$\mathbf{M}$ost everybody knows an enduro has something to do with timekeeping, checkpoints, route sheets and terrain that would stop a centipede. Magazines love to print pictures of enduro riders speedometer-deep in water or bulldogging down a cliff that belongs in Hillery's memoirs. Indeed no other form of motorcycle competition is more misunderstood than the enduro, unless it is the ISDT, which is simply a six-day enduro with modified rules. But, don't let the confusion, or even total ignorance, stop you from trying an enduro, because in the end they're a challenge that lets you prove yourself, and have a lot of fun as well.

Put simply an enduro requires you to ride a course at various speed averages, and frequently checks your progress to see if you are running ahead or behind schedule. For instance the enduro might begin at 24 mph (the most common speed average) and have a secret check at 8.4 miles. You will lose two points for every minute you arrive early or one point for every minute you arrive late. This process is repeated throughout the length of the course, which varies from 50 to 250 miles, or up to 500 miles if the enduro is a two-day event such as Greenhorn or the Last Chance. Whoever totals the fewest points wins, and since the art of timekeeping is a separate skill, sheer motorcycle riding ability isn't always the determining factor. However the winner is usually a master at both, such as current National Enduro Champion, Dick Burleson.

How can you tell whether you are behind or ahead of schedule while riding on the trail? Simple. The organizers, usually an off-road motorcycle club, will send you a route schedule a few days before the event if you've mail-entered in advance. It will look something like this:
Start Go 24 mph for 10.8 mi . 7:00 a.m Speed Change: Go 18 mph for $3.9 \mathrm{mi} . \quad 7: 27$ Speed Change: Go 30 mph for 20.0 mi . $7: 40$ Speed Change: Go 24 mph for 13.4 mi . $8: 20$ Gas Stop

8:51
From this you will make a route chart which goes into the route chart holder on your handlebar. To make the chart simply refer to the accompanying speed-average breakdown and divide the enduro's entire mileage into whole minute intervals. Every entry you make will be a possible checkpoint. Your route chart will look something like this (at 24 mph ):

Start 7:00

| .4 | $7: 01$ |
| :--- | :--- |
| .8 | $7: 02$ |
| 1.2 | $7: 03$ |
| 1.6 | $7: 04$ |
| 2.0 | $7: 05$ |
| etc. |  |



All four starters on this minute are double-checking their watches to make sure they agree with keytime clock. Husky rider is National Champ Dick Burleson.

> SPEED-AVERAGE BREAKDOWN
> 3 mph
> 4 mph
> 5 mph
> 6 mph
> 7 mph
> 8 mph
> 9 mph
> 10 mph
> 11 mph
> 12 mph
> 13 mph
> 14 mph
> 15 mph
> 16 mph
> 17 mph
> 18 mph
> 19 mph
> 20 mph
> 21 mph
> 22 mph
> 23 mph
> 24 mph
> 25 mph
> 26 mph
> 27 mph
> 28 mph
> 29 mph
> 30 mph
> 31 mph
> 32 mph
> 33 mph
> 34 mph
> 35 mph
> 36 mph
> 1 mile per 2 minutes
> .2 mile per 3 minutes
> 5 mile per 6 minutes
> 1 mile per minute
> .7 mile per 6 minutes 4 mile per 3 minutes 3 mile per 2 minutes .5 mile per 3 minutes
> 1.1 miles per 6 minutes .2 mile per minute
> 1.3 miles per 6 minutes 7 mile per 3 minutes .5 mile per 2 minutes 8 mile per 3 minutes
> 1.7 miles per 6 minutes .3 mile per minute
> 1.9 miles per 6 minutes
> 1.0 mile per 3 minutes .7 mile per 2 minutes
> 1.1 miles per 3 minutes
> 2.3 miles per 6 minutes .4 mile per minute
> 2.5 miles per 6 minutes
> 1.3 miles per 3 minutes .9 mile per 2 minutes
> 1.4 miles per 3 minutes
> 2.9 miles per 6 minutes
> .5 mile per minute
> 3.1 miles per 6 minutes
> 1.6 miles per 3 minutes
> 1.1 miles per 2 minutes
> 1.7 miles per 3 minutes
> 3.5 miles per 6 minutes .6 mile per minute

Deciphering the above reveals that when your odometer reads .4 the time should be 7:01, and when it reads 1.2 the time should be 7:03, etc. If your odometer reads .8 at 7:03, you know you better get the gas on because you're one minute late.
Naturally there are nearly as many timekeeping methods as enduro riders, but we've had good luck with this one. Many eastern enduros have only one average- 24 mph -so you ride four-tenths per minute all day.

