12<sup>th</sup> ICCRTS "Adapting C2 to the 21<sup>st</sup> Century"

## TITLE:

## Tactical Application of Gaming Technologies for Improved Battlespace Management

**TOPICS:** C2 Concepts, C2 Technologies and Systems

## **AUTHORS:**

POC: David Silvia Naval Undersea Warfare Center DivNpt 1176 Howell Street Newport, RI 02841 401-832-2869 silviada@npt.nuwc.navy.mil

> Ken Doris Applied Visions, Inc. 6 Bayview Avenue Northport, NY 11768 631-754-4920 kend@avi.com

Computer Gaming Technologies, though not typically used in tactical applications, provide mature capabilities that are a natural fit to meet the Situational Awareness requirements of an integrated Command and Control system. Real-time Situational Awareness is key in the ability to engage Time-Sensitive Targets (TST). The Tactical Target Analysis and Prediction System (TTAPS), now under development, uses gaming technologies to provide the ability to support strikes on mobile targets by Tomahawk Missiles through improved mission planning, optimized sensor (e.g., UAV) search routes, target movement prediction, and tracking of time-sensitive/mobile targets in a rapidly changing tactical environment. TTAPS will provide the ability to visualize the spatial relationships between the sensors used to detect the target, the weapon employed against the target, threats to the weapon, the movement of the target, and the battlespace itself, which includes the terrain and weather conditions. This paper discusses the TTAPS development program, along with details of the selection and implementation of the underlying technologies.