

FELT AR3

An early adapter in the aero road category still packs a punch

➔ While the “aero road” hype bandwagon has dutifully been visiting small towns and big cities alike these days (fueled by the latest crop of aero bikes, such as the Specialized Venge, Scott Foil and Cervelo S5), it’s easy to forget that Felt designed the first incarnation of their AR (Aero Road) back in 2007. In fact, back in the 2008 Tour de France, Garmin rider Will Frischkorn famously duked it out aboard his AR in a four-man breakaway that succeeded in besting the peloton during Stage 3. The following year, you could find the (radical at the time) AR on showroom floors.

Indeed, the bike was designed with the sort of solo breakaways in mind that will see you off the front going for personal race or lunch ride glory. With their dramatic tube shapes and Felt’s signature black paint motifs, the AR bikes have always looked ready for business and capable of putting in some seriously quick efforts. But now, two years after the AR’s commercial release, other aero road bikes have arrived on the scene. So, is Felt’s latest AR still a viable, aerodynamic road design capable of enhancing your individual effort?

Photo: Pat Carrigan



BIKE TEST: FELT AR3



The AR3's silhouette, especially its thin downtube and bladed fork, is clearly inspired by Felt's DA time trial bike.

So, at 16 pounds for a smaller (51cm) frame, the AR3 is still more middleweight than heavyweight, but it becomes a point of discussion as it aims to compete with its newest aero road rivals. The stock SRAM S30 wheelset did its job well, but it would be the first thing we'd upgrade on the AR3 spec list, especially if our ride involved some serious climbing. And on the flat days, a wheelset with deeper rims and comparable weight makes an ardently noticeable difference, increasing the AR3's aerodynamic chops.

THE VERDICT

All technical jargon and marketing hoopla aside, the current crop of aero road bikes are intended to offer cyclists an honest-to-goodness "do-it-all" bike. The Felt AR3 is one of the best examples of that for the racier types, as it was specifically created to help a pro rider break away from the field and "time-trial" his way to the finish line. It's a bike that will perform well in most ride and race scenarios; it's comfortable enough for a long stage race or century, just stiff enough to get you through a fast crit and viable for the local time trial with a set of clip-on aero bars. Any bike that offers such versatility and comes in such a complete range of build options and price points is worth looking at.



The fork is dramatically bladed for added aerodynamic benefits.

PUNCH LINES

- A pioneer aero road bike is as viable as ever
- Wheel upgrade unlocks the AR3's full potential
- Ideal for an individual effort, except a serious mountain stage



Felt's proprietary InsideOut molding process utilizes polyurethane bladders instead of the traditional nylon type, allowing for the creation of complex tube shapes.

STATS

Price: \$5499
Weight: 16 pounds
Sizes: 51 (tested), 54, 56, 58, 61cm
www.feltbicycles.com

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RBA MINI-VIEW: JIM FELT

An aero pioneer weighs in on the aero debate

Go figure. Jim Felt—yeah, the same guy whose name is found on the down-tubes of some of the more popular road bikes around—has an opinion on aero road bikes. Any why wouldn't he? After all, besides designing bikes that have previously led the peloton around in the Tour de France, he's also designed—and personally built—bikes that have won the Kona Ironman eight times.

With all the hoopla currently surrounding the rebirth in popularity of aero road bikes, we decided to have a sit-down with the former National Championship-winning motocross mechanic to see what his current thoughts are on the subject.

RBA: Jim, when was your first exposure with an aero tube?

Jim: I'd say it was back around 1991. I had just made the transition from being a factory mechanic for Team Kawasaki to a new job as an engineer at Easton. I had already been building my own road bikes, and since they had just sponsored their first athlete, Paula Newby Fraser, they asked me if I'd be interested in building her a bike for Kona. I said yes, but they said I had to do all the work at home—not at Easton—and so I said yes again. From that point on, I built her the bikes she used to win that race eight times.

RBA: And now here we are in the midst of a new aero battle between all the bike makers. What do you make of it?

Jim: It's kind of funny, because, again, we've had an aero road bike in our catalog for the last three years or so! The Felt AR came about after a meeting I had with Magnus Backstedt at the Interbike trade show in Las Vegas in 2007. He and I had a meeting about building the Garmin team a special bike for Paris-Roubaix, and just as we were finishing up, he said he had a stupid idea to ask me about. Basically, he said that he felt as a big sprinter, that he could go out for a win from maybe 10k out if he had a bike that would give him more of an advantage over the standard team bike. I gotta tell

you, a light immediately went off in my head, and I went home and started drawing up some concepts.

RBA: What were some of the design parameters that you used to build the new bike?

Jim: You know, there are always new trends to take into consideration as well as what your dealers are asking for that might force you to do certain things you

tunnel, and if you saw the numbers, well, it's pretty amazing. The difference between a TT bike and an aero road bike in terms of efficiency is around 20 percent, but the difference between a TT bike and a road bike is closer to 70 percent!

RBA: Most people we talk to say that while the aero effect is good, you have to give up something in terms of compliance and weight.

Jim: Yeah, no question about it that there will be a trade-off in ride quality and weight, and you have to take that into consideration when you're designing the bike. Basically, when you stand tubes up on their major axis, they aren't as giving, so the more aero the tubes are, the harsher the ride. With weight, too, aero tubes bring with them an inherent penalty. To get the stiffness you need, the frame tubes either need diameter, wall thickness or a buildup of really high-modulus material. I'd say there's probably going to be a 100-gram weight penalty for any aero frame over a round tube frame.

RBA: OK, imagine that you're on a desert island and the only way off is by bike on a course with plenty of hills and flats; would you go with aero or lightweight?

Jim: Oh, aero, without a doubt. Even if you compare an aero bike with a bike that's 2 pounds lighter, there's no question that you'd want to choose the aero advantage.

The sensation and wake-up call you get with an aero bike is definitely there. You also have to factor in the decrease in durability and high-speed handling of a light bike. When we sponsored the Garmin team, they rode bikes that weighed about 980 grams, and I can tell you we went two years and never broke a frame. I think the Pro peloton has caught on, and all the effort we've put into beating the UCI weight limit will decrease as the riders begin embracing more aero designs—that is until we started trying to make the aero bikes just as light as the road bikes! ■



Magnus Backstedt.

didn't originally plan, and I'd say that was the case with the AR. Still, I was happy with the direction we took. It was as close to an aero version of an F1 that we could build at the time. The head tube is taller, and we had to relax the angles a bit to add some stability. Because with aero-shaped tubes, you automatically give up some lateral stiffness.

I can say that since that bike is three years old that we are now focusing 100 percent of our effort in that category, and we really think the effort will pay off. We spend a lot of time in the wind