



NEWS

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From Phone Call to Prototype in Three Days, North Dakota Tech Company Appareo Takes on Emergency Ventilator Project

FARGO, North Dakota (April 3, 2020) — Appareo today announced its commitment to the North Dakota Department of Emergency Services to produce 2,000 emergency ventilators by the end of the month.

Appareo is a privately-owned company that's an established leader in the custom design, development and manufacture of innovative electronic and software solutions for aerospace, agriculture, and defense. Like other businesses navigating the historic challenges of the coronavirus (COVID-19) pandemic, Appareo has been maintaining operations to meet the needs of its customers, while taking precautionary steps to protect the health and safety of its employees.

"While employee safety will continue to be our top priority, we wondered if there was more we could do to help our state and nation during this unprecedented time," said David Batcheller, President and CEO, Appareo. "That opportunity presented itself in the form of an emergency ventilator project with the State of North Dakota." Within just a few weeks, Appareo will be manufacturing 2,000 devices to provide mechanical resuscitator compressions in the event that hospital ventilators are no longer available.

The Appareo device is based on an open-source design that came out of the Coventor project, which originated at the University of Minnesota (UMN) and the Earl E. Bakken Medical Device Center. The device is not to be confused with a sophisticated hospital ventilator; rather, it's more

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of a “one-armed robot” that was designed to fill the role of a human in an emergency situation where all ventilators are occupied and the last viable option for a respiratory patient is to have a healthcare worker manually squeeze a ventilation bag. This device would fill that role so that the healthcare worker can focus on other needs, if it came to that.

Appareo is currently working with the Coventor project collaborators to pursue an Emergency Use Authorization (EUA) from the FDA for this device. The UMN team submitted the original EUA application for the design with a “manufacture agnostic” approach -- meaning its open source is available for any manufacturer to bring the design to market.

Understanding the potential impact this emergency ventilator could have against the COVID-19 pandemic, a large number of Appareo engineers volunteered to work overtime to build the first prototype.

“From the first phone call on Friday, March 27th, it was only three days later that we had a functioning prototype,” said Batcheller. “During that time our engineering and manufacturing people logged almost 1,000 hours, working late into the nights and over the weekend. We simply have an amazingly talented and dedicated group of people here.”

In a March 30th press conference, North Dakota Governor Doug Burgum expressed how important the public/private sector partnerships were for moving quickly toward finding solutions, and he acknowledged Appareo’s role in manufacturing ventilators as part of the State’s emergency preparedness efforts.

“As a privately-held technology development company that has the ability to do rapid proof of concept work, we have the fortunate ability to move incredibly fast, and that’s exactly what’s needed right now as our nation approaches an anticipated shortage of ventilators,” David Batcheller said.

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For more information about the UMN Coventor project, visit their [website](#). For more information about Appareo Vita, and to see video of the prototype, please visit appareo.com/vita.

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About Appareo

Appareo is a recognized leader in the custom design, development and manufacture of innovative electronic and software solutions for aerospace, agriculture, and defense. Through the creative application of cutting-edge technologies, Appareo creates complex end-to-end solutions that include both mobile and cloud-based components. The company is privately held, with headquarters in Fargo, N.D., and design offices in Tempe, Ariz. and Paris, France. All Stratus products are designed, developed, built and supported in the USA.

Submit inquiries via online form: appareo.com/vita