

## TeamFAST's Air-Wave Suspension Delivers An Amazing Ride

**TeamFAST has earned the 2007 *Snow Goer* magazine Aftermarket Innovation Award for its delivery of an aftermarket product that works amazingly well. It will have a profound impact on the snowmobile industry.**

**T**eamFAST President Gerard Karpik made bold claims last summer about the abilities of the Air-Wave rear suspension he would bring to snowmobilers this season.

He said the new skidframe would “re-define the expectation levels of a snowmobiler.” After our initial 130-mile ride out of Karpik’s Eveleth, Minnesota-based shop last January, we agreed. We now expect a better ride from a sled’s rear suspension.

From the first section of 8- to 12-inch, sharp-edged chop to the big “G” bumps we mowed down later that day, we were amazed — heck, astonished — at how well the new skidframe could absorb that full spectrum of bumps without sacrificing ride quality at any speed. The Air-Wave in a Polaris 600 IQ Karpik used for testing and the one now in our Yamaha Apex RTX flat-out erased most of the bumps and holes we hit.

### A BETTER RIDE

The air spring was developed by over-the-road trucker Jeff Zaczkowski. His experience with air-ride truck seats and “lots of time to think while behind the wheel,” Karpik said, led Zaczkowski to his suspension invention.

In 1998, Zaczkowski and friend Tony LaMotte experimented with a Mack truck air seat platform. Their tests proved that the small spring could support an entire 520-pound sled. They reasoned it could also support a sled and rider over trail bumps.

Further testing and the opportunity to compare their suspension to those of the sled manufacturers showed that the air spring offered better ride quality. Because the M-10 was Zaczkowski and LaMotte’s benchmark, the partners took their design to Karpik. In April 2005, the former cross-country racer realized the design had advantages and soon

entered an agreement to further develop the technology with Zaczkowski and LaMotte.

The production version of the Air-Wave suspension is laid out similar to other models from TeamFAST. It includes a front and rear torque arm and two shocks. The front shock’s duties are to absorb bumps on initial contact. The rear shock’s job is to control rebound. The air spring replaces a traditional skid’s torsion springs.

The suspension is available in two versions: Diamond and Gold. Each package performs the same, differences are in their method of adjustment. The Diamond package includes an on-board air compressor to make easy adjustments. The Gold package includes a hand pump — similar to the one used to adjust Fox FLOAT air shocks — to make adjustments.

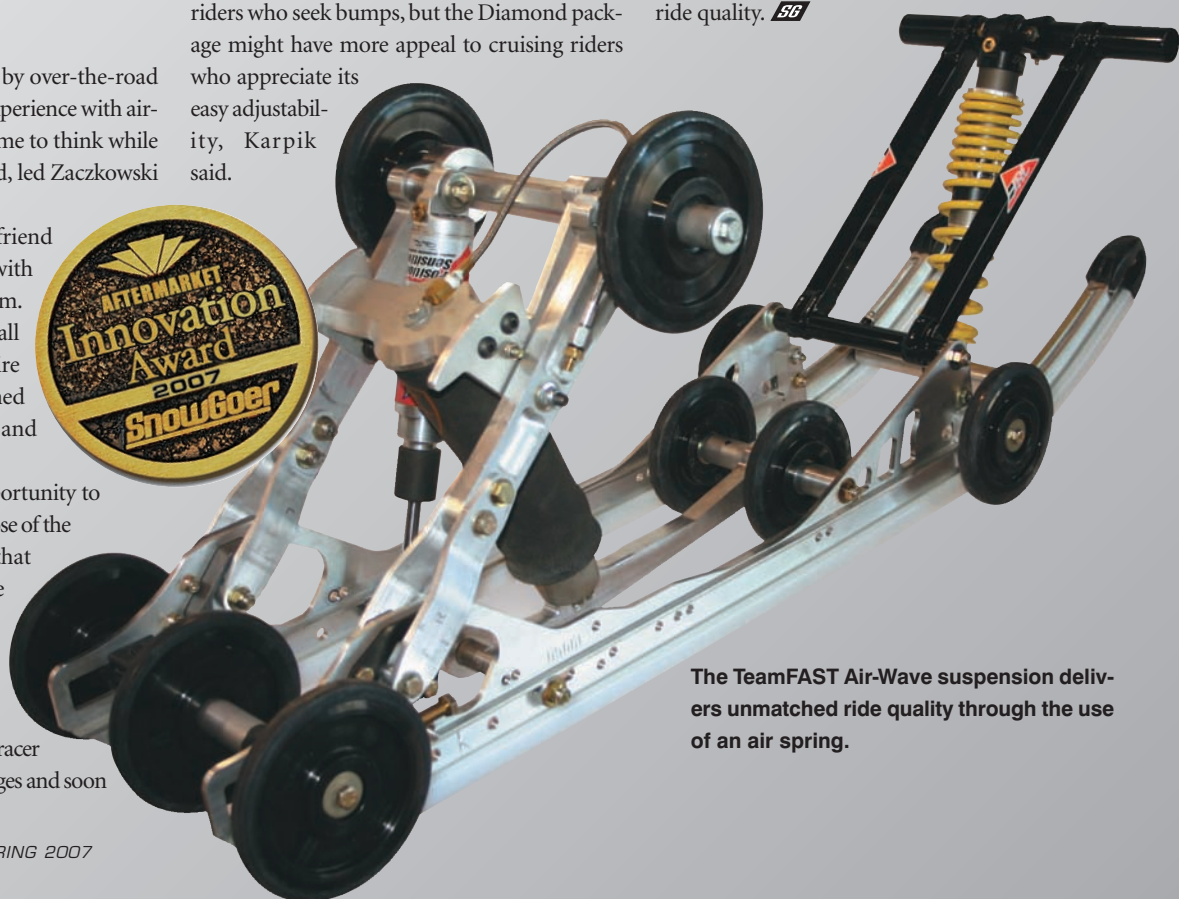
The suspension is aimed at young, aggressive riders who seek bumps, but the Diamond package might have more appeal to cruising riders who appreciate its easy adjustability, Karpik said.

### SUSPENSION LANDS SOFTLY, MAKES BIG IMPACT

Since the Air-Wave absorbs bumps like they aren’t there, it will leave a significant impact on the sport of snowmobiling because it works so well.

We’ve ridden thousands of sleds and worked with aftermarket suspension shops (including FAST) and shock manufacturers to improve ride quality and performance of our sleds; none have delivered a suspension or shock package that provides a ride quality that’s as amazing as the Air-Wave. Its effect on the sport might prove to be as significant as the long-travel revolution in the mid-1990s.

TeamFAST’s new suspension performs too well to not have a major effect on the snowmobile industry and how manufacturers design suspensions. Consider the bar raised regarding ride quality. **SG**



The TeamFAST Air-Wave suspension delivers unmatched ride quality through the use of an air spring.