

Advanced Timekeeping

This is where enduros turn into the "thinking person's game"



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[Trail Rider Magazine](#)

When we left you last month, you were riding an enduro with a basic roll chart, a clock and an odometer. You know how to make a roll chart (or how to buy a Jart Chart), and you know that the object is to match the roll chart to your odometer and clock. Knowing that a little bit of knowledge is a dangerous thing, you've probably already realized that there's a lot more to it than this. Certainly, if it wasn't the dead of winter and you'd had a chance to actually ride an enduro after our little lesson last month, you'd still feel in the dark about a lot of things. This month we'll get into all those things, hopefully, and open up the darker corners of the art of timekeeping.

Check-Ins, Check-Outs

You've heard enduro riders talk about going through the "check-in;" or losing points at the "check-out." If you're new to this game, two questions are going to come up when you here such things. First is, "What are they talking about?"

Basically, a check-in is a checkpoint along the course that "checks you into" a tough section; a section where the club expects you to lose points. If you're riding well, on top of your game, and nothing has gone wrong yet during the run, you'll be riding on time at some point right after you leave the start. All four of the riders on your minute will be bunched-up together, at least somewhat, and you'll be riding along at something short of a racing pace. If the guy leading your minute knows what he's doing, he'll be constantly checking his mileage and time, and varying his speed by the minute to keep his roll chart matched to his instruments. If you watch your instruments, you may notice that he's riding exactly according to the numbers on his roll chart--what we call "staying on top of his minute," or riding exactly on time--or even riding early by a few seconds. He will appear agitated and be nervously looking ahead every time he can see a distance in front of him, and if you ask he'll say he's looking for the "check-in."

Through experience, he knows there will be a check coming up, and that check will take your time going into the first "section" of the enduro, where the club will try to take points. He's done his math up to this point. The starting line at the enduro was also a check, but it is known as a "start control" or possibly a "known control," and in an AMA enduro he knows there couldn't be a check for three miles. So you have ridden the first three miles of the run, and he's looking for the next check, which, at the 24 mph our sample enduro calls for in that section, could be located on any minute, spaced every four tenths of a mile on the course, at least until the next speed change. Your roll chart is written out as four tenths of a mile every minute; what he's looking for is the next point on the roll chart where the numbers line up, and he knows there can be a check there. He's looking for the next "possible" check.

StumpJumper
Start At
24mph
RESET
0.0 to 3.2
3.2 - :08
3.6 - :09
4.0 - :10
4.4 - :11
4.8 - :12
}
8.8 - :22
CHANGE TO
18mph
9.1 - :23
9.4 - :24
9.7 - :25
10.0 - :26
}
14.2 - :40
CHANGE TO

When the check-in finally comes up, your lead rider will rush into the check right on the top of his minute--maybe just a few seconds past what your roll chart says is right on time, to make sure he doesn't come into the check early--and as soon as his card is marked he will be gone. You should do the same. You've just been "checked-into" a section, and anything can happen. Watch your timekeeping gear, and if you start falling behind while the terrain keeps getting tougher, well, now's the time to forget about timekeeping and go as hard and as fast as you can. When you finally come to the next check it will most likely be a "check-out," meaning that the club now checks you out of the tough section. A check-out might be followed by a reset, or by easy riding, to allow you to get back on time before the next check-in.

Right now, let's assume that the next check is a check-out. In reality, it doesn't have to be. It could be one in a series of "back-to-back" checks figured into the course to take away massive amounts of points. When the checks are back to back, there's no way to get back on time. This is very damaging to the scorecard and the soul, and the club knows this!

Anyhow, the way you stay abreast of this check-in, check-out thing is to read the rules, just like we said last month, and know where it's legal for the checks to be. AMA rules are easy. Checks can't be any closer than three miles. So when you're three miles out from the start control the next "possible" check location is just that, the next place a check can be; which at 24 mph is 3.2 miles or eight minutes into the ride. Because of the rule, when you go through the check-in you know for sure that the section is going to be at least three miles long--by the roll chart--because the next check can't be any closer than three miles. So for 2.9 miles you have nothing to lose by going as fast as you can; and, if you feel like you might be staying at the current average speed or even exceeding it, you should pause and check your instruments 2.9 miles out from that check-in and confirm whether you're late or early before you go wailing into the possible check location.

As an aside, let me add here that under New England's "Brand-X" rules (formally known as New England Interval Rules) there is no three-mile rule. Checks can be located anywhere on the course on a whole minute and a whole tenth, but no farther than 40 miles apart. We'll get into Brand-X techniques later.

