

YETI A.R.C.

A bold new Easton aluminum tubeset puts Yeti in the thick of the lightweight hierarchy.

By Keith Mills

When the lightweight megatrend first started to zip through mountain biking a couple years ago, it express-mailed a message to framebuilders everywhere: Lighten up. For Yeti Cycles, a small-scale builder that had forged its reputation by building durable but heavy steel frames, the news was particularly weighty.

"We realized right away that we had to have something light," admits Yeti president John Parker. "But we know our customers like to do things like ride the Kamikaze at 55 miles an hour. And since we've always been a little uncomfortable with the prices we're asking, we think the bike has to last three or four seasons to justify the money."

As a result, he elected not to offer a superlight version of Yeti's stout steel frames. "We're steel people from day one, but we're only willing to go so far with it," Parker says. "The big decision we had to make was whether to go with titanium or with some other alloy. Eventually, we figured that titanium is already pretty well-developed. I go not only where there is technology, but where there is more to be achieved."

First, Yeti tried out carbon fiber with its bonded C-26 frame, but the bike was scuttled in 1990 because of problems with its glued joints. Still, that project gave Yeti a foothold in the labs of its then-SoCal neighbor Easton, the kingpins of aluminum and carbon tubing.

Parker liked what he saw in the aluminum vault even better. "These guys are aggressively seeking new technology. You can't even come close to seeing the end of what they're up to," he praises.

Last year, Yeti scored some of the first batches of Easton's Varilite tubing, a weldable 7000-series aluminum. This led to the A.R.C., a sub-four-pound frame that survived a rigorous season of testing



The A.R.C.'s one-piece, computer-bent stays apply a traditional Yeti design to thin aluminum tubing.

on the NORBA circuit and now is in full production at Yeti's new Durango shop.

Nowadays, lightweight oversize aluminum frames are commonplace. Still, the A.R.C. ("alloy racing composite") should easily stand out—even if it's not built up with a passel of purple parts like our test bike. There's something intriguing about the assimilation of Yeti hallmarks (ovalized top tube, one-piece chainstay/seatstay, top-tube cable routing) into an oversize aluminum design. And though that look may not be enough of a hook for all, everybody can groove on the bike's light and stiff ride.

Here, the intricacies of the Varilite tubing are most important. Easton's bicycle products engineer, Chuck Teixeira, says the tubing walls use an elaborate taper-buttling that varies their thickness according to the stresses on the frame. "A straight-gauge tube just never achieves the same feel as a taper-wall tube," Teixeira claims. "When you thin out the center section, you allow the frame to have some torsional twist but





Easton's Varilite tubing is so thin that the cable guides are riveted—which adds no heat stress.

still retain good bending stiffness." That explains why the A.R.C. is as stiff as anything else through the bottom bracket but not bitterly jarring over bumps (as long as your tires aren't too hard).

Those thin-wall sections, Teixeira adds, are about as extreme as the design can stand. A standard property of aluminum tubing is that the ratio of the outside diameter to the wall thickness can't exceed 50 to one without inducing the risk of buckling. The thinnest sections of both the A.R.C.'s top tube and down tube run to the 50:1 limit ($1\frac{1}{2} \times 0.03$ inches in the top tube, for instance). The tubing feels as though you could pinch it with your fingers. "It is more dent-prone," Teixeira verifies, "but where you might dent the tubes are very low-stress areas." As a security measure, the A.R.C. bolts on a Ringlé anti-chainsuck plate to keep the chain from strafing the chainstay.

Not surprisingly, the Varilite tubing can be fragile in the hands of the wrong builder. It needs caretakers like Yeti's Frank T. Wadellton, better known as "Frank the Welder," whom Parker calls "one of the all-time monsters of welding." Under Frank's tutelage, the Yeti welders have mastered the formidable Varilite. "I just can't consider these guys

workers—they're artists and craftsmen," Parker gushes. "I mean, the welds look like a stack of dimes knocked over. And they don't use pulse-welder machines like they got over in Taiwan, where the thing just goes tick-tick-tick and a guy shoves rod like a trained monkey."

Although the Varilite tubing requires no post-weld heat-treatment to restore its strength, Yeti artificially ages the A.R.C. in a low-temperature curing oven. Then the frame gets painted in Yeti's in-house powder-coating facility. Parker loves the powder-coating process because it's simpler and environmentally sounder, but it adds a few ounces to the frame.

Indeed, Teixeira says anodized Varilite frames can easily weigh three pounds. The frame on our 20-inch A.R.C. weighs three pounds, 14 ounces. The complete bike (with an Answer Manitou suspension fork that is almost as heavy as the frame) weighs under 25½ pounds. That's righteously light for a fairly big bike with suspension.