Enduro riders are classified A, B or $C$-these letters being equivalent to Expert, Intermediate and Novice. In a three-loop enduro the Cs often ride only the first two loops because the last one contains terrain or speed averages too tough for beginners. Advancement requires earning the requisite points in a season.
The AMA sanctions most U.S. enduros and membership is required to enter. The only other qualification is the entry fee which varies from $\$ 5$ to $\$ 15$ for a one-day ride and up to $\$ 30$ for weekend runs.
Endurance riding in America can be classified in three basic categories: family enduros, local AMA District enduros and National enduros. Difficulty ranges from ridiculously easy to practically impossible. Nobody zeros a true National-calibre enduro because the average speeds in tough sections are purposely set

## ENIDURO


high as a separating factor. Sometimes sponsoring clubs get tricky with frequent speed changes to break your timekeeping rhythm and force a mistake. Nothing would make Dick Burleson madder than burning a check because of a timekeeping error. Conversely, a family enduro sticks to simple averages that can be computed in your head if you don't have a roll chart or watch, and keeps the terrain simple enough for kids and moms on lightweights. District runs vary in difficulty depending on the reputation of the particular event or sponsoring club. About 300 riders compete in the average District enduro, compared to $500-600$ in many family runs. The famous Hook and Ladder family enduro sponsored as a benefit for the L.A. County Hospital Burn Ward usually gets 3000 entries every year. It's an amazing sight. They run eight riders every minute for seven hours, so the entries on minute 1 are finished with the enduro and halfway home before many have even started.

Most enduros shouldn't be attempted on any motorcycle smaller than a 125, although certain family runs will advertise a course negotiable by minibikes. Street-legal trail machines are usually suitable when fitted with full knobby tires, but to be competitive you'll need one of the many ISDT-type bikes now available or a motocrosser set up for enduros. It would be wise to begin with. something like an IT175 Yamaha (\$998) which has adequate performance for even a National enduro without a shrinking effect on your wallet. Motocrossers can cost up to $\$ 2000$ and often deliver high-strung, explosive performance difficult to control in enduro situations. Furthermore the dual-purpose and ISDT bikes already

Some riders prefer to use mini-computers built for enduro timekeeping such as this Digitronics $\$ 150$ unit. the minute and second hands separately.
come with a speedometer and enough rudimentary accouterments to pass for "enduro street legal." This usually means lights, a working stop light, spark arrester, horn and mirror so short sections of pavement can be included in a course without unnessarily aggravating the authorities.

Enduro classes are usually up to 175, 250 and Open in each of the A, $B$ and $C$ rider classifications. Most often four riders leave on every minute, your departure time being determined by a drawing of mail entries a few days before the event. Thus it is possible to sign up with three of your friends so you can all ride on the same minute. Post entries the morning of the run are assigned minutes


An efficient pit crew is especially important at gas stops where extra time isn't added into the route schedule.


Route chart holder at left is available through Webco and sells for \$15.95. Heuer Master Time 8-Day clock costs $\$ 125$ so be sure it's well-insulated from vibration. Don't buy a clock without a "hack feature" which enables you to set
at the back of the pack. Most riders prefer early numbers because the tough sections won't be clogged with traffic, the trail is less chewed up and there's less dust.

An enduro rider's clothing is specialized in several ways. The boots must have cleated waffle soles to provide traction in case you have to push your bike up a hill or through a mud bog. Steel-toed boots such as the Full Bores ( $\$ 84.50$ ) pictured on our fully-outfitted enduro rider have prevented rocks from claiming many a toe. Luja pants from Rocky Cycle (\$69.95) include the indispensable knee cups needed to fend off brush and branches on tight trails. Because of dust, face shields are inadequate eye protection for enduros, so buy
goggles that seal completely, such as our model's Scotts (\$12-15.00). A proper jacket is one of your most important purchases. Since enduros often start early in the morning when it's cold (7a.m.), the jacket must be designed to loosen the cuffs, collar and front to let air circulate when it gets hot later in the day. It must also have a billion pockets like our Yamaha jacket (\$75) to carry the following items: scorecard, identification, money, matches, tow-rope, a chain repair kit, a snake-bite kit, toilet tissue, an innertube, a can of flat fix to inflate your spare tube, extra spark plugs, a small roll of duct tape and whatever spares you feel you can carry. Don't forget a paper and pencil so you can send a note ahead if you break down or are hurt.

Since many enduros are a point-topoint event rather than a series of loops that start and finish at the same place, you'll need a pit crew that can meet you at spots on the course designated for gas and lunch. Pitting is one of the main reasons most enduro riders belong to a motorcycle club; because there are always plenty of club members and their friends to handle the job.

Are all the horror stories true? Will you really have to push your bike up Himalayan-type hills or carry it over giant redwood logs? How much endurance does it take to ride all day? Is just finishing a real achievement? How would I do in an event that cost Dick Burleson 30 points? Generally a new rider with a couple years of trail riding experience and a satisfactory motorcycle will be able to negotiate all the terrain on a C-rider loop without a problem. Certain sections on the $A / B$ loop might require two or three tries, or maybe even a push, but finishing should be ensured. Staying on time is another matter. Some of your early scores will be disheartening because of timekeeping errors, crashes and the pure fact that you aren't fast enough to stay on time. Since most events have slower sections after the speedy ones, your body has a chance to recover, so most riders in average physical shape won't have to quit from exhaustion. However you'll probably be sore the next day-with aching muscles a constant reminder that you finished. By the end of one full season, ( $8-10$ events) you'll have learned enough to be in contention for a class win. The prizes aren't much-a trophy and maybe a few contingencies such as a case of oil or pair of gloves-but the fun is priceless. What else would make you pay $\$ 10$ to get up at $6 \mathrm{a} . \mathrm{m}$. and freeze while bashing your bike through an ice-encrusted pond at 24 mph ?


