

Oakland Police Department

Airborne Surveillance Video Downlink Solution

Vislink is proposing to provide the Oakland Police Department with a state-of-the-art airborne surveillance video downlink transmit & receive solution that will provide real-time, high quality high-definition airborne images from two aircraft, operating simultaneously, to both fixed and mobile ground receive units.

This high-quality encrypted/secure video downlink solution will provide real-time actionable video images to both command staff and remote users, allowing for critical decision making, enhancement of officer safety and better allocation of resources.

AIRCRAFT TRANSMIT SOLUTION

Vislink is proposing to provide a new AeroLink 6.5 GHz, high power, high definition, RF transmitter in the proposed Diamond DA62 aircraft platform. The Vislink AeroLink RF transmitter can provide up to 4K UHD encoding.

Vislink is proposing a low-cost and no maintenance omnidirectional antenna system for this aircraft, this antenna will be belly mounted. Utilizing a low-cost omnidirectional antenna allows the aircraft to transmit simultaneously to future multiple fixed receive sites, providing greater area coverage

and signal reliability, as well as to mobile command vehicles and hand-held tactical receive systems.

The Vislink RF transmit system will be fully controlled by the aircrafts mapping & navigation system, allowing for easier control by the Tactical Flight Officer.

FIXED RECEIVE & DISTRIBUTION SOLUTION

Vislink is proposing to provide and install a single 2-channel fixed receive site solution on the existing self-support tower structure or building structure within the City of Oakland. The proposed Vislink solution will allow any two aircraft to simultaneously transmit live video downlink images, into the fixed receive system.

The proposed fixed tower solution receives the aircraft signals and then provides an IP output stream, which is then transported over the cities secure data network to the Police EOC facility, where the actionable video images it can be viewed by command staff on a video wall or dedicated television monitor.

Additionally, Vislink will provide a secure cloud distribution and viewing system, no video recording or storage will be provided. The downlink images will be sent to an AWS Government Cloud instance, where the video can be observed by only authorized users, via password protection.

This solution allows for a hands-off viewer approach, allowing command staff access to actionable video images, without the need to initiate the downlink reception from the command center.

PORTABLE / TACTICAL HAND-HELD RECEIVE SOLUTION

Vislink will also provide one of our MobilCMDR portable / tactical hand-held receive kits. This self-contained hand-held receiver allows for direct viewing of encrypted aircraft video downlink images on a daylight viewable screen, as well as connection to an external monitor via a coax cable connection.

This unit can also be utilized at the police aviation hangar to test the aircraft transmit system, to ensure proper operation prior to flight.