"In the workingman's world, we're into fair weights and honest measurements," vows Parker. "I won't say we have the lightest bike, but we have one of the lightest, and it's RTR—ready to race. Not ready-to-go-to-the-bike-show-and-bullshit-everybody. We raced the A.R.C. for a full season in front of everybody before we even offered it to the public. The bike's design is all about racing."

Accordingly, the geometry is balanced, with nothing special, nothing wrong. But then, handling is something Parker and company have had down for years. It's the lightweight success that had eluded Yeti. Now, Easton's inspiration and Yeti's perspiration make the A.R.C. a triumph. □

YETI A.R.C.

Approximate price: \$2100 (frame with Answer Manitou fork; with Answer Accutrax steel fork, \$1800)

Sizes available: 16, 17½, 19, 20 inches (center to top of sloping top tube)

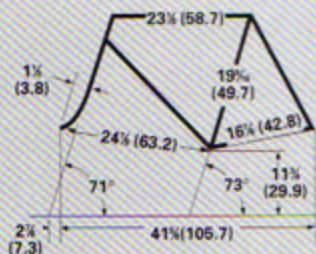
Size tested: 20 in (50.8 cm)

Total weight: 25 lbs, 7 oz (complete bike as tested)

Frame without fork: 3 lbs, 14 oz

Fork only: 3 lbs, 9½ oz

Frame: Easton Varilite 7005 tapered aluminum frame with welded aluminum dropouts. Answer Manitou suspension



fork. Bosses for two water bottles, brake and derailleur cable stops and guides.

Manufactured by: Yeti Cycles, 194 Bodo Dr., Durango, CO 81301; 303-259-1914.

YETI: L.A. TO.....

From his office, John Parker can look out on all the activity that makes up Yeti Cycles. In one room, he sees Chris Herting and Frank Wadellton, with whom he co-founded Yeti in 1985, working on a prototype suspension project. On the main floor, he sees a dozen other employees producing the steel and aluminum mountain bike frames that have made Yeti famous. And to the side, he sees the business department, which has helped the company grow so much that Yeti occupies 10,000 square feet of a Durango industrial park.

But something that's right outside Parker's office can elicit the strongest response from the Yeti president. It's his 1939 Indian Chief motorcycle, still rideable after all these years. "That's a holy thing," Parker says, gesturing at



Yeti leapt at the chance to move to Durango.

the bike. The Chief played a vital role in Yeti history when Parker sold it to raise a few thousand dollars for the company start-up (he later bought the bike back).

Further, the Chief is a living symbol of the 40-year-old Parker's background: motorcycles and movies. A former nationally ranked motorcycle racer, Parker spent 15 years working on special effects for the big Hollywood studios, during which time he acquired his Chief from the late actor Steve McQueen. In fact, Yeti began in the back of a special-effects shop.

Although Parker has been out of Hollywood for seven years—and completely out of Southern California since he moved Yeti to Durango last year—there is still a little show biz in him. He's one of the most entertaining characters in the bike business, affably tossing off tales and one-liners.

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.... DURANGO, JOHN PARKER & CO. ROLL ON

combines with a deadly serious approach to building bikes. "I am a slagmatic, man. I am a man of metal. I have earned my way through life as a welder," he says proudly. His enthusiasm carries over to mountain biking too. "I've got mud in my blood," Parker declares.

Perhaps his fervor is best expressed in the attention to detail that characterizes Yeti bikes such as the aluminum A.R.C. "When people buy a Yeti, they're looking for a bomb-proof vehicle," says Parker. "Now there's a lightweight revolution that has to be addressed. But when you buy our bike, you're not buying a ten-month, one-season throwaway bike."

To make sure of that, Parker fields a pro NORBA team. "Everything we do is a race-proven product," he avows. "I just wouldn't have it any other way. The racing community will always seek out new materials and new technology. To me, the racers are the gods."

A number of god-like talents have raced for Yeti over the years, including John Tomac, Tinker Juarez, Don Myrah, Juliana Furtado and Joey Erwin, the latter two of whom won gold medals at the 1990 World Championships. "You don't think big companies wouldn't buy a world championship if they could?" Parker asks. "We've got two of them, and we won't put the rainbow stripe on anything. People know, and if they don't know, who cares? It's not what I base my whole world on. I don't have rainbow stripes on my underwear."

