



October 10, 2017

Innovation Challenge: Visionaries, ideas move on to design, development and prototype phase

MARINE CORPS AIR STATION CHERRY POINT, N.C. (Oct. 10, 2017) — Fleet Readiness Center East visionaries of five new ideas have been selected to move ahead to the design, development and prototype phase in the first Industrial Innovation Challenge.

There were 23 ideas submitted to the Innovation Challenge aimed at positively impacting production within FRC East. The challenge was open to all FRC East employees and kicked off June 14. Teams had until Sept. 1 to submit their ideas through the NAVAIR online tool: Spark!.

The commanding officer, executive officer, senior civilian and AIR 4.0 group head scrutinized the submissions and chose the final five based on a 100 point scale. Scoring was organized in three subject areas: Technical Data or Digital Technology use, Communication and Collaboration, and Technical Achievement.

The ideas and teams moving forward are:

Material Nesting Optimization, submitted by Eric Santure: When cutting composite fabric plies for a repair, the plies are oriented and cut out by hand. The amount of material considered waste after performing the cuts will depend on the orientation and layout of the plies on the fabric sheet. The idea is to incorporate optimization software that takes individual composite ply shapes as inputs and provides as an output, a ply pattern optimized to reduce waste. The process of orienting polygons in a manner which uses the least amount of material possible is known as nesting.

New Tail Rotor Blade Dolly, submitted by Maria Gaskill: The disproportionate size and weight of the tail rotor blades present safety and ergonomic concerns using the existing small wooden dolly. The idea is to redesign the dolly to address those concerns.

Dynamic Component Liner Blasting, submitted by John Burbine: When processing small liners for Dynamic Components, the parts tend to get blasted out of workers' hands. The idea aims to engineer a tool that will hold multiple liners of various sizes in place while blasting.

Drive Shaft Maintenance Tree or Cart, submitted by Samuel Chaisson: Drive shafts currently require a substantial footprint and the containers used during transport often require maintenance. The idea is to manufacture a single driveshaft support tree that will allow the storage, maintenance and transportation of several drive shafts.

Application Development for Mobile Devices, submitted by Dani Curl and Albry Spence: Not having direct access to computer applications and databases while working in an industrial environment hinders the mission. Having mobile devices and applications would improve Safety, Quality, Throughput and Cost.



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Between now and December, teams will be given a few hours each week to further develop their ideas and prove concepts. In December, the teams will present their ideas and the associated benefits to a panel of judges. The winner will be announced in mid-December with awards presented.

Col. Clarence Harper III, FRC East commanding officer, said that although only five ideas were selected for the Innovation Challenge, "please know that your voice was heard and received.

"We are looking for ways to explore and implement all the ideas submitted. This challenge has given us the chance to improve our operations here at FRCE, and help NAVAIR improve Enterprise practices."