



Rapid Trusted Video Stream Dissemination

Mark Workman

781-271-2395

mworkman@mitre.org

MITRE Sponsored Research

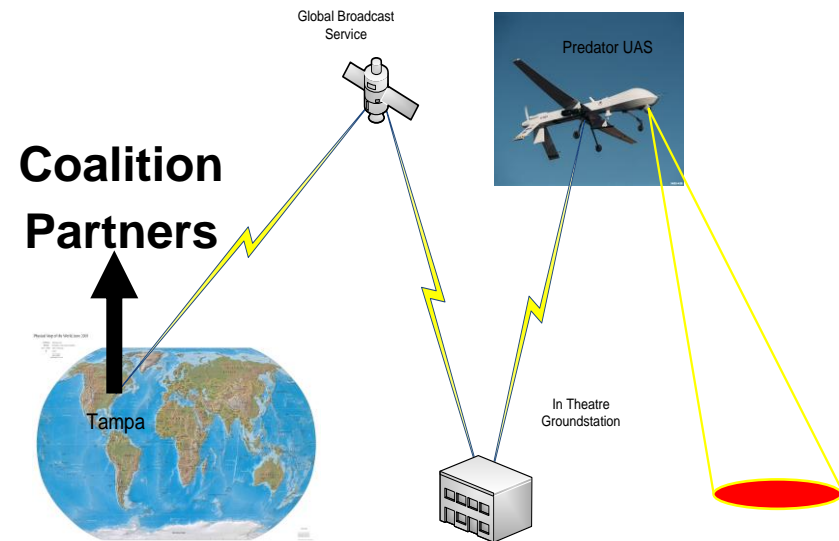
Problem



- **Video intelligence and reconnaissance from Unmanned Aircraft Systems (UAS) is arduously disseminated to Coalition partners**

Background

- UAS platforms gather intelligence and reconnaissance for U.S. Military operations
 - Coalition partners require some, but not all of the video that is broadcast
- UAS video is broadcast on the Global Broadcast Service
- Video is distributed to partners



Objective



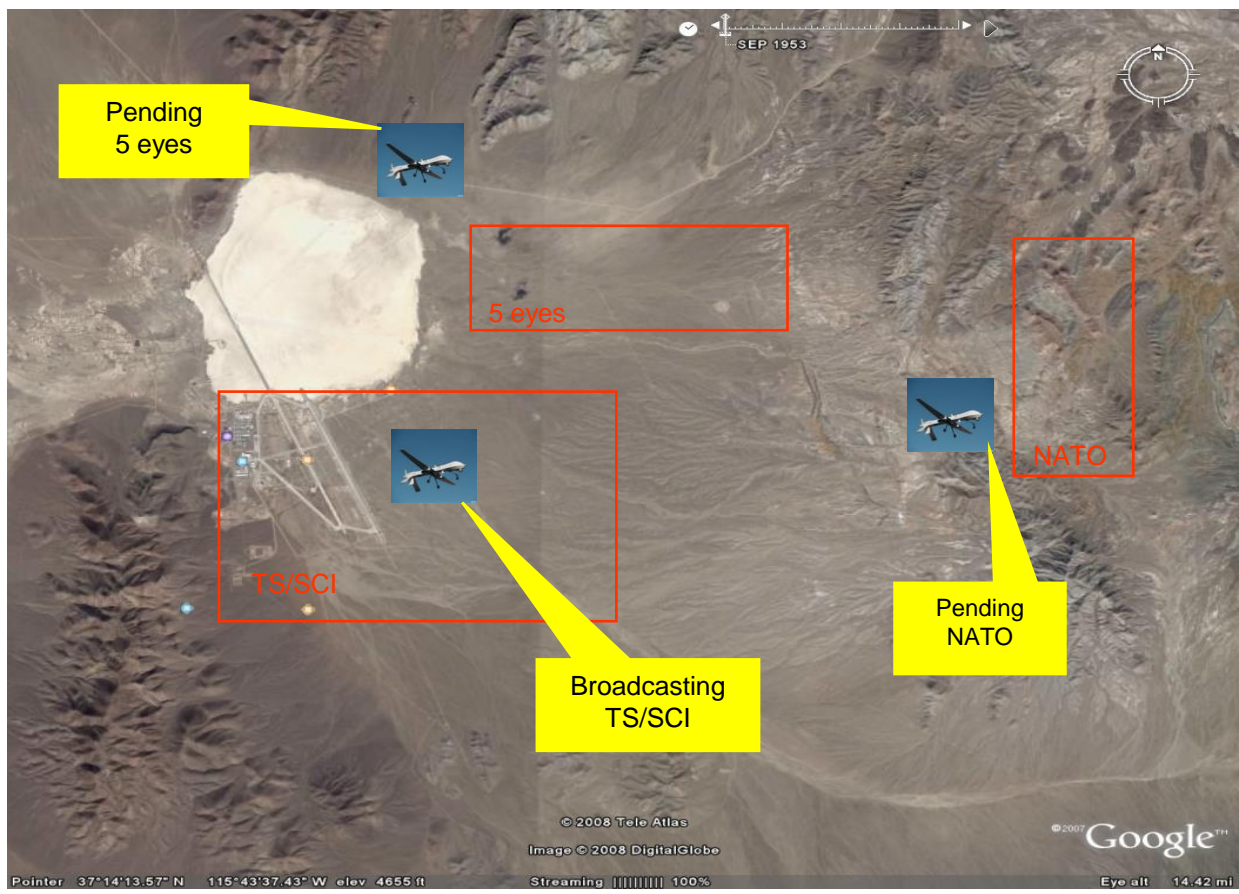
- **To provide a rules based automated system that will ease the task for delivering near real time UAS video across domains to our allies**
 - **With a fail safe human override**
- **To assure nothing but appropriate video feeds**

