SmartCam3D®

Geospatial AR Library

20220810_6-2608PRIMARY.ts-SPI

West Cajon Dr.

Greenbrier Lane

East Imperial Highway

Black Bone

Geospatial AR and FMV Annotations

SmartCam3D® *is like Google Earth for real-time, full-motion-video (FMV)* – allowing end-users to view and interact with FMV in the same ways they would a traditional satellite map display. Specifically, SmartCam3D® is a geospatial augmented reality and situational awareness technology that provides AR overlays on real-time, full-motion-video (FMV) as well as tools to annotate live video. SmartCam3D® is compatible with Android, iOS, Linux, Mac and Windows, making it applicable to a wide variety of applications leveraging airborne FMV.

SmartCam3D® Applications

The SmartCam3D® library has been integrated into a wide variety of applications throughout the FMV ecosystem including Ground Control Stations, sUAS Pilot Apps, TAK, ISR Mission Management Systems, and even web-based video players.

ATAK & WinTAK Plugins

SmartCam3D® can be utilized within the TAK ecosystem via ATAK and WinTAK plugins. These plugins allow users to utilize the core TAK Map tools (e.g., Point Dropper, Red X, R&B, Drawing, etc.) on the real-time FMV.

TAKX Plugin Coming Soon

To further expand SmartCam3D®'s usability across the TAK ecosystem, a TAKX Plugin is coming soon.

TAK   TAK

TAKX

Getac

GEOSPATIAL AUGMENTED REALITY

Baseline GIS Data: Display road vectors, street names, POIs, and other common geospatial entities within live FMV.

Custom GIS Data: Import (e.g., .kmz) and display custom GIS entities.

Vectors and Polygons: Generate and display vector paths or polygons.

3D Objects: Display 3D Entities (e.g., .obj files).

Common Operational Picture Entities: Display User-Device locations (e.g., ATAK Device Locations).

PERFORMANCE HISTORY

SmartCam3D® has a rich performance history, originally serving as the primary flight display for the NASA X38 during initial unmanned testing. Additionally, since 2003, the technology has been deployed with US Army Tactical Unmanned Systems as a module within the Universal Ground Control Stations (UGCS), where it's utilized in conjunction with the Hunter, Shadow, and Gray Eagle UAV Platforms. Additional integrations of the technology have touched all levels of the FMV ecosystem.
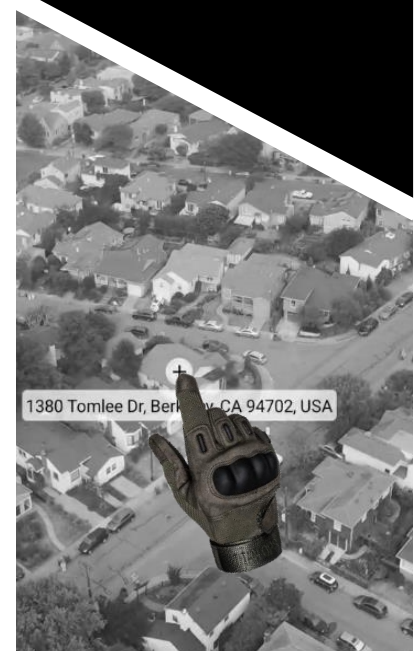

FMV ANNOTATION TOOLS

Geocoding: Enjoy three geocoding options to forward- or reverse-geocode locations within live FMV.

Cross-Cueing: Simultaneously navigate the map and FMV display using an Active and Reactive cursor.

Target Marking: Mark targets by tapping in the video. Customize the POI marker and add it to the Target List.

Measurement: Range & Bearing tools within live FMV. Measure areas of closed polygons.

Geospatial Telestrator: Free-hand annotate live FMV.