

The Dawn of the Launch Monitor by Bill Bales, CEO of aboutGolf

I'm in the business of golf performance technology.

Golf performance technology is a new term relating to high-tech stuff that can help you become a better golfer. My company (aboutGolf) makes high performance indoor golf simulators, video analysis systems, force plate balance systems, software and hardware related to club/shaft/ball fitting—and launch monitors.

According to the PGA of America, 2008 marks the dawn of the launch monitor. If you didn't know, the PGA is a bit slow on the uptake. They still use sliderules and rotary dial phones (at least they still remember stymies and gutties).

Launch monitors have been around quite a while. The first valid launch monitor to make a name for itself was made by a company called Swing Dynamics, maybe two hundred “tech-years” ago. They aren't around anymore, but more than a few members of the golf community still promote it as the most advanced technology available.

For those of you who don't know, the term “launch monitor” refers to a piece of technology that measures the initial flight of a golf ball after being struck (by a club, usually). The term has been stretched a bit to also cover devices capable of measuring balls over a large portion of their flight. Regardless, the key data these babies deliver are ball velocity, ball trajectory (aka launch angle), and ball spin.

Notwithstanding the PGA's take, launch monitors started going mainstream in 2003 with a product called Vector. Vector was/is a two-dimensional photographic system designed to take two pictures of the ball shortly after launch. Marks on the ball enable the system to provide a measurement of ball data. The Swing Dynamics system was of the same technology, perhaps even a bit more accurate when used properly, but much more expensive and difficult to operate. The Vector was an instant success because of its portability and relative ease of use.

The current popular price leader is a product called Zelosity. Like the Vector, its data is not extremely accurate (their salesmen would take issue with this). But it's so easy to use that even a below average simian can run it, which is a good thing considering most PGA pros didn't go to MIT (I'm sure I'll catch some flak for that remark, but my journalistic integrity demands I call it like I see it).

The big name price-no-object product out there today is called Trackman. Like Zelosity, it applies Doppler radar technology. Radar has been around since the Haskell ball, but Trackman's architecture applies the Doppler radar in a more sophisticated way, called phased array. To be overly simple (about as much as my below average simian brain can achieve), Trackman radar is 3D and Zelosity is 2D. And, 3D isn't just one better than 2D—it's better in exponential proportions (imagine if the world was 2D—that wall ten feet away would be right in front of you—you'd be stuck in the same place for life).

Trackman is, overall, a much more accurate system than Zelosity or Vector, although it doesn't measure spin in the true sense of the word. A little voodoo takes place between what they measure and the data that comes out. But it's pretty good. The real deficiency lies in Trackman's ability, or lack thereof, to measure spin axis--radar can't do it. But Trackman has made a name for itself as a long range tracking device. It follows the ball for over 300 yards,

so they say. Hence it can see which way the ball curves and guesstimate the spin vectore.g. infer the side spin.

The biggest problem with Trackman is the price. A guy could have a darn nice weekend in Vegas for what Trackman costs—and still have enough left over to buy a Kia Rio and half a dozen Vectors. But it's the best radar system there is... or is it?

Actually, a company in South Africa called EDH has the best intrinsic application of phased array radar technology. In fact, they wrote the book on it. They've been doing some pretty amazing things for nearly twenty years with this stuff. Their FlightScope long range tracking technology is not nearly as well known or well placed in the market as Trackman, but I assert it's better. And it's about one fourth the cost of a Trackman. Unfortunately EDH is long on engineering genius and just as short on marketing moxie.

Anyone who has read this far deserves to know why I was sniping at the PGA about sliderules and rotary phones—and what I mean about their recent acknowledgment of the dawn of the launch monitor.

If you know the golf industry you know that the world's most significant trade event is the PGA Merchandise Show, held over three days in Orlando when it's too cold to play golf—in late January. This past February, and only after much boisterous and belligerent grousing by yours truly, the PGA of America for the first time recognized launch monitors as a product category for its signature trade show—in the 2009 exhibitor directory.

Big deal? Maybe not. But consider there were nearly twenty companies at the recent 2008 show that had some form of launch monitor. Consider that launch monitors have been a legitimate product for the better part of a generation. Consider that launch monitors are used by most major golf retailers, a very noteworthy number of teachers and club fitters, and virtually every OEM. Consider that the PGA of America, for many years, has provided product categories at their show for beverages, cigars, floor coverings, purses, snacks, tableware... and defibrillators!

Given that launch monitors are the next major piece of golf performance technology, with rapid adoption taking place in virtually every corner of the golf market, I think it's fair to say the PGA was a bit lame for ignoring launch monitors for so long. In closing, you may have noted that I have not said anything about what my company offers to the world of launch monitors. To be very honest, it hasn't been formally released—but it's coming this summer. And, it's kind of cool.

It's called 3Trak. It will set the bar for launch monitors quite a bit higher than it is today. It's a 3D photography system. It does things the above-mentioned products can't do. It's more accurate. And, it will be popularly priced.