

GARNER PRODUCTS INC.



QUALITY IS IMPORTANT - WE LOVE OUR PRODUCTS, BUT WE NEVER WANT TO SEE THEM AGAIN.

Garner Products designs, manufactures, and sells equipment that delivers complete, permanent, and verifiable data elimination. Their products ensure your data is unrecoverable. Founded more than 60 years ago, they serve customers from every industry in 120 countries around the world. Today Garner products are used by data centers, governments, hospitals, and offices who want to secure their data. Garner provides time-tested solutions for permanent data security of working and nonworking hard drives, magnetic tape, and solid-state media. From design and engineering to production and worldwide shipping, everything is produced at their Roseville Ca. headquarters.

The company started out in 1959 as a recording studio by Bob Stofan called Audiolab Electronics, Inc. Bob's son Ron and Ron's wife Michelle own and manage the company now. Their son Justin manages the machine shop.

Bob's love of radio started early, listening to WW2 on his short-wave radio from his childhood home in New Jersey. He later joined the Airforce setting up radio stations and radio communications during the Korean War. "Dad was proud of what he was doing during Korea," chuckles Ron Stofan, president and CEO of Garner Products Inc. "He was especially proud that the importance of his job meant he got his own Jeep. As an enlisted man that was a big deal." Bob was a sound engineer at Sacramento's channel 10 TV station before becoming chief engineer for KRAK Hercules broadcasting company. Media companies needed to have an easy and effective way to erase the cue tone on broadcast tape cartridges "carts", so he began manufacturing degaussing machines.

A broadcast cart is a continuous loop of tape wound inside a cartridge with a "beep" recorded on a separate track indicating the beginning of the recording. That beep is a cue tone. When the machine recognizes the beep, it stops, and it is at the beginning of the recording cycle. The DJ hits play and "Go See Cal" commercial would come on all queued up. Before new content could be recorded you needed to get rid of the cue tone. The only way to do that is by demagnetizing the tape in a process called degaussing. "Degaussing leaves the magnetic field in a random state with no readable data," explains Ron. "We manufactured and sold degaussing machines to the broadcast companies. Video followed radio, diskettes came along and so forth. It was similar technology, but harder to erase the data because the tape was larger with a higher coercivity, requiring a stronger magnetic field to remove the recordings. Basically, in a perfect world if the coercivity is 500 you need to have gauss strength larger than 501 to overcome it."

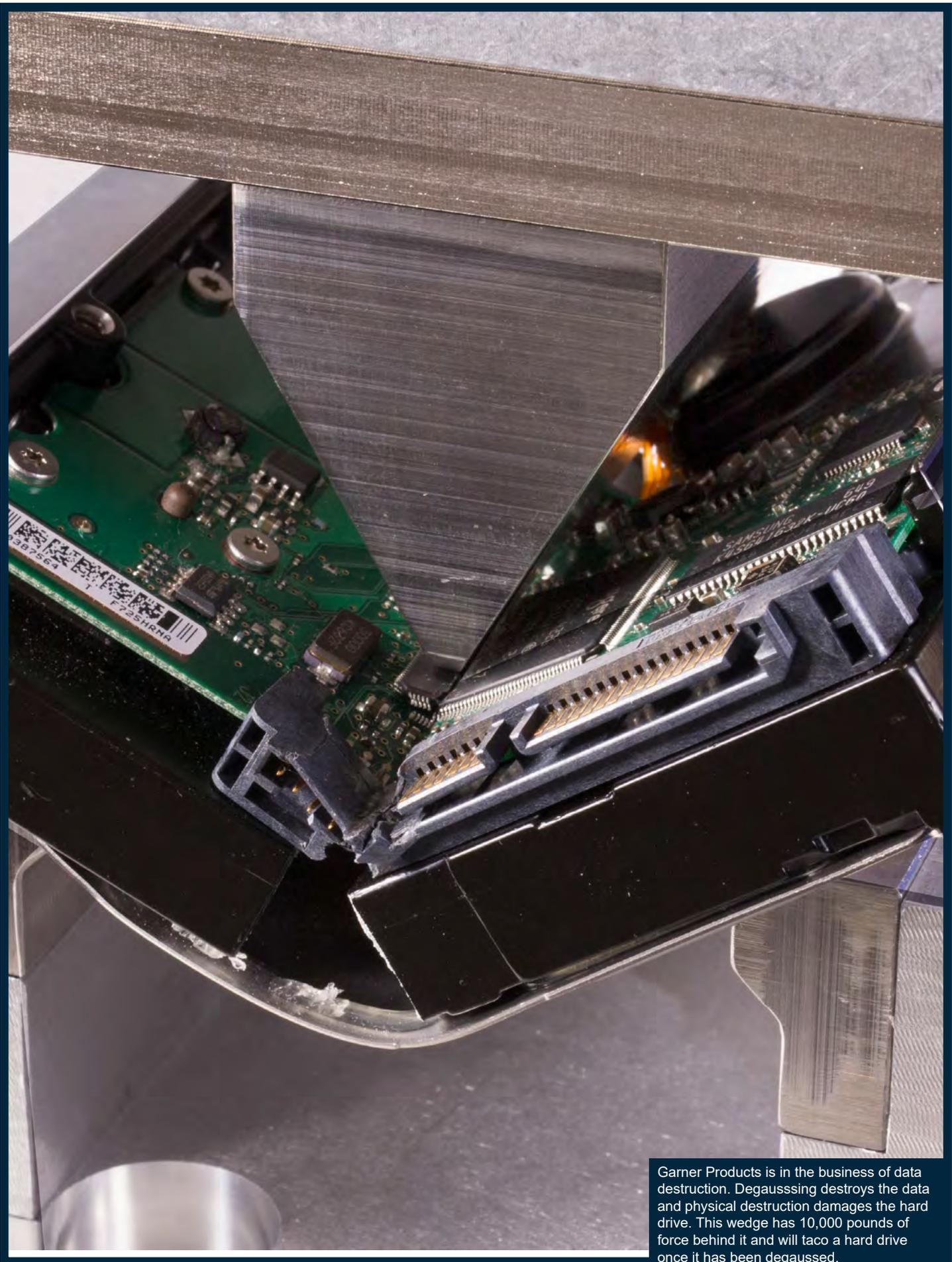
One of Audiolab's first products was the TD-1B. It was sold



