

## **Benét Laboratories leads DOD challenge to harness private sector innovation**

U.S. Army

WATERVLIET ARSENAL, N.Y. (April 22, 2013) -- The Army's Benét Laboratories announced this week that it is the program manager for a \$250,000 Defense Department challenge that began earlier this month to harness private sector advance manufacturing and intelligence innovation in hopes to make defense manufacturing, such as at the Watervliet Arsenal, more efficient and competitive.

John P. Snyder, Ph.D., who is a senior mechanical engineer with the Army's Benét Laboratories at the Watervliet Arsenal and who is also the program manager for the DOD challenge, said that DOD entered the first phase of what is called the MTConnect Challenge, April 12.

"The challenge is essentially a tool for DOD to reach outside of the defense research and development fence line to domestic academia and industry, via MTConnect protocol, to stimulate thought and development of tools and applications that will enhance defense manufacturing capabilities," Snyder said.

DOD-operated manufacturing centers have hundreds, if not thousands, of machines that for the most part operate independently, Snyder said. Each machine has a value to the manufacturing process but its current status, such as where it is in the work flow or its maintenance status, is often captured by stubby-pencil calculations that are not in real time.

The bottom line is that defense manufacturing does not have a standard communication program and that is where the MTConnect protocol comes in.

"Imagine if we could communicate in real time with every machine, using a common standard, how much clearer a manufacturing center's common operational picture would be," Snyder said. "Then if we could take that same application and applied it to other manufacturing requirements such as the amount of energy being consumed by machines and by buildings, manufacturing efficiency would dramatically improve."

DOD has two main goals for the challenge, Snyder said.

"The first goal is to motivate domestic software and system experts who would develop the applications, using the MTConnect standard, that have the potential to make defense manufacturers more efficient and competitive," Snyder said. "The second goal is to then take those award winning concepts and to create the tools that could be adopted by DOD, to include the Watervliet Arsenal."

Phase one (Ideation Phase), which began April 12, 2013, and closes May 31, 2013,

## **Benét Laboratories leads DOD challenge to harness private sector innovation**

Published on Electronic Component News (<http://www.ecnmag.com>)

---

will award each of the five winners \$5,000 each. This phase is essentially a concept development phase where great, innovative ideas are measured by their utility and attainability.

In the second phase (Challenge Phase), which begins July 1, 2013, and closes Jan. 17, 2014, Phase one winners take their concepts and develop them into concrete software applications. The grand prize of \$100,000 will be awarded to the Challenge winner in April 2014. The second place award recipient will receive \$75,000, and the third place finisher will receive \$50,000.

DOD's Defense-wide Manufacturing Science and Technology center, the National Center for Defense Manufacturing Technology, and the Association for Manufacturing Technology have teamed up with Benét Labs to administer the challenge.

MTConnect is a newly developed, open communication standard that provides the capability to pass data from equipment and devices to higher level systems for further processing using the XML-based standard. The MTConnect Challenge focuses on promoting the development of manufacturing platform solutions using a standard protocol.

For more information, visit the website at <http://mtconnect.challenge.gov>.

The Watervliet Arsenal (pronounced water-vleet") is an Army-owned-and-operated manufacturing facility located in Watervliet, New York. The Arsenal is the oldest, continuously active arsenal in the United States, having begun operations during the War of 1812.

Today's Arsenal is relied upon by U.S. and foreign militaries to produce the most advanced, high-tech, high-powered weaponry for cannon, howitzer, and mortar systems. This National Historic Registered Landmark has an annual economic benefit to the local community in excess of \$100 million.

Benét Laboratories is a Department of the Army research, development and engineering facility located at the Watervliet Arsenal. It is a part of the Weapons & Software Engineering Center, Armament Research, Development, and Engineering Center, which is located at Picatinny Arsenal, N.J.

**Source URL (retrieved on 12/18/2014 - 4:47pm):**

<http://www.ecnmag.com/news/2013/04/ben%C3%A9t-laboratories-leads-dod-challenge-harness-private-sector-innovation>