

By the time we reached Ritchey USA in Redwood City, California, we'd already visited several other Bay Area bicycle companies, and in each of these there had been employees whose functions were not readily apparent. I warned Jacquie Phelan and Bruce Feldman that the Ritchey facility would be different, and to stay clear of the shipping door if they didn't want to be buried by the products flying out of it.

I was joking, of course, but I sounded like a prophet when we walked into the modest warehouse on a back street. Five young men were working at a pace suggesting a world record in frame prep. They were picking component groups by wheeling a shopping cart past shelves full of parts, then packing framesets and components into boxes they piled next to the door. One young man, humorously wearing a Fisher T-shirt, threaded a bottom bracket on an unpainted frame. Every few minutes another bike box landed on top of the stack waiting for the afternoon pickup.

Although he spends most of his time at his frame shop in another location, Tom Ritchey agreed to meet us at the warehouse. When we walked in he was in a meeting with a manufacturer's rep, so we talked with the employees while we waited. They answered without looking up and without slacking the pace.

"Do you guys work this hard all the time," I asked, "or only when Tom is in the building?"

"Are you kidding?" replied Mark Anolik, who was taping some boxes. "This is the only way we can keep up with Tom."

At a later date, when I cornered Ritchey on his back porch, he laughed about keeping his shipping department working at warp speed.

TOM RITCHEY: Of course I take pride in being prolific, in trying to make a quantity of quality products. But I sense that it's overshadowing the real scope of my operation: to refine not only the bicycle frame but all of its components.

I get the feeling people think I have a big company with 50 employees and a technical department that comes up with these ideas that I just approve. My company includes six people at this point, and in between running it and building frames, I spend a lot of time riding my bike. That's the time I use to think creatively.

MOUNTAIN BIKE: Is it your creative thought that has led you to introduce a line of tires and a new rim that's one of the lightest on the market?

TR: I'm not willing to make components unless I can be sure of the quality. When I introduced a Japanese bike that was assembled somewhere else from 30 different components, it was difficult to end up with a product that met my personal standards. That's why I had to stop the project and go in another direction.

I won't develop a derailleur; it has too many components that require considerable organization to manufacture and assemble.

But a rim only requires a top-notch extruder and someone to fabricate it. So it's a natural product for me. I can maintain a high standard and be comfortable with the finished product.

As far as tires go, IRC makes the best in the world. It has a lot of technical resources, and its rubber technology—in the compound of the rubber, for instance—is very scientific. In the components I want to design, I have to know that the manufacturer can meet my quality standards.

With a complete bicycle, my experience has been disappointing. In individual components, such as tires, IRC has jumped through hoops for me. It knows that some of my ideas are going to set trends. Now IRC is using 127 tpi [threads per inch] in the casings and Kevlar—the first mountain bike tires to have it. It's also experimenting with base rubber thicknesses, different compounds, and dual hardnesses—stuff that other companies don't even try.

MB: What have been your experiences with other foreign companies?

TR: I like working with some of the smaller Oriental companies that are run by engineers and have a family heritage. They have a real pride. My progress with components has been slow and methodical, and I only want to work with companies that won't give me grief if I see something that isn't right.

To keep up with demand for my bikes, I use some Japanese expertise while maintaining quality control. TIG welding is a refined technique. Some of the best welders aren't in the United States, but in Japan and even Taiwan. Over the years I've had

welding done domestically and in Japan, and right now I'm getting the highest quality welds I've ever had from Japan. The people who do it most usually do it best. I contribute with what I do best, and we get the best product.

I make the custom-built frames myself, but the TIG-welded ones are preassembled in Japan, then shipped unpainted and unfinished to me. I add the braze-ons and bridges myself, because once the bridges are positioned the frame can't be cold set.

A large-production builder can sometimes get away with sloppiness. After the frame is painted it can look fine. Eventually, though, the braze-ons will break off or weaken the tubing. The Japanese know how to TIG weld but not braze. Working alone each week I produce 10 of my custom brazed frames and complete the finish work on another 20 or more production frames. Then I check the alignment before sending them to the paint shop.