Current technology degausser alongside the original TB-1B circa late 50s.



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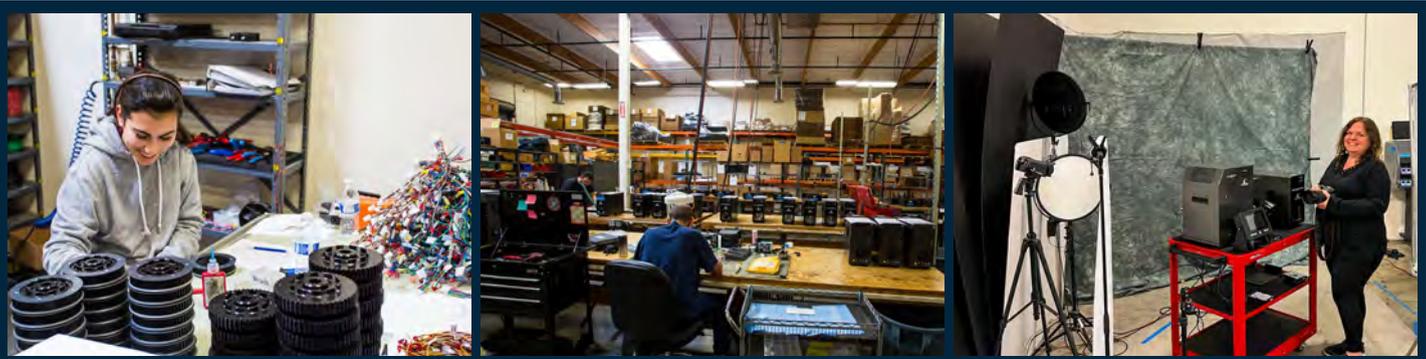


Garner Products is in the business of data destruction. Degaussing destroys the data and physical destruction damages the hard drive. This wedge has 10,000 pounds of force behind it and will taco a hard drive once it has been degaussed.



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CNC West Magazine



Garner Products manufactures brackets, coils, frames, plastic bezels, PVC holders, PVC tubes, gate pins, wire up all the electronics, make harnesses, and so forth. They even custom cut and make the shipping containers and shoot product photos and videos ensuring quality every step of the way.

to the radio stations to degauss tapes in the 350 coercivity range and cost \$77. Coercivity for current data storage solutions is around 5000. "Our top-of-the-line NSA Listed TS-1XT unit has been evaluated by the NSA and sanctioned to erase top secret data. It produces approximately 20,000 gauss," describes Vice President Michelle Stofan. "There are only 12 other products in the world that hold that kind of certification. The TS-1XT operates like a camera flash where the energy is stored up and then released in a burst."

Back in 1959, the original TD-1B was mostly manufactured on site. They wound the coils, filled it with tar, machined parts, and assembled everything. "Only the box and label were outsourced back in the day," details Ron. "That is still our practice now." Having control of the process has always been important to Garner Products. Their level of vertical integration gives them flexibility and adaptability to better serve their customers. Garner Products got their first CNC machine back in 2003, a remanufactured Fadal 4020. "Our first Fadal is still out there running," touts machine shop manager Justin Stofan. "It's machine #1 and has a 4th axis table on it now." "We had manual machines from nearly the beginning," adds Ron. "But as a small company I get really excited about getting new equipment that makes all our lives and products better." "He isn't kidding," jokes Michelle. "Ask him about how much he loves the cherry picker and forklift. The forklift was almost on our family Christmas card that year." "She's right," smiles Ron. "Improving processes or capabilities on anything bigger and more interesting than

the floor jack is awesome."

