

The Power of Suggestion

SCANTRAK 18 GOLFBALL FINDER.

From Lil' Orbits, Inc., 2830 Vicksburg Land, Minneapolis, MN 55447. Price \$89.95.

We here at Gizmo are the first to admit that technology is wonderful. We should know — we see new technology all the time. Because of that, we've become somewhat jaded. But still, occasionally there is a product that is so different and that uses such new technology that even we are impressed. When we received a press release describing the *ScanTrak 18* golf ball locator from *Lil' Orbits, Inc.*, we were delighted. It described technology that we didn't even know existed.

The first line that attracted our attention was "Using new microchip technology, the ScanTrak 18 finds golf balls in any terrain from weeds to bushes to high grass." We weren't aware of any new microchip technology that had anything to do with golf balls, so we read on. "Within minutes, this tiny hand-held device can detect and point out any balls in the vicinity." How, we wondered, could a device find ordinary golf balls? There had to be a catch, we figured. Maybe this was a way to sell special golf balls.

But as we read on, that guess seemed to be wrong. "The secret is in the unique molecular wavelength given off by every golf ball, of whatever manufacture." So *that's* how they do it!

But hold on a minute! *What* molecular wavelength? We know that spectrometers can be used to identify the makeup of materials by measuring the spectrum emitted when they are burned or electrically excited. That's also the way that scientists determine the elements of which stars are composed.

We were surprised to find out that plain old *golf balls* emitted wavelengths that could be measured. But there in black and white was the promise that "The ScanTrak 18 identifies and homes-in on the signal of the golf ball, just like a short wave radio set" regardless of rocks, trees, or bushes.

When the ScanTrak 18 arrived, we immediately popped in the instructional video, hoping to better understand how it worked. The video provided simple operating instructions, and showed the

device hard at work finding golf balls behind bushes, in high grass, and even in a water hazard!

The four-page instruction manual shed more light on the principles behind the fascinating device. The ScanTrak, it said, operates with a new technology called "Positive Molecular Attraction." We couldn't find any reference to the technology in our well stocked reference library. Boy, it *must* be a new technology, we figured.

"The unit contains a ROM (Read Only Memory) card which detects the molecular structure of golf balls and is energized by static electricity which you generate when moving." We didn't see any slot into which a ROM card could be inserted, so we figured that they meant a ROM chip and not a ROM card. Perhaps they were planning on manufacturing different versions of the device — a car-key locator would seem to be a good idea. But we are unsure whether all car keys emit a common wavelength. We were also a little surprised that the device was powered by static electricity. After all, we've destroyed more electronic components than we care to remember with inadvertent discharges of static electricity. Besides, just how much static is generated by walking across a grass field in golf shoes? Maybe it would be a good idea to wear a wool sweater when testing the device out. Come to think of it, ROM chips are pre-programmed *read-only* devices. How can a ROM detect anything, let alone the molecular structure of golf balls?

"Just like a magnetic compass needle

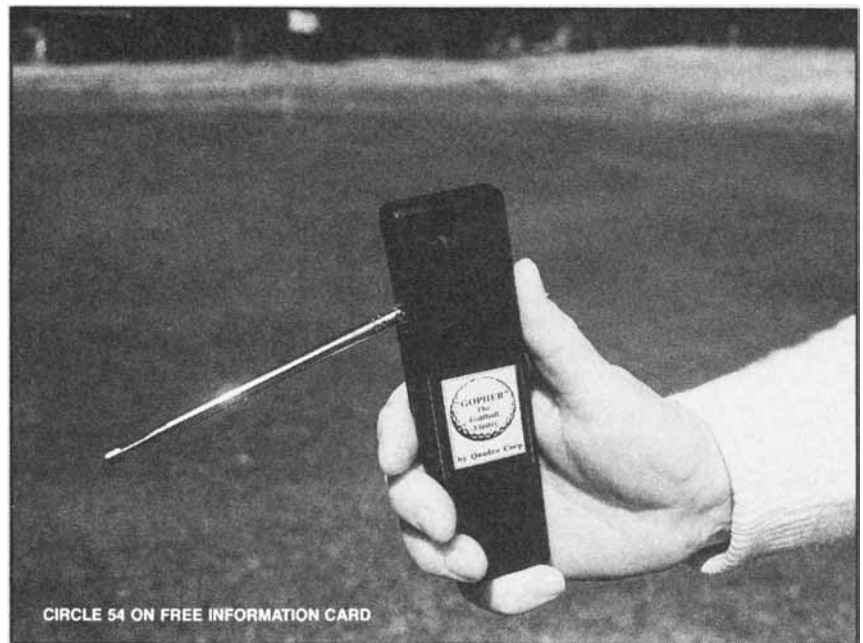
which swings of its own accord to the North Pole, the direction-finding antenna on your Locator will swing of its own accord in the direction of a hidden golf ball." We were impressed by the amazing technology that was packed in a device that looked like nothing more than a piece of plastic with a telescoping radio antenna mounted on a free-moving swivel.