Riding Possibles

The other term you hear bandied about is "riding possibles." This is a technique advanced riders use that only works if you have the ability to ride faster than the prescribed average speed in any section. The way you "ride possibles" is to go as fast as you can in-between the possible check locations, so that every time you approach a possible you're riding way early, and you slow down and very carefully approach the possible check location. You can imagine that this would be a very nervous and jerky thing to do at 24 mph, or 18 mph, which translate to .4 per minute and .3 per minute, respectively. However, if the club hands you an oddball section average like 21 mph (.7 every two minutes) or 16 mph (.8 every three), riding possibles is a very effective technique, and it adds a lot of fun to the day's riding. Rather than poking along worrying about a possible every minute, you can ride like a knucklehead for two and a half minutes and then slow down, concentrate on your timekeeping, and carefully ease your way into the possible check location. If there's a check there, you can hit it on the top of your minute and blast into the next section; if there is no check, you still blast off and ride hard towards the next possible. Now most riders, even good riders, will take a speed like 24 mph and cruise along at a pace that allows them to hit each possible at the top of their minute without varying speed too much along the way (this is assuming that the terrain is open enough to allow you to keep up at 24 mph). The trouble is, whenever you keep up a steady pace like this it's pretty easy to let your mind wander--especially if you're not leading the minute--and the chances are you'll forget completely about what you're

supposed to be attending to--like what the mileage is, what the mileage of the next possible is, what minute you're in. As soon as these three necessary numbers leave your brain you are trail riding, you are not enduro riding. If something tricky comes up, like a short difficult section, or a speed change you forget to pay attention to, or a mileage marker that disagrees with your odometer, you are going to be sleeping. Instead, you'll see a really sharp, winning enduro rider vary his speed tremendously even at 24 mph. He'll creep into the possibles, and then floor it hard between them; he'll be "riding possibles." Doing this forces you to concentrate on your mileage, the time, and where you are in the enduro, and it's a very worthwhile skill to develop.

Types of Checkpoints

This kind of information is in the rules, but we'll go over it briefly here.

Secret checks: Normal checkpoint, could be at any legal point in the ride. If you're early you lose two points for the first minute and five points for each additional minute, and if you're late you lose one point per minute.

Emergency or Tiebreaker checks: Same basic scoring and rules as the secret check, but at a tiebreaker check you are scored to the second. The perfect arrival time at a checkpoint is 30 seconds into the minute you are supposed to arrive. So if your roll chart says "4.4 at :11" your perfect arrival time to a tiebreaker check at that location would be 11 minutes and 30 seconds; which we will write as 11:30 (remember, there's no such thing as hours). You lose emergency points, or tiebreaker points, for however many seconds you miss 11:30 by. Say, if you arrive at 11:45 you lose 15 tiebreaker points; you'd lose the same amount of points if you arrived at 11:15. It gets confusing if you're much later, because now you're accumulating seconds in addition to and separate from your regular points. For example, if you arrive at 12:15 you lose one point for being a minute late (you're "into your second minute") plus 45 tiebreaker points (counted from 11:30). Get it?

Known control: A known control is always identified as such on the route sheet. You know where it is in advance. You'll lose one point for each minute late, but you are allowed to arrive up to 15 minutes early without penalty, five minutes early under Brand-X rules. You are also penalized two points for each minute for an early departure from a known control, although most clubs only use known controls for the finish, or for the finish of a loop. You must be careful with known controls. Occasionally a club will set up the finish of their run with a known control, and through resets and speed average make it so you can easily arrive more than 15 minutes early without thinking about it. Do the math! There's always an element of machismo in arriving way early at a known control--out west it was a point of pride to see how hot you could be at the finish--but you look real stupid if you ride well for a whole enduro and then disqualify yourself by burning a known control. Also, know in advance that "15 minutes early" technically means 15 minutes plus 59 seconds, per AMA rules, but very few club members really understand this. To be safe, always arrive something less than 15 minutes early at a "known," if you have the ability.

Observation check: An untimed check that could be anywhere on the course, where the crew marks your card to prove you've actually been there. Your time is not taken at an "OB" check, so you can be early or late without shame.

As you can imagine, it's to your advantage to know the difference between the above checks, and the clubs make it easy for you. Secret check locations are marked by a pair of red and white flags delineating the actual line you must cross to be scored. Emergency checks use green and white flags, known controls use yellow flags, and observation checks use white flags.

