## The 2013 Iron Butt Rally: Day 2

## In the Middle

How do these riders decide where to go once they leave the hotel parking lot? As you might suspect, the answer is not always immediately apparent. On the first of the rally's three legs there are 69 bonus locations. They range from Sault Ste. Marie, Ontario, in the northwest to Rimouski, Quebec, in the north to Key West in the south. In the entire recorded history of the Iron Butt Rally, traveling to Key West to obtain a bonus has never --- let me repeat that, for it bears repeating: never --- been a good idea.

With unlimited time, of course, each rider would soon be returning to Cranberry Township with 69 bonuses in hand. They are long-distance riders and riding long distances is what they do. But they don't have an infinite amount of time. Even our galaxy doesn't have that. No, on the first leg the riders have but 84 hours. Is it even possible, for example, to ride from Cranberry Township to Sault St. Marie, to Rimouski, to Key West, and back to Cranberry Township in 84 hours? It is. You'd have to average almost 60 mph for 3.5 days, but some of these contestants could do it. Would that be a clever strategy to employ? It would not. It would be an exceptionally poor strategy because, to name just one of many objections, it is thoroughly inefficient: you will have ridden a great many miles for very few bonus points.


So how do they do it? Given mapping software, computer spreadsheets, and a reasonable knowledge of travel conditions --- tools commonly available to the riders nowadays --- most routes will eventually optimize themselves in a fairly predictable pattern. The leg's biggest bonuses will attract the most serious attention. Many bonuses will have constraints, such as being available during daylight hours only. It's a delicate balancing act, and the tipping point is not always obvious.

Some riders are geniuses in the route plotting game. Rick Morrison was one, using a Marlboro cigarette to measure 200-mile distances on a Rand-McNally map. He seemed to be able to absorb the intricacies of a 30 -page list of bonus locations the way Bobby Fischer could deconstruct chessboard positions. Jeff Earls, Eric Jewell, and Jim Owen are in that league. I once saw Don Arthur, then the surgeon general of the U.S. Navy, take the bonus listing from the first leg of the 2005 IBR and, using Street Atlas and an Excel spreadsheet, produce in less than 20 minutes a near duplicate of the winning ride that Jim Owen had taken in the event. It was like watching Michelangelo sculpt an elephant from a block of marble: he just chipped away everything that wasn't the elephant. There was really nothing to it.

Once a potential route for the leg has been constructed and allowances have been made for average speed, the time to be taken for bonus, gas, eating, and rest stops, and miscellaneous distractions, a final question remains: Is the rider physically, mentally, and emotionally capable of riding the route that he has created? Jim Owen, the winner of the 2009 IBR, says it most succinctly: Plan your ride; ride your plan. Planning a ride should not involve luck, but riding a plan always does. Still, you control the things you can, hope for the best, and expect the worst. What made people like Morrison, Earls, Jewell, Owen, and Arthur stand out from the crowd was that, when the flag dropped, they were gone and not looking back. How do you win this rally, someone once asked Morrison. He pointed to the seat and throttle. "Sit there, twist that." Nothing to it.

In the weeks leading up to the start of this year's rally a number of thoughtful posts about rally routing appeared on the Long-Distance Rider list. One of them linked to a blog by Sam Liles, today known as Rider \#55. At first I thought I was looking at a variant of the Seven Bridges of Königsberg or some other intricate operations research model involving a traveling salesman making nine stops in five towns in six days that, I seemed to recall, had originally appeared in a 1916 issue of the Zeitschrift für Angewandte Mathematischen und Statistik. Clearly, Mr. Liles would be someone to keep an eye on during the early stages of the event.

During the riders' meeting, routemaster Austin was not hesitant about suggesting one of his preferred bonus stops on the first leg, the Henry Ford Museum in Michigan. As we noted yesterday, it appears that most of the contestants have followed, or are about to follow, his advice. Not so five riders who are making a
beeline for Key West, among them none other than Sam Liles. Can it be that his analysis of the leg's bonuses has uncovered an ingeniously sophisticated route that will leave such clear contenders as Eric Jewell, Matt Watkins, Mark Crane, Ken Meese, and Derek Dickson in the dust?

Tom Austin, no slouch himself when it comes to plotting courses, doesn't think so. He told the riders at the banquet Sunday night that if they were designing a route that didn't produce at least 14,000 points on this first leg, they would find themselves behind the curve and in danger of not being able to accumulate enough points to be considered a finisher at rally's end. Sam Liles' proposed plan, even if executed as he hopes, will fall about $15 \%$ short of Austin's recommended minimum on the initial leg, but he wants to begin conservatively. We shall see how that works out.

The bell-shaped curve that describes a standard distribution of elements in a population is one of nature's great delights. Everything has its unique place under its mathematical umbrella, from Albert Einstein at the extreme of one end to Josef Stalin at the other. Most of us are more or less huddled in the middle, trying to find a way to be noticed. It isn't easy. If it were, anyone could sculpt an elephant.


Decal on fender of rally bike at start

## Update: 7/2/2013 2245 EDT

## The Attrition Begins

Neil Hejny lost the better part of a day in Ohio with a failed alternator. He wasn't two hours into the rally when the bike's troubles began. He called Lisa, depressed and ready to make a sacrificial pyre of his Gold Wing. "Neil," she snapped. "You need to get angry here. Channel your inner Lisa and get those mechanics moving!" Apparently he did. Tonight he's up and running with an alternate alternator.

Mark Crane never seems to have a carefree ride. Late this afternoon his BMW began spitting gas where gas should never spit, not even on a legendary motorcycle of Germany. There aren't many BMW dealerships still standing in Canada these days, but by some miraculous process Mark seems to have come to a halt not far from one. We'll cross our fingers for him.

## We Hear from Our Attentive Readers

A few of our followers wrote to suggest that my condemnation of Key West as a bonus locale is not always as delusional as I suggested. They say that in 2001 $40 \%$ of the top ten riders visited the place and in 2011 six of the top ten finishers did so. I am a bit reluctant to put too fine a point on it, but this sort of reasoning is merely an example of the well known logical fallacy of post hoc ergo propter hoc, or that because B followed A, A must have caused B. Nevertheless, as Sportin' Life said, it ain't necessarily so.

The scoring algorithm in 2001 was so aberrant that one of its unintended consequences was to permit incompetent riders like me to beat George Barnes and Eric Jewell, a result so completely contrary to all known laws of human reasoning that philosophers still cannot properly categorize it. Key West did not determine the outcome of the event; Prudhoe Bay did that.

A similar argument holds for 2011. The proper route from the outset was to avoid the Four Corners bonus and to concentrate on taking down as many capitol cities as possible. The winner, Peter Behm, was forced into riding to Key West because he lay in 13th place with one leg to go and had no alternative available. He had worked himself into that corner, and it would take one of the great rides in Iron Butt history for Peter to work himself out of it. But that didn't make it the ideal ride; it made it the only ride that he had left.

On a less contentious note Ira Agins, who knows something about the scientific method, told me this evening that my earlier note about the bell curve sounded to him like a succinct description of chaos theory. Not 30 seconds later I opened an e-mail from Derrick Sutton, a 2001 IBR finisher from Melbourne, Australia: "While the normal distribution has its place, I'd argue that a better model for the IBR
would involve power laws, fat tailed distributions, fractals, Black Swans, and chaos theory."

OK, I can resonate with the idea that Chaos, thy name is Iron Butt, and when butterflies flap their wings in Tokyo, clouds burst a week later in Cranberry Township, Pennsylvania. But in all candor I forced that bell curve trope because I really liked the photo of the decal on the bike.


Bob Higdon