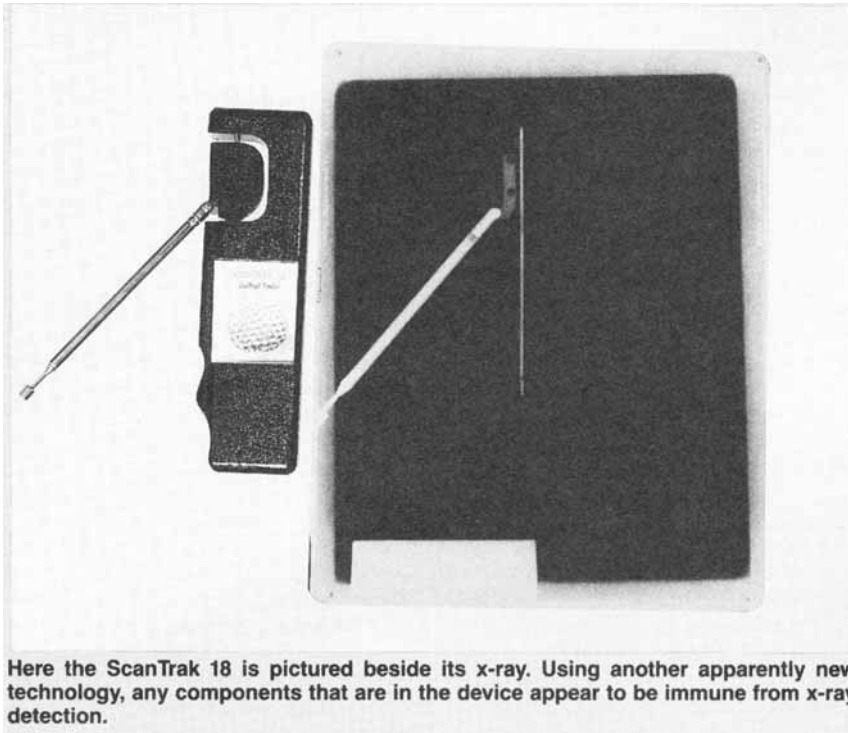
"The Locator does not generate or transmit any harmful signals. Your Locator only 'tunes in' to signals generated by golf balls." Well that's a relief!

We were so excited about trying the ScanTrak out that we dropped a golf ball on our office floor, took the device in hand, and extended the antenna. The antenna just seemed to swing randomly instead of homing in on the golf ball. We thought it was odd, so we went back to the instruction sheet. Aha! We had made the classic mistake of not reading the instructions. Right there was the note that "the locator works best outdoors away from household appliances, fluorescent lights or computers which emit signals that can confuse your locator." We picked up our golf ball and headed outside.

We extended the antenna again and held the device properly ??? with our little finger below the unit as shown in the photograph) and began by pointing the ScanTrak 18 to the ground. (That "initializes and clears the Locator of any previous signals." We guessed that there's a mercury switch or something similar in the device.)

We still couldn't seem to get the hang of it. The antenna would seem to swing





in random directions. We re-checked the instruction sheet to make sure we were doing things correctly. "It's important that you keep walking! This generates the power which drives the antenna." We tried it again, but still were unsuccessful.

"You must be insulated from the ground. Most golf shoes use composite or rubber soles which insulate you from the ground. If you are wearing leather soles we suggest you insert foam inner liners or plastic sole inserts in your shoes. We also know that molecular activity slows down in freezing weather. So don't expect to find golf balls in the snow unless they're still warm." We were wearing sneakers, so we figured we were well insulated, and it was a hot summer day. We weren't sure what was going wrong. The instructions promised that "When you pass along side your golf ball, the antenna should abruptly swing in the direction of the ball.

"When used correctly, the Locator is

so sensitive it will locate balls from a great distance once it locks on to the signal. It may pick up signals from an adjacent green where players are putting in. When the Locator points in a totally different direction, it is picking up a signal from another ball." So *that's* it. We should have known! Our offices are located near a driving range. (Our test ball was, in fact, an escapee from the range that was hit into our parking lot by what we hope is an embarrassed golfer with a nasty slice.) The device must have been sensing all those flying balls and getting confused! Further, we concluded, those balls must have more molecular energy because they're moving so fast.

We tried the ScanTrak 18 in different locations and in different weather conditions but we still couldn't get reliable results with golf balls we could see. We doubted whether we could ever find balls that were truly lost. But that didn't concern us too much — we don't golf.

Then, realizing that our lack of golf

experience might be one of our problems, we loaned the ScanTrak 18 to a doctor friend who (surprise, surprise) is an avid golfer. He loved it! He not only found his own golf balls, but he came home with extra balls that other golfers had given up trying to find! He also made a lot of new friends. All golfers, it seemed, were as fascinated by the device as we were. He estimated that he could have sold a couple dozen ScanTrak 18's if he had them with him at the time.

We were impressed by the success reported on the golf course. We still didn't understand how the device worked. And we were dismayed to read that "There are **no** user repairable parts within the unit. Trying to open the case will damage the unit beyond repair and will void our warranty." We had considered opening the case, but couldn't see any way of doing so. There were no screws holding things together. The plastic case seemed to be solid.

In our effort to learn more, we pulled out our digital multimeter. We measured the impedance between the antenna and the pivot around which it swiveled. (These were the only metal parts to which we had access.) To our surprise, there was an open circuit. So how did the electronics inside the unit control the antenna?

Refusing to give up, we enlisted the help of our doctor friend who had been so successful with the device. We couldn't open the device, but his x-ray equipment could see into it! The results of the x-ray left us more puzzled than ever. It seemed to show that there was nothing in the device except for a metal rod around which the antenna swiveled — nothing at all!

But that couldn't possibly be true, could it? The new technology must also render the circuitry immune from x-rays. After all, people wouldn't spend \$89.95 for a piece of plastic, would they?