What To Do During Your Stay

There is a lot to see and do in a checkpoint, when it pops up in front of you on the course. Here's what you should do when you see a check in front of you, coming up on the course. For the sake of argument, we're assuming this is a check-in, and you're either on time or early when you see it. If it's a check out, chances are you're late, and in that case the only steps you'll need to follow here is what to do once you're already past the flags.

First, you look at the flags. If it's an observation check, just blow on into it and get on with your life. If it's a known control make sure you're not earlier than 15 minutes (five minutes for Brand-X), and head on in. If it's a secret or emergency check, you've got a lot to do.

First, how early are you? Look at your clock and figure out where you are. If you're early by a few seconds you're going to have to scrub off time before you pass the flags. Now, according to AMA rules you can't cease forward motion, but you can drag your feet; but most checkpoint crews will score you a "burn" as soon as you put a foot down. Don't ask me why; mostly they're just over-anxious. Just know that if you put your foot down someone will holler "Ah-ha!" and score you right there.

Are you already into your minute? If it's a secret check, then run on in and get scored as quickly as you can. You want to have as much of your minute left as possible after being "checked-in" to the next section. If it's an emergency check you have more to consider. If you go into the check on the top of your minute, you're going to collect emergency points, maybe as many as 25 or 30 of them. Whether you can afford those points on top of what you already have in regular points depends on how easy the run is and how good of a rider you are. Remember that emergency points are just used to break ties--if another person in your class scores exactly the same as you, the emergency points total will determine who finishes ahead. If it's a real easy run, possibly everyone will be very close on regular points and your emergency points total will have a large effect on your final placing.

However, if you know you're being checked into a tough section and you have little confidence in your ability to really do well coming out the other side, then you should rush in and get your card marked and get going. The seconds you save going in may be enough to net you another whole point at the check-out, and remember that whole points are what matter the most. The more experience you get in enduros, and the better you start doing, the more emergency points will factor into your riding.

Once you're into the check things will happen quickly, but you absolutely should make sure you do a few things before you jet out of there. First, someone will jump out to mark your card, which should be taped onto or carried in a holder on your front fender. You should watch what number that person writes on your card and make sure it matches what's on the flip cards. The flip cards should correspond to key time, and if you're doing everything right they should agree with your clock. While the checker is marking your card, it pays to look over your shoulder and see if someone is sitting on a lawn chair with a clipboard. This person is maintaining a backup sheet of all the scores, and you want to make sure they got your riding number, so you can shout over to this person whatever your rider number is, like "25A."

The next thing to do, and most important, is to look for a card, like a little sign, that gives all the specifics for the check. It will have the key time, the mileage, the check number, and maybe some more information. What you want from this card is the check mileage, and before you move forward you should reset your odometer to this mileage, and make sure you get it right. If it's an AMA enduro, you now know by the rules that you have three miles in front of you where

there can't be a check, so roll your roll chart up to the first possible three miles past your present mileage, and note that mileage. Maybe your instruction for the possible might read "8.8 at :22;" so you memorize that and take off. Until you get to a point just before that next possible you don't have to think, so remember that number and take off.

Remember the rules, though! In New England's Brand-X rules, you're now on time and there's no three miles of free riding in front of you. For Brand-X, there's another step in the check. You have to note the number the checker writes on your score card, and then figure the difference between this number and your starting number. If you started on 25A and the girl just wrote "27" on your card, your new number is 27. What this means is that you now have to add two to every one of the time notations on your roll chart. Yes, it gets complicated, since your number may change at every checkpoint. Some guys actually carry a marker pen or grease pencil with them to note the new number down on a piece of paper taped to the bars or the tank, or even just write on the tank itself. Whatever works.

Still More To Come

Okay. So now we know what checkpoints are, we know some of the finer touches of timekeeping. We know how to make a roll chart and how to rely on our instruments. Unfortunately, there's a ton more to learn, but very little space left here. We have to cover resets, free territory, and a lot of other little things that you'll need to know before you turn pro. Tune in next month for "More Advanced Timekeeping," and in the mean time remember to keep your roll chart tight.

Common Speed Averages

MPH	Miles	per	Minutes
6	.1		1
7	.7		6
8	.4		3
9	.3		2
10	.5		3
11	1.1		6
12	.2		1
13	1.3		6
14	.7		3
15	.5		2
16	.8		3
17	1.7		6
18	.3		1
19	1.9		6
20	1.0		3
21	.7		2
22	1.1		3
23	2.3		6
24	.4		1
25	2.5		6
26	1.3		3
27	.9		2
28	1.4		3
29	2.9		6
30	.5		1