

MOUNTAIN BIKE ACTION TEST

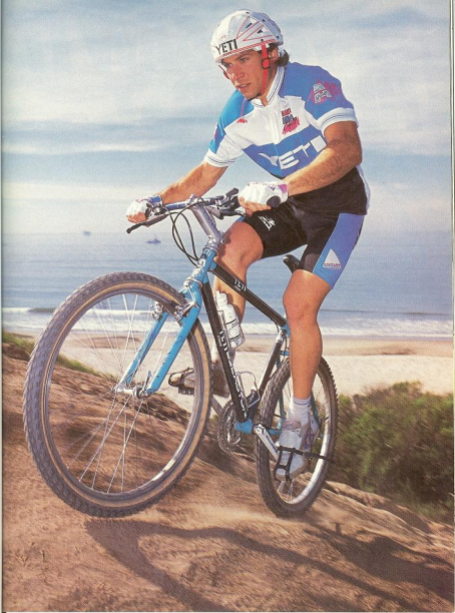
YETI C-26 PROTOTYPE

*A meeting of minds
produces
an incredible bicycle*

History is full of occasions when two parties with radically diverse backgrounds have gotten together to create something that actually represents the best interests of both of them. The recent rescue of two forlorn gray whales in the frozen waters of Alaska by teams representing both the Soviet Union and the United States is one such example. The innovative partnership between the small Yeti bicycle company and corporate giant Easton Composites is another. The latter union is one that not only represents the interests of both parties involved, but also every mountain bike enthusiast around the world who is yearning for what could possibly be one of the greatest-performing mountain bikes ever made. Tall words to be sure, but entirely feasible given the fruit of this shared endeavor.

It should come as no surprise to the many readers of *MBA* that we like Yeti mountain bikes. However, as with other companies within the industry that we really like, it's the people who make up the small company located in the outskirts of Los Angeles' sprawling San Fernando Valley that are the most endearing to us. Yeti could produce a 42-pound mountain bike with coaster brakes and hi-rise handlebars, and, though we'd hate the bike, we'd still like the company. Yeti people are true bicycle enthusiasts and we always like that. As it is, we don't think Yetis





YETI C-26

are the best mountain bikes for every rider, but they are unique and they are serious race bikes—we like those a lot, too! Probably the one man most associated with the Yeti name is John "Don't Call Me Pappy" Parker. Parker's presence looms large over the race team's desert blue bikes and he is overwhelmed with eking out the best possible performance from a mountain bike. John is a metal man. His bikes have never been made from anything but the most basic air-made from titanium or aluminum and, as of last year, he could be heard loudly proclaiming, "No carbon fiber!"

MY, HOW TIMES HAVE CHANGED

Fortunately, John has a group of people working for him who are a bit more open-minded about using alternative frame materials. Chris Hurling is one and when he first approached John about using carbon fiber frame tubes John scoffed. But then Chuck Teixeira from Easton Composites entered the debate and slowly John Parker was moved from his traditional ways. Between the ideas and know-how of Chris and Chuck, a radical new Yeti was born, the C-26 prototype. Utilizing Easton's C-9 carbon-wrapped alloy tubes, with Hurling's hand sculpted lug and the Yeti's trademark one-piece, comput-

er-bent rear section, a 24-pound prototype race bike came to fruition. With so many experimental ideas, many people were wondering how successful the bike could be—in its third outing Yeti team rider Russ Worley won the rigorous Chihuahuan Bend season opener in Texas.

Why is it called a prototype? The boys at Yeti made the bike first as an experiment and second as an all-out race bike. Everything about the bike bespeaks the success they achieved in both of these categories. But the same reasons for their achievement with the C-26 would make it unwise as a production bike. As it is, the bike is closely scrutinized

Learning the traits: Weighing as little as it does, the Yeti takes some getting used to at full speed. Yeti factory rider Russ Worley has little trouble in flinging the C-26 as he pleases, but the wrecking crew would occasionally get on the light weight jitters on the downhills.



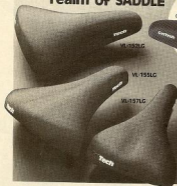
YETI C-26

This is it: The culmination of design and labor talents between Yeti Bicycles and Easton Composites created the 24-lb. C-26 prototype race bike. The bonding process enables the frame to be taken apart, flared and reassembled if the tubes or lugs happen to break. The C-26 could see production by late summer.



VELO

New Material & New Touch —
VELO creates new realm of SADDLE



- VELO adopts particular GEL that can eliminate the strong shock.
- VELO also uses LYCRA to produce touch-comfort with the waterproof effect cushioned its next try. It is considered much superior to compare with that of ordinary saddle cover.
- VELO introduced from the conventional style to show more up-to-date attraction.

VELO ENTERPRISE CO., LTD.

1012, Sec 1, Chung-Shan Rd., Tainan, 700099, Taiwan, R.O.C.
 P. O. Box 102 Tainan • Tel: 0226 82628-9 • Fax: 0226 82628-9
 Telex: 91006 VELUO ATTA VELO • Cable: VELO Tainan

*Descend
 with Conviction*



SEAT LOCATING SPRING

- Adjust seat stability and easily while riding.
- Push-down for control on rugged terrain.
- Springs up to your most efficient height for cruising.
- Seat always remains centered with frame.
- Moves quickly. • Prevents seat theft.

