

# Salute

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## EASY AS 1-2-3D

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and Air National Guard  
reservist **Samantha Snabes**  
is helping 3D printing  
change the world



Check out Beetle Bailey on page 16.

Most intense... most delicious...  
most buttery... pop corn to  
ever hit your taste buds!



FAMILY SIZE

By DONNA BOYLE SCHWARTZ

Samantha Snabes standing beside the Gigabot, re:3D's flagship technology that enables industrial strength, large-format 3D printing to create functional, practical necessities.



# EASY AS 1-2-3D

Air Force veteran and Air National Guard reservist **Samantha Snabes** is helping 3D printing change the world

**N**ot too many years ago, the idea of three-dimensional printing using recycled plastics seemed like something out of a science fiction novel. But Air Force veteran—and current Air National Guard reservist—Samantha Snabes has taken 3D printing out of the fiction aisle and right into some of the most desperately downtrodden areas of the world.

As co-founder of Austin-based re:3D Inc., Snabes has been instrumental in bringing the reality of 3D printing to more than 53 countries. The company builds affordable, accessible 3D printers and recently won the WeWork Creator Awards for \$1 million toward innovative technologies.

Snabes has an interesting and varied background, which has served her well in blazing a trail as an entrepreneur. “In 2010, I was working at NASA when I decided to enlist in the Air Force during my lunch hour,” she recalls. “I was assigned in Mississippi to the 186th Air Operations Group. We support and ensure safety at major events, such as the Super Bowl and inaugurations, as well as support areas following natural disasters like Hurricane Harvey. I currently serve as an officer in the Air National Guard.”

During her travels for the Air Force and as a volunteer for the nonprofit Engineers Without Borders organization, Snabes began developing the idea for a low-cost, portable 3D printer that would function in a wide variety of challenging environments. “There was so much desire in the areas we visited to work and help make the world better,” she explains. “These people just needed the tools to work and solve problems independently. We saw our technology as a platform to do that. It’s interesting now as an officer in the Air Force because I see people caught in terrible situations, and I believe small businesses are a source for independence and see 3D printing as just one more way to provide that.

“I started to get our idea out there and ultimately got into a program called Start-up Chile, in which the Chilean government granted us \$40,000 to launch a company from Santiago,” Snabes continues. “I showed up with just an idea in my



The re:3D founder worked at NASA where she met her co-founders and began developing their idea for global social impact through 3D printing.

head and was able to create the first prototype of Gigabot with help from friends in tech school and NASA. We also had help from a large community to create and launch a successful Kickstarter campaign, meeting our first Kickstarter goal in the first 27 hours, and have since raised about \$350,000, which was really meaningful. We have used our banking partner, Chase for Business, for mentorship and resources that have allowed us to establish and grow our business."

Snabes also received assistance from Bunker Labs, a national nonprofit organization that provides educational programming, mentoring and events to help veterans, transitioning service members, and military spouses succeed and thrive as entrepreneurs. "Bunker Labs has been really helpful in building connections between reservists and veterans," she notes. "It's not easy (starting a business), but there are resources like Bunker Labs to help you figure it out and be synergistic. A lot of veterans and reservists I meet are very entrepreneurial-minded. It's a unique peer group to be a part of, and in both spheres we're very goal-oriented, and there are lots of lessons learned."

Today, re:3D's Gigabot printer is churning out industrial components for industries as varied as education, health care, and manufacturing. "Our customers are Fortune 500 companies, hospitals, and federal agencies," she notes, adding, "The appetite for 3D industrial printing has really expanded beyond the communities we were initially trying to serve."

In spite of those high-profile clients, Snabes hasn't lost sight of the original social mission of 3D printing. "We have a '1 for 100' program where, for every 100 Gigabots delivered, we give away one Gigabot to someone trying to make a difference in the world," she says. "We call this the Gigaprize. We have a cohort of fellows who are doing amazing things around the world with the Gigabot they won, and we follow their work closely. It's an honor to support these people who are trying to do something radical to make a difference. At the end of the day, it's about our customers, and we're working hard to spread their stories on our website,

<https://re3d.org/>"

The company currently has 20 to 25 employees, and is actively hiring. "We have one reservist (myself), one guardsman, and a technician now, and would love to grow with more veterans or reservists," Snabes notes. "Another goal is to create 500 jobs in five years—jobs that don't necessarily require a college degree."

Snabes says her military experience has been invaluable in starting and running a business. "As a reservist, I have access to leadership training that I can easily translate into my role at re:3D as well as my role as a junior officer. For example, we're very into checklists in our factory, which is something I pulled from my experience in the Air Force, as well as quality control and using 'courses of actions.' The military teaches us how to organize, how to be efficient, how to distill large amounts of information, how to map decision making, and how to train and equip others, which are particularly valuable with a hardware company.

"Being in the military taught me how to be a better communicator and a better leader," she continues. "In the Air Force, our core values are integrity first, service before self, and excellence in everything you do. We want to be a company that can do business on a handshake and instill those core values into our company. All our missions and tactical experiences in the military really translate well into the business setting."

Snabes says she hopes to continue to build re:3D as an environmentally friendly, socially conscious manufacturing firm. "Our ultimate goal is to enable access to printing of larger objects affordably to problem solvers in all markets and industries," she says. "We also want to use reclaimed plastic and be a more sustainable business. Metric tons of manufacturing waste are discarded every day, and we want to be a manufacturer that uses waste for something else before it makes it to the landfill. Powering printing from garbage and plastic waste is something we'll be working on for years to come. We're also working on community-driven solutions and are excited to partner with similar groups and ecosystems all over the world." 