Human-Autonomy Teaming: Control of Multi-Domain UxV's Year 2

Multi-Domain UxV Operations

Problem Statement

- The objective of the proposed research is to learn about an operators ability to manage multiple UAVs by increasing the onboard autonomy.

- If the future of command and control is multi UxV operations by one operator, then the parameters of what the operator can handle need to be assessed.

- Experimentation will be conducted with simulators representing the control of multi-domain UAVs.

- The number of UAVs will be systematically varied so that those elements can be examined for their added difficulties.

Impact

- Allows us to quantify an operators ability to manage multiple UAV by increasing the level of Autonomy onboard each platform.

- The results can be used by training commands to focus curriculum on specific areas rather than taking a generalized approach to teaching.

- In addition, program offices can use the results to determine the level of autonomy a system needs prior to procurement.

- Success will be measured by quantifying the increase in the operators ability to manage multiple UAVs.

Transition

- Our results can be given to any command that is responsible for UxV training or procurement

- This research directly supports Naval Special Warfare Command and Naval Special Warfare Advanced Training Command.

- Long standing partnerships with PMA-263 and NIWC Pacific will provide a technology transition

- Transition plan is to partner with PMA-263 and Advanced Training Command (ATC)