Available at better bicycle dealers
 in the USA and Canada.

Essential equipment on Fisher Mountainbikes, Hasey USA,
 Fat Fly Cycles, Jans Olear and many more!



BREEZE & ANGELL

P.O. Box 5491-X, Mill Valley, CA 94042 USA
 (415) 388-1217

YETI C-26

◀ **Soon to change:** The Yeti trademark one-piece computer-bent chromoly rear section has excellent tire clearance and is very stiff. The boys from Yeti are designing a new rear end made out of the same Easton E9 carbon tubes that are used in the front triangle.

Backing the trend: Easton's Chuck Teixeira credits bullseye cranks for achieving the most sought-after attributes of a crankset without following the cast alloy trend. These chromoly units are light, strong and extremely simple to install and maintain—as bulletproof as you can get. ▶



King Kong was here: The Yeti C-26 had the most rugged front end that we've ever encountered on any bike. The Fisher oversized Evolution headset and gigantic FTW alloy stem built any bike that used the Yeti fork assembly. Most frames would fall before these components would. ▼



C9 & E9 Tubing Stiffer, Stronger, Lighter.

Easton C9

State-of-the-art combination of two material groups—Metals and Composites

- Metal for hoop strength & torsional stiffness
- High modulus carbon fiber for bending stiffness, and overall weight reduction

The results—the best of both materials provide superior strength and reliability over an all carbon tube.



Easton E9

Easton E9 is made by a proprietary combination of heat treating, aging and cold working.

- Typically 4% stronger than 60 aluminum
- Mechanically and chemically treated surface
- Hard coat anodized finish with permanent graphics

The results—light weight, high strength, and precise fit for complete reliability



EASTON

7800 Haskell Ave., Van Nuys, California 91405-1999 (818) 782-6445

Easton E9 & C9—Used by leading Manufacturers Who Demand Reliability & Performance



is scalloped to reduce further weight and to avoid making a stress riser which would have resulted if we used a flush cut.

"From the time we got the tubes, it took us three weeks to build the bike. With only a small amount of glue [the glue tube is no bigger than a Chapstick holder], the bike is ready to ride right out of the oven. The frame weighs four pounds, which is over a pound lighter than a standard Yeti frame. We plan to start working on a carbon rear section using the same computer-bent design. The idea is to find out just how light we can go while maintaining a high strength factor."

It's obvious that the Yeti achieved its low weight with the aid of the small 17.5-inch frame. But what weighs down other carbon fiber bikes so much is the length the internal lugs travel inside the frame tubes—most over four inches from each joint. While these other bikes end up with what could be a higher allocation of steel than carbon in their carbon frames, Yeti and Easton kept the amount of steel used to the bare minimum. The carbon tubes have a high-luster finish and help give the bike its magical appearance.

What about braze-ons, you ask? Extra attention was given to this area and a unique solution was employed to join the cable guides and water bottle mounts to the carbon tubes, since actual brazing was out of the question. Things that are normally brazed on are actually glued on. The cable guides required an oversized surface area (one square inch) to allow the necessary contact patch to withstand the sheer stresses involved. Under testing at Easton the Yeti's cable guides withstood sheer testing up to 5000 psi (pounds per square inch); normal welding failures usually occur at 500 psi. There is also the glue itself, which plays an important role in the bonding of the frame. Perma-bond ESP 310 is a high-tech, structurally bonding epoxy which bonds the frame after cooking in the oven for one hour at 275 degrees. The advantage of this type of glue is its ability to bond different types of substrates. Perma-bond's Daniel Del Campo claims that the amount of glue used to bond

water.

th ODI
· bottle
ep the
of your
ly. You
eat dirt
I never
o drink
t again.



HANDLEBAR CAP

YETI C-26

the frame saves eight ounces over the welding material normally used and that the bond is actually stronger than the weld. It all adds up.

ANOTHER NAME JOINS THE GAME

When it comes to front-end strength and rigidity, Yeti forks rarely go by without mention. The thin-wall, straight-blade chromoly forks are renowned for both the durability (some would say too durable, as in a rough ride) and precision steering they provide. But in those categories Yeti stands alone no more. In the fall of '88 Gary Fisher shocked the cycling world with the introduction of his oversized "Evolution" headset. The 1.25-inch headset is probably one of the most talked-about components this year as manufacturer after manufacturer decides whether to run with the traditional one-inch size, the Evolution or possibly something in between for 1990.

Wait! There's more. If the frame has been underdesigned to achieve all-out lightness, the front end of the Yeti has definitely been overdesigned to achieve all-out ruggedness. Mounted to the extended steerer tube of the forks is a massive aluminum FTW stem. No, FTW is not an acronym for some popularized biker slang; it actually stands for Frank the Welder. Frank Wadleton hand-welds each

stem, so what else do you call it? Don't you just love the modesty? The C-26 also features the newest in handlebar technology with the Answer aluminum Taperlite handlebars which are also made by Easton and feature a 6061-E9 construction with tapered wall cross sections which are thinner at the ends than at the center. Together these four pieces make, without a doubt, the most hardcore steering package known to man.

