

Novel Network

Field test proves readiness of new radio services

BY GLYNNIS RICHARD, BOEING WRITER

Connecting sites from Hawaii to Florida, Boeing's radio as a service (RaaS) successfully completed a field test with the U.S. Army, showcasing the capabilities of the extended network.

The 2023 field test was the first demonstration of the network's use for real-time monitoring of live fire training events.

"When a soldier made a successful shot on a target, a sensor from the acquired target sent a signal through the RaaS tactical mobile network to all the other sites simultaneously," said Bob Worsham, Boeing program manager for Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance and Reconnaissance (C5ISR) Services.

RaaS provides deployable, secure 4G/5G, Wi-Fi and radio mesh networks, connecting service members during expeditionary operations and battlefield deployments and on both cyber and training ranges.

Military units can integrate the technology on existing radio assets and infrastructure.

During the field test, the network included an array of mesh radios, cellphones, SIM cards, vehicle kits, manpacks, and a private 4G LTE/5G extended network. Boeing also demonstrated the long-range capability by using satellite communications (SATCOM) integrated with RaaS.

"This extended network has the potential to greatly improve military readiness and battlefield command," said Eric Esposito, Boeing training specialist.

Boeing has plans to continue supporting the U.S. Army's training strategy for the Indo-Pacific region, where battlefield communications are particularly challenging across mountains, jungles and the Pacific Ocean. Expanding the RaaS network and extending SATCOM capabilities will provide new solutions for soldiers, sailors and airmen.



SATELLITE SYNERGY

Boeing teammates Hector Marin and Corey Holmstrom position a SATCOM terminal to connect the RaaS network to a Boeing training site in Florida.

PHOTO: BOEING



"This extended network has the potential to greatly improve military readiness and battlefield command."

ERIC ESPOSITO,
BOEING TRAINING SPECIALIST



ASSEMBLY REQUIRED

Marin and colleague Eric Esposito raise a mast assembly to outfit radios for the experiment, connecting field test sites in Hawaii and Florida.

PHOTO: BOEING

