an ICO instrument or just a clock and odometer. Remember above all that it's not what equipment you're using that will win the enduro, it's how much THINKING you do. Very few people in history have won enduros without trying. If you can do it, great; if not, here's some of what I consider the most important things to remember when you have a score card on your front fender.

At the check, scan for flags: green means stop!

Know the two kinds of checks. At the secret check red/white diagonal flag, only minutes are recorded; and at the emergency (tiebreaker) check, green/white diagonal flag, minutes and seconds are recorded. If you are roughly on time, meaning that you're not way behind and riding in the berserko mode, when you first see a check, quickly scan for the flags. There should be two flags visible, usually they are behind a cooler or a fat lady, though. Learn not to look at your instruments right away; scan for flags first, but scan quickly, just the once-over. If you see a green flag, or cannot see any flag, then assume it's an emergency check. Check your diff-time

display; if you're more than one minute late, blast in. If you're in your minute, switch your attention to the clock (see next tip). Watch the clock at green flag checks. Your diff-time display is only as accurate as your odometer at any given point on the course, but your clock, theoretically, should match the check clock exactly. So when you are entering an emergency check, and you've checked your diff-time to make sure that you're inside your minute, switch your attention to the clock display. The clock will always be a more accurate way of telling your exact time than the +/- diff-time display, when you are entering a checkpoint.

Every check is the start of a 3 mile moto

There is a three mile free zone after every checkpoint (in AMA rules). Although many times the club will put a reset after the check to eat up this free zone and allow them more possible check locations, you should treat every check as the start of a three mile free zone. Go as fast as possible (still conserving a little energy for the rest of the race), and get through the free zone at your maximum trail pace, in case this is the beginning of a special test or points taking, section.

verbal reinforcement of 3 mile free zone

To help you remember the end distance of the free zone, reinforce it audibly. For example, if the check is at 30.3 miles then the free zone lasts until 33.3 miles. At the check, while the crew is marking your card, look for the mileage at that check, which is required by rule to be posted somewhere. Add 3 miles to this distance, and then say it out loud, "33.3!". Verbally reinforcing this makes it easier for you to remember when your head is full of numbers. Then go like hell, and train yourself not to look down at your instrument until you think you're almost at the end of the free zone. Three miles at 24 mph is 7.5 minutes, so that gives you an idea of about how long to moto before taking your eyes off of the trail. The new P3 has two methods of keeping track of free zones: you can mark a check location with a key-press, and black bars appear between display segments that denote the free zone, these disappear after 3 miles. There is also an audible alarm that alerts you to an upcoming possible check, and it is silenced when the free zone bars are visible.

Know when NOT to timekeep

Beginners timekeep all day, but pros know when they are safe inside a free zone, where they can go all out, and when they are not in a free zone and subject to a check. Know the rule book. Free zones are two miles before a known control, three miles after a known, or any secret or emergency check. If you're inside a free zone, why are you looking at your instruments? Quick quiz: every enduro has at least one known control. Do you know where it is? (The start).

What is "Riding Possibles"

Riding possibles is an advanced timekeeping technique, made somewhat obsolete by the latest generation of timekeeping computers. Since the rules only allow checks to be placed at the conjunction of a whole minute and an even tenth, there is a limit to where checks can be placed. You can calculate, or the Jart Chart can show, the exact location of allowable (possible) checks. Pro riders that have no trouble keeping pace at almost any speed average, in effect will treat the space between possible checks as mini-free zones, and roost between them, slowing when they approach the next possible location. They are basically riding very hot (early). The advantage is that it may give them a few seconds lead if the trail suddenly turns way too difficult for the speed

average (a points taking section). The danger is that they will be caught early, and get a big penalty. If you ever hear of Davis or Hawkins burning a check, it's not because they were napping, it's because they were riding possibles and got caught. For the average club "A" rider, there are more points to be lost by burning a check early, than there are seconds to be gained by riding early on possibles. Also, since modern computers are so accurate with respect to your diff-time seconds fast/slow, a better trick than riding possibles is to keep 10-15 seconds early into the next minute at all times. You can always scrub that amount of time by trials riding if a check appears. This does almost the same thing as riding possibles, but you don't need the razor sharp alertness of the factory pro.

