ONR 'SCOUTs' for Creative Warfighting Solutions at Naval Academy Event

ARLINGTON, Va. — A web of connecting sensors and buoys for conducting ISR (intelligence, surveillance, reconnaissance) in the maritime environment. Specialized GPS that can monitor fishing routes and pinpoint suspicious activity that might reveal the presence of drug smugglers.

These were just two of the ideas presented by recent U.S. Naval Academy graduates during a "design thinking" event aimed at addressing a major challenge facing the Joint Interagency Task Force-South (JIATF-S) — limited resources to cover a huge area of operations to counter narcotics smuggling into the U.S.," said Warren Duffie Jr., Office of Naval Research, in a release.

The Academy event — which lasted from Aug. 2-5 and culminated in presentations to Chief of Naval Research Rear Adm. Lorin Selby and other stakeholders — was a partnership between the Office of Naval Research (ONR)-sponsored SCOUT initiative, JIATF-S and multiple warfare centers.

"My job is to train people to think differently and challenge the current system," said Selby, "and this generation is the one that will change things. We're trying to change the conversation and talk openly about challenges, obstacles and opportunities to learn and improve."

The event was spearheaded by SCOUT, an ongoing, multiagency experimentation campaign that rapidly brings solutions to warfighter challenges. SCOUT is committed to getting nontraditional, commercial-off-the-shelf, government-developed and/or government-sponsored technologies to the fleet rapidly.

Currently, SCOUT is helping JIATF-S, which works with U.S. Southern Command and partner naval forces to leverage all-domain technologies and unmanned capabilities to target, detect and monitor illicit drug trafficking in the air and maritime domains. This facilitates interdiction and apprehension to reduce the flow of drugs, as well as degrade and dismantle transnational criminal organizations.

"We wanted to get fresh minds and perspectives to study the warfighting problems faced by JIATF-S," said Dan Cabel, who heads up SCOUT. "What better minds than those at the Naval Academy, who will surely bring creative thinking and viewpoints to real-world challenges?"

During the Academy event, the graduates divided into two teams and listened to JIATF-S operators and subject matter experts describe challenges and needs unique to their mission. From there, they grouped these issues into themes that would serve as the basis for generating ideas. Afterward, they held a Shark Tank-style round robin to pitch ideas and select the best four for final presentation.

In addition to the ideas about connecting sensors and buoys and specialized GPS, other concepts included using artificial intelligence and machine learning to predict where drug runners might operate — as well as improve data gathering for asset allocation and case management.

"An event like this is fantastic for exposing these Academy graduates, who are now newly minted Navy and Marine Corps officers, to operational issues and challenges they will face when leading our warfighters," said Lt. Cmdr. Allison Mabrey, lead facilitator of the event. "We can't wait to see them bring their innovative ideas and skills to use in the fleet."

Next steps involve SCOUT and JIATF-S reviewing the four presentations and determining which aspects could be incorporated into experimentation exercises. The Academy

graduates will be part of this implementation process.

"This has been a fantastic experience," said Ens. Skyler Schork, one of the presenters. "It's not often that someone fresh out of the Academy gets to brief a two-star admiral. It's inspiring to know that naval leadership is interested in the ideas and viewpoints of an ensign."

The Academy event was part of the larger SCOUT Experimentation Campaign, which will leverage the Naval Research and Development Establishment communities, capabilities and enterprise tools to solve warfighter-driven problems. The goal of SCOUT is a series of innovation sprint events, exercises and experimentations to encourage learning and innovation, in order to rapidly develop technologies and techniques to improve warfighting capability—and assist in quicker leadership decision-making. These events will ultimately culminate in a large-scale demonstration early next year.