SURE IT LOOKS COOL, BUT HOW DOES IT RIDE?

Since the C-26 is only a prototype race bike intended for a single rider, the wrecking crew wasn't as concerned with how it would function as a readily available consumer item. Prototype means that anything could change between now and when (if ever) it becomes available to the public. It also means that Yeti didn't over-engineer, in the sense of too many refinements, the C-26 for fear of warranty problems. If the frame was prone to breaking, we wouldn't care because that's part and parcel of developing a sophisticated race bike. So while we weren't looking for glitches in its overall form, we were very curious as to how the C-26 performed. After the first ride we rushed to find our thesaurus—staggering, unimaginable, phenomenal, outstanding, fantastic, incredible—ineffable!

The parallel 71-degree head and seat tube angles, 24-pound weight and overall construction made for one of the most awe-inspiring mountain bikes we've ever ridden.

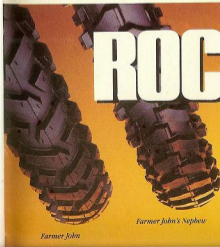
(continued on page 107)

die

B M A X



OVER DEFINITION.



ROCK

Farmer John's Nephew

Farmer John

In fact, while its lightness was one of the bike's virtues, at times it proved to be problematic. As maneuverable in mid-air as it was (especially on slow-speed jumps), the C-26 was a handful when jumping at higher speeds. Maybe it just takes a while to get used to jumping such a lightweight bike, because we were definitely not used to it and found ourselves in several scary situations. But with the wheels on the ground the Yeti was a veritable hot rod. This is when the featherweight assembly really came into play. The bike literally flew through the rough, soaking up whatever bumps it happened to come upon. The steel rear end definitely helped give the bike the requisite stiffness for hard hammering out of the saddle.

High-speed downhill runs were most enjoyable due to the front end amenities—precise steering with nary a wobble. Just looking at the huge FTW stem inspires confidence and that's what the wrecking crew was overcome with as we attacked one descent after another. On occasion the C-26 did take a few hops to one side or the other on the downhill, but the skittering was kept to a minimum due to the relaxed angles—a very sweet ride overall.

WHAT'S ON THE RACE BIKE

As successful as it is as an all-out race bike, the Yeti is a top performer due also to the components used. Specialized X23 rims are mounted with Fisher Slimtrax tires and

laced to Bullseye hubs, without a doubt one of the best wheel combinations available today. Since Shimano's seven-speed HyperGlide system is only compatible with Shimano hubs and the freewheels come in a limited gear selection, John Parker grafted Shimano 600 EX cogs to a Sante road body and attached the unit to a Bullseye hub. Shifting isn't as precise as a complete HyperGlide freewheel and hub unit, but the proper gearing is more important for serious racing and, as long as Shimano refuses to open up the gear range, this type of custom work will be mandatory for stronger or weaker riders. A Shimano Deore XT gruppo fills out the Yeti—shifters, two-fingered levers and their strong lightweight 390mm seatpost.

AS A RESULT . . .

Without a doubt the Yeti/Easton partnership has created the first truly efficient carbon fiber mountain bike. What they achieved is the result of the purpose they had in mind—to find and test the limits of weight and strength factors involved in such construction. Not worrying about product claims and unhappy customers gave the team more leeway than is usually found in the bicycle business. The MRA wrecking crew was lucky enough to get our hands on the bike, not so much for testing but merely to take a look at the status and evolution of mountain bike technology in one neck of the woods. Clearly the result is a positive one and the ramifications for the rest of us are promising at the least, galvanic, tantalizing, heart-stirring and exhilarating at best! □

TEAM MARIN



Pro Racers - Tom Collins and Mike Jordan riding Team Titanium with Rockstar Kevlar tires.

SPIN 'N GRIN

FULL MONEY BACK GUARANTEE

OUR LOW PRICES WILL BRING YOU MILES OF SMILES!

- Our awesome showroom has the finest array of factory and hand made bikes available anywhere.
- Priced from \$300 - \$3000
- Fully assembled
- Shipped Federal Express
- Our friendly staff is waiting to serve you
- Our friendly staff is waiting to bring here!

So call us. It's the next best thing to being here!

800-346-0862

Most orders shipped within 24 hours

Checks Accepted



MOUNTAIN BIKE SOURCE

416 21st Avenue S
Nashville, TN 37203 • 615/329-0409

MARIN TEAM TITANIUM

- 23 Lbs - Titanium Alloy Tri-3.25
- 71" Head, 74" Seat, 16.75" chainstay
- Deore XT II Gruppo
- 32 Hole Araya Rims with Titanium Alloy heat treated spokes
- Titanium Alloy handlebars

Call for a dealer near you



MARIN MOUNTAIN BIKES

999 Andersen Drive
San Rafael, CA 94901
Tel. 415-459-7557

FRANCE - Mt. Bike Diffusion
Tel. 7 6475876

NORWAY - Aspaas Sykkler a.s.
Tel. 02 68 71 11