Nor is Parker tweaked that his racers get lured away by other sponsors offering big money—most recently O'Mara and Furtado, the defending NORBA National Champions in the Expert and women's classes. "We just didn't have the jingle in our jeans to play their tune," Parker shrugs. "Our team is going to have to find a corporate sponsor from outside the industry or else we're going to

end up back in the Expert class. Either one I'm ready to accept. But boy, what I could do with some sponsorship. We know our racing game so well."

Parker is taking that expertise to his new post on the NORBA competition

ones. Are we just gonna roll over and succumb to the Europeans? On the NORBA board, I've got to gracefully inspire these people to address the issues," he says.

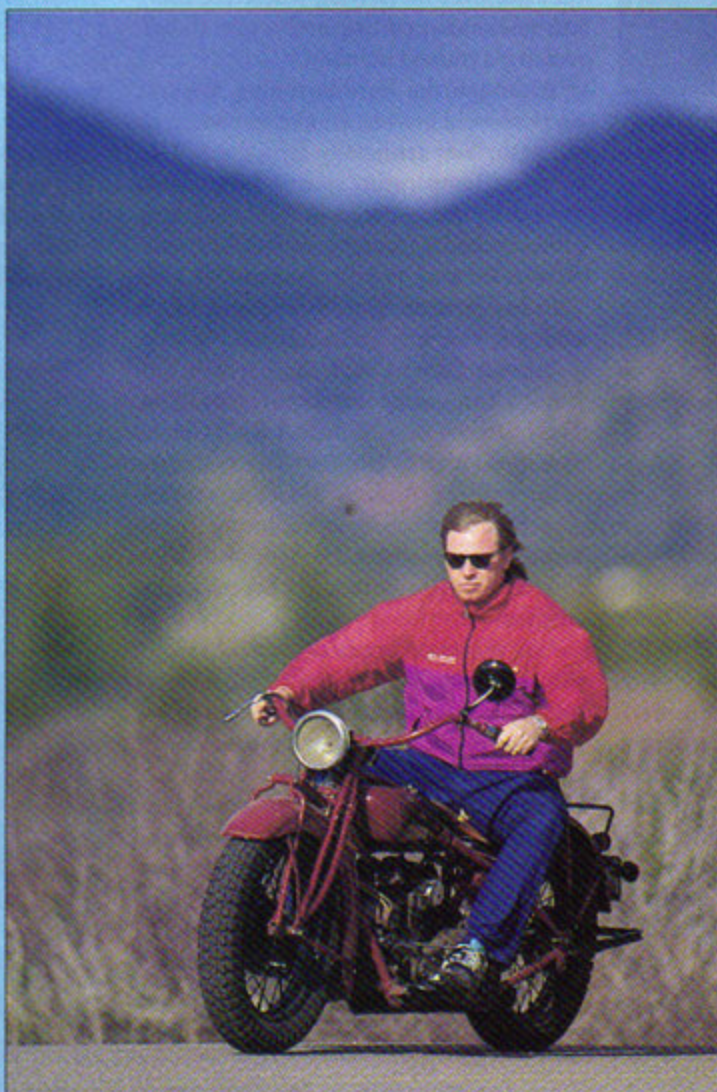
Graceful inspiration is a Parker hallmark, whether it's coaxing peak performance out of his sponsored racers or convincing an entire company to vacate Southern California and move to Durango. "We were packed in Cali. We literally rolled half the shop outside every morning just to go to work," Parker relates. "Besides, my dear sweet Malibu was so stinking polluted." Amazingly, all but one Yeti employee made the move—Drew Steele ("our spiritual adviser," Parker says) stayed home to be with his band, the Surf Punks.

"This company has blossomed since we got here," Parker testifies. He refers not only to Yeti's doubling its annual output to about 2400 frames, but also to the way the ex-Californians have taken to Durango. Parker, a lifelong Californian who used to call himself "pure beach trash," is particularly pleased with his new home: "I'm ready for a bit of hoe-down shit-kicking mentality after the chichi fuel-injected candy-apple-striped bullshit out there in California," he proclaims. "I got my belt buckle. I got my cowboy hat. Tomac will have me thoroughly converted before too long."

The hits keep on coming, but Parker's discourse returns repeatedly to mountain bikes. "I'm looking for people who value technical achievement, not tradition," he says. "The future's exciting. God, what I wouldn't pay to see a copy of your magazine from 1995."

He looks past his beloved Chief and points to the prototype room where Yeti's own future bikes are coming to fruition. "That," he says, "is why I get up in the morning and haul ass down here."

—Keith Mills



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board. "The fact is, dammit, we Americans invented this sport, and some of the best in the world come from here. But we still go to more lousy races than good