Monterey, Calif. (NNS) -- Cryptologic Technician (Technical) 2nd Class Edward Montoya at the Naval Postgraduate School (NPS) in Monterey Calif. is one of only four enlisted Sailors in the Navy to receive a 2015 Secretary of the Navy Innovation award. Montoya received the award along with fellow members of NPS' Advanced Robotics Systems Engineering Laboratory (ARSENL).

"It's truly a great honor for ARSENL to receive this award," said Montoya. "This award speaks volumes about the caliber, commitment, and character of the ARSENL team."

Montoya has been in the Navy for nine years. He came to NPS in November of 2012 and was assigned to work in the Radar Lab. However, due to his long-standing interest in robotics, he applied for and was given the opportunity to work with the ARSENL team.

"When I first started working at ARSENL there was definitely a learning curve, especially on the software side. However, the team was very supportive. Also, my background as a Cryptologic Technician (Technical) helped with the transition."

"I was able to come into the lab and suggest ways to improve communications such as using a directional antenna instead of a dipole antenna with the command and control system," said Montoya.

In the lab, Montoya manages day-to-day maintenance and upkeep, software uploads, and recharges the UAVs that are the heart and soul of ARSENL.

During the last 19 months, Montoya has helped build more than 50 UAVs in the lab. They are complex vehicles that require more than 30 mechanical checks, not to include software updates and patches.

"Once the UAVs are constructed, we test and troubleshoot each system as needed to ensure everything is working as designed," said Montoya.

Montoya serves as the UAV manager for all pre-flight checks and assists with the launch and recovery evolutions when the ARSENL team heads to Camp Roberts, Calif. for field-testing.

"One of the major accomplishments for the ARSENL team in 2015 was flying 50 autonomous UAVs simultaneously breaking our own record of 30,"said Montoya. "One of the reasons for
achieving the goal of 50 UAVs was the design of the automated multi-plane propulsion system, which greatly increased our UAV launch time.

I look forward to finding new ways to help the team succeed as we continue to expand the capabilities of ARSENL and UAVs at NPS, added Montoya.

The ARSENL team is comprised also of: Assistant Professor Timothy H. Chung, Research Associates Michael Clement, Michael Day and Marianna Jones, Research Associate Professor Kevin Jones, Research Assistant Professor Duane.

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