Activities



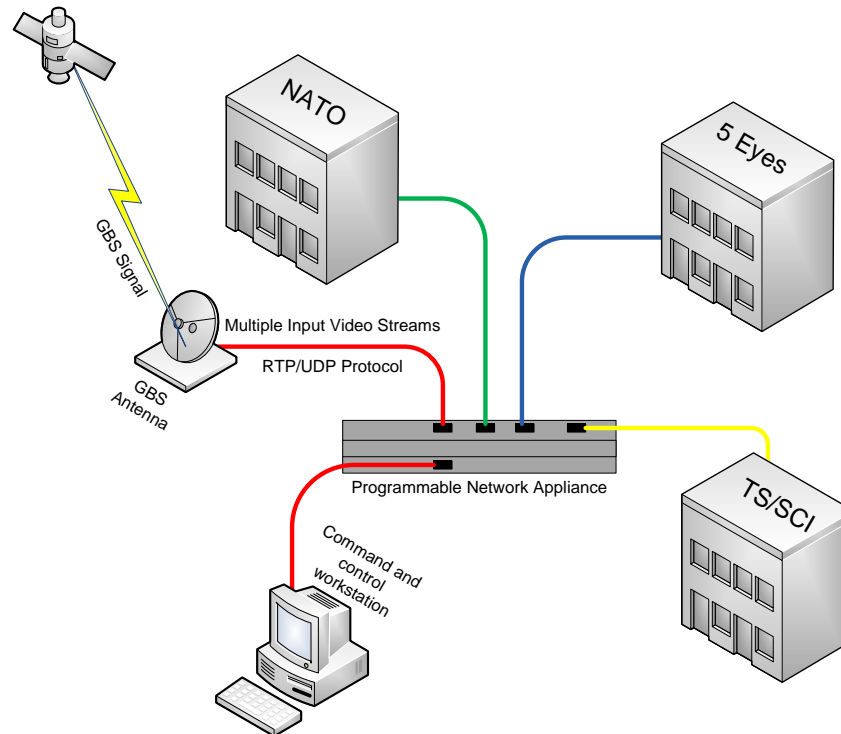
- **Research cross domain issues associated with UAS video dissemination**
- **Develop deep packet inspection and processing for video stream based on accompanying metadata**
- **Develop command and control Graphical User Interface (GUI) to initially classify the video stream and to reclassify it with the click of a mouse**
 - **To set the rules for dissemination**

Highlight



Visualization of mission planning

Demonstration



Actual video dissemination based on accompanying geositional metadata

Impacts



- **Enhanced intelligence sharing with coalition partners**
- **Improved understanding of the task at hand with a methodical approach to mission planning**

Future Plans

- Scalable solutions
- Extensible framework will facilitate other cross domain solutions for intelligence sharing
- Pursue accreditation for Multi-Level Security (MLS) guard
 - Logging classification changes
 - Logging rule set configuration