The shop consists of a Flow water jet, a Hyundai WIA L 150A lathe, Fadal 3020 and 4020 mills, three YCM NXV 1020A mills, Shop Sabre router, and multiple Raise 3D printers. "About ten years ago we had an issue with a vendor that really changed the way we do business," details Ron. "We had a new product failure on a Thursday and by Friday I was on my way to a large data center in Ireland to investigate. It shouldn't have failed, after all the successful testing it made us really ask the question why." At that time Garner Products didn't have a CNC lathe, so any part that needed turning was outsourced. "Our design calls for a specific hardness of the materials and all throughout testing that material was used," explains Michelle. "Unbeknownst to us the vendor used a softer material than what was spec'd, and the main shaft was deforming. We had products go out all over the world and we were going crazy trying to figure out why we had a failure. As a small family run business, we are really proud of our products and how they are made."

"We love all our products," adds Ron, "But we never want to see them again after they've been shipped to customers. This was a big deal that we had a failure. Quality is everything, national security agencies rely on our products to perform and keep America's data safe by destroying it. Once the vendor fessed up to the materials being out of spec, we knew we had to bring it all in-house. Within a few weeks we purchased a Hyundai Wia CNC 150 with a bar feeder from Clancy Machine. John met with us, we explained what it is we needed to manufacture, and he made the recommendation. We had zero experience with CNC turning, it was a big jump for us, but a required one."

Quality isn't necessarily measured in microns at Garner Products, but their quality is measured by the NRTL test UL CE labs and by customers like the NSA. Ron's found over the years that their products respond best by having a tighter tolerance than a loose one. So, although microns don't come into play, they operate at about the same level as most aerospace shops when it comes to +/- on the gauge. Garner's products are designed for one thing: destroying your data.

They manufacture essentially two types of physical destruction devices. One is for solid state drives, and one is



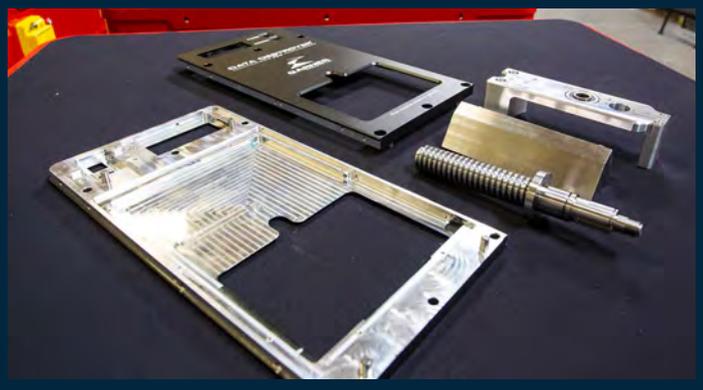
Justin Stofan, Ron Stofan and Michelle Stofan.



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Top Left - This acme shaft was the reason Garner added CNC turning.
 Top Right - The Hyundai Wia CNC 150A with bar feeder runs only 6 part numbers, but each one of them is critical to the trouble free operation of their products.
 Right & Right Middle- Garner Products has three YCM NXV 1020A mills and two Fadal's. The Fadal 3020 has a 4th axis. Bottom Right - A sampling of internally produced parts shows the variety of shapes and materials used in their data destruction devices.



for magnetic drives. Both end up with the drive either broken into a taco shape or have 90 spikes driven through it. Both require tremendous amount of force coming from a small footprint. "We produce 10,000 pounds of downward force without the use of hydraulics," explains Justin. "It all comes from that shaft we talked about earlier. Our products are tablet size, so it is no easy task."

People tend to think of hard drives as delicate. We've all had one go bad in our computer and "lost" that data. They are actually very resilient. One of Garner Products' long-time customers does the exact opposite of them. "Our customer is in the business of recovering data," explains Ron. "I'm talking airline crashes, space shuttle disasters and 911 terror attacks. They can recover data from the worst-case disasters, but they use our products to ensure once they recovered what they needed that the hard drive is destroyed, and the data is no longer recoverable. Think about that for a minute, think about the responsibility we have to our customers to provide a quality product. Our quality starts at design, goes through manufacturing, and all the way through to delivery and support. We don't take those responsibilities lightly."

"What we do here is tangible," concludes Michelle. "These are products that impact people's lives. Our products are essential to national security, essential to your daily life. It is really rewarding. Looking back and sharing these memories with you is a tremendous sense of pride for us. You don't always remember the old milestones and pizza parties, and it isn't often we get to tell a story about Ron's dad listening to the war on his short-wave radio. But that is who we are. We really are still a family run business, but one whose products have a global impact."

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