### Riding actuals, not possibles

Inspect the route sheet carefully the night before the race. Look for sections with high speed averages and find the resets. Small resets of less than 1.5 to 2 miles, particularly ones with odd mileages that are not divisible by the speed average in that section, usually are placed there to adjust the course mileage so that the club can place the check in a good physical location, like in a gulch or past a hill crest, and have the mileage come out to be an even possible. Longer resets that increment in even minutes at the given average speed, e.g. 4.0 or 5.4, normally are placed after a points-taking section's check-out check. Those resets put all the riders back on time, and are a clue both to the location of the check-out and to the amount of time that the club thinks you'll drop. Sometimes the club is remarkably transparent, if you know what to look for on the route sheet. Keep your mouth closed if you think you've found something. No sense telling everybody. If you can anticipate the checks, we call that "riding actuals" rather than riding possibles (even though we're really only guessing about the locations).

### Use the roll chart to preview the course

When you're riding an enduro, the roll chart is an important tool, since it is the only way we really know what is coming up next on the course. If we're going 24 on a dirt road section, and there is no trouble keeping that kind of average, use this time to roll ahead a bit on the roll chart and see what comes next. Perhaps there's a left turn onto trail in two miles, or a change to a much lower average. Knowing this would allow you to tighten up your helmet and fanny pack, psyche yourself up a little, and maybe discreetly move ahead of the other guys on your row, so that when you dive into the trail section you won't have them holding you back.

### Mark the roll chart the right way

Pros use highlighters to mark certain parts of the roll chart for fast reference. Make sure that you mark the same things with the same colors each weekend. We keep the markers in a little tackle box (Kelby Pepper's is called the "Barbie Box", ask him why sometime), and use tape to mark the markers, so we know that (for example) pink is for speed changes, green is for resets, and blue is for free zones around gas or knowns.

### Always update your mileage

The legal mileage at any check is derived from the last posted mileage on the course. Sometimes the club will post a mileage that



is deliberately in error, and then place a check after that, and it's legal. Remember that we're not trying to match the national bureau of standards, just the bike that laid out the course. The rule book says that the club must use one bike to mileage the entire course, but they NEVER do that, so make it a habit to update your mileage every time you see it posted, and at every turn. Learn to do this without looking at the computer twice, e.g.: sign says 32.81, glance at odo shows 32.79, press the up button twice without looking at the computer, it'll be right. You don't need to be staring at the instruments all the time, you should watch the trail. Also, your diff-time is a calculation that is derived from the "should be" or computed distance, and compared to your actual odo reading. If your odo is not in sync with the course's marked mileage, your diff-time is inaccurate.

What is a cheat sheet, and how to timekeep with one

Best tip I've got. Make a small 3x5" chart showing all the speed sections, and the length or duration of each. If the route is complicated use two or more cards. Tape these to your tank or shrouds, or tape them like a flag to your bars. At resets or gas, study the next upcoming sections. Since you've really studied the route beforehand, (and making the cheat sheet is a good study tool) you'll know the sections where you think you can rest, and the ones where you expect to get spanked. If you get really late, you can timekeep off of the cheat sheet. Just take a second and find the next reset, or gas, or speed change to a slower average, and go like hell until you get to that mileage. Ignore everything else but the odo, just go like a moto until you reach the next point that you've identified on the cheat sheet.

Gas and Go:

At many gas stops where the gas is a known control, (actually, any gas stop must be a known, unless they call it a "Gas Available"), there is a three mile free-zone after the gas. Sometimes the organizers will put a reset after the gas, often right in sight of the gas, and that will in effect eat-up the free-zone (Remember, reset miles count the same as ground miles). In this case it's safe to take your full allotment of time at the gas, and fuel or eat, etc., BUT... many times the club will not have a reset after gas, and that means that there is up to three miles of trail before the next possible check. If this is the case, you should gas and go as soon as possible, and ride to the end of the free-zone before resting. What if there IS a check at the next possible, and there is three miles of gnarly terrain that you must cover at 24 mph? You'd feel pretty stupid if you were late to that check because you talked to your girlfriend and peeled a leisurely orange back at gas. Often, the club has a reset after gas, but places it out of sight of the gas, maybe only to reduce congestion there. It's up to your pit crew to know exactly where the reset sign is located, so that they can point it out to you at the gas, or if it's just down the trail they can hold you at gas while the other riders race out.

Know the rules, and always bring a rule book

Always carry the AMA rule book, and your local district rule book, and know what it says, too. There's a way to make sure that the rule book always favors your position in a protest. Keep it in your truck, consult it if you think you have a possible protest (or are the victim of one), but only bring it out if the interpretation favors your position! You'd be surprised how many club referees don't bring the rule book, and if it helps your protest and you've got it in writing, you'll win every protest (usually).