

# National Security Technologies Improves Situational Awareness at the Nevada Test Site using AGI Software

## Software System Integration Aids Visualization Efforts

**MANY REQUIREMENTS:** The Nevada Test Site monitors multiple projects simultaneously and unifies data into one picture to track vehicles, personnel, aircraft, and facilities. They disseminate air and ground track information across a user network through a server/client software system. The center is responsible for the safety of 1,200 people who work on a 1,375-square-mile site supporting national security, first-responder training, hazardous chemical-spill testing, environmental restoration, and waste management. Because the site's terrain—700 miles of paved and unpaved roads—can be difficult to navigate; they required a common operating environment to make fast, informed decisions and maintain control.

**ONE VIEW:** As the command center conducts new projects, they sought to integrate radar and ground tracking into one common picture. This helps personnel see relationships among aviation, ground, and weather tracks on a single monitor. They developed a real-time tool for Command, Control, Coordination, Communication, Visualization, and Analysis (C4VAS) using AGI's 4DX technology. The software integrates multiple data feeds, displays geospatial information, and tracks multiple lines of disparate data onto a single platform.

Combining air and ground data with information related to roads, borders, terrain, and imagery into a 3D picture allows the future integration of data feeds such as wind, temperature, and lightning. A 3D display helps operations personnel and emergency coordinators make timelier, more accurate decisions; better manage aviation over flights; and more thoroughly understand such hazards as space restrictions.



C4VAS gives a three-dimensional view of an F-35 Joint Strike Fighter aircraft flying over Las Vegas, NV.



For years, the OCC tracked aviation assets on one system using FAA radar feeds and monitored other data in separate 2D displays. This approach had limited capability to integrate multiple feeds and geospatial data. They wanted a system to disseminate information on an existing WAN, distribute real-time 3D visualizations across an Intranet, and improve workflows for personnel.

**MULTIPLE BENEFITS:** Combining air and ground data with roads, borders, terrain, and imagery allows future integration of wind, temperature, and lightning. The 3D display helps coordinators make timelier, more accurate decisions; better manage aviation; and understand such hazards as space restrictions. C4VAS tracks 330 objects and can expand if required. The software displays information to clients on an Intranet using AGI's real-time tracking technology as the server structure. The system passed a cybersecurity accreditation evaluation to ensure it did not breach cyber security protocols.