I'm the happiest I've been with the product, because it's been a joint effort with a small builder over there—a guy I trained in my shop. There's one thing to being a welder and getting the best weld; it's another to assemble the frame so that everything is aligned. The guys in Japan are basically a foreign division of my company.

MB: What do you gain by keeping your company small?



Custom Quality at Warp Speed

BY CHARLES KELLY



Ritchey's success proves that when it comes to mountain bike technology, he knows which way the wind blows.

TR: I can be sure that each employee is trained by me personally to my standards. Over the last eight or 10 years there has been a real temptation to go big-time. I've even sent out feelers and done small projects that had this potential. But at every evaluation point, I've reeled it in; the reward doesn't compensate for the headache. This isn't even a 10-person organization at this point. When someone phones for the marketing director, well, there is none.

Keeping it small and manageable lets

me feel good about things. Having been wine and dined by industry bigshots who tell me about my potential, I now realize that quality of life is most important. I don't want to overcommit to anything that sacrifices my family and personal interests. Maybe that isn't a success story a la Madison Avenue, but I feel it is. I've held back when everyone else said, "Go for it!"

MB: Your career seems to have been shaped by your love of bike riding and your engineer's temperament of trying to

find a more elegant way to accomplish a task.

TR: We all racked up a lot of miles getting into this, and to me that's key to continued creativity—just riding my bike. It continually gets harder to do, but it's something I stubbornly insist on in spite of the kids and a 50- to 60-hour work week.

MB: Because you're so closely associated with the beginning of the fat-tire movement, your actual contributions have been distorted by time and distance. What do you remember about your introduction to the sport?

TR: It's hard to recall the details, but I was in my garage in Menlo Park, and [Joe] Breeze and [Otis] Guy called me about a tandem they wanted me to build. Then they mentioned these clunkers or ballooners they were working on. I said I'd heard about them and was working on my own version.

Joe later came down and showed me what he was doing, with drawings even, and I showed him a frame that called for a 650-B tire. So I'm not sure who was first. As a framebuilder, though, I was able to build a frame on impulse.

At that time my interest in racing was winding down, but I still enjoyed riding. We'd take awesome endurance rides—150 miles in the Santa Cruz mountains with 50 on dirt. We'd start at 8 a.m. and get back at 6:30. I don't do that enough anymore—the kind of rides that if you didn't know what you were doing, you just wouldn't finish. You'd ride 100 miles on pavement and 50 on dirt, but you'd remember all the fun you had on dirt. So we were all Category I riders having a gas off road on our sew-ups.

In fact, the mountain bike evolved from the skinny-tire road bike. What we have now is a sport with fat-tire road bikes. Things have really flipped around. There isn't enough credit given to the road bike, though. It's almost blasphemous to talk about one having much to do with the history of mountain biking.

Mountain bikes could have taken a different direction. In the beginning we were limited by the heavy wheels. The alternative was what the English were using on their woody-type bikes: the 650-B tire and the lightweight Super Champion Model 58 rim. What stopped them was no longer being able to get those Hakka tires from Finland because the Russians had allocated the entire production.

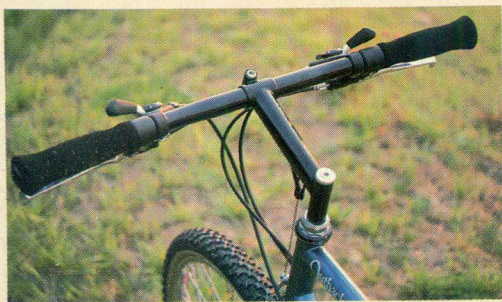
As far as the history of mountain bikes goes, we were all so caught up, and so unbusinesslike, that no one bothered to consider the implications.

That's the last thing anyone would say about Tom Ritchey now. ■

RITCHEY'S INNOVATIONS



Tom Ritchey's latest creation, the Outback, uses a steep 71.5-degree head angle for a versatile bike suitable for sport riding or expedition touring on or off road.



Ritchey, creator of the triangular-brazed Bullmoose-style handlebar, now specs his bikes with a chromemoly Force 1 bar and stem of his own design.



The Outback's ovalized lower seat tube, which increases bottom bracket rigidity, and its reinforced seat collar, which resists the stress of frequent seat adjustment, are Ritchey innovations now widely adopted by other builders.