



# In Focus

Air Support Unit

---

Believe in Excellence



**Platinum Client**



**Platinum Client**

## Air Support Unit

As part of our public-sector client's responsibility to maintain public safety they operate three helicopters from their Air Support Unit (ASU), covering a major UK city. Operating 24 hours a day and flying an average of 275 hours per month, the helicopters are vital observation and communication platforms.

Although the helicopters are fairly recent arrivals, the ASU command and control room had not changed significantly since the 1990s. To improve the operations and efficiencies of the ASU, our client required an overhaul of the room and chose Cinos to carry out the work within a limited budget and crucially, without disrupting the ASU's critical work in the skies above the city.



### The Requirement

Working to a limited budget and challenging time frame, Cinos incorporated several features into the upgrade design which met our client's key requirements:

- High resolution display of video, graphical and electronic information
- Improved operator efficiency and working environment
- Ability to share video and data between operators and within the room.

### The Solution

Cinos started with the basic structure and layout of the control room. A raised floor was installed to allow the new technology and infrastructure cabling to be well hidden but easily accessed via floor panels. This would ensure that maintenance and any future expansion can be carried out without disrupting operations.

Once the room shell was complete, Cinos installed a new console desk, fully equipped for three operators and built in a horseshoe layout to improve comfort and make the best use of the room space. Facing the desk, a video wall was installed, utilising four NEC 46" LCD display in a 2x2 layout, complemented by a further four 19" ceiling mounted displays. To ensure the image quality was not compromised, the Extron Quantum Elite video wall processor was integrated into the system; allowing users to resize and display images simultaneously. Further integration with the main command centres allows access to thousands of CCTV camera feeds.

The original command and control room utilised a basic whiteboard to record pilot and office rotas. To streamline this process for the user, Cinos installed a Samsung 65" LCD touchscreen display, allowing users to easily see and update information quickly.

To free up space in the room, existing hardware was placed in an equipment rack. KVM technology was implemented which allowed operators to control multiple systems from a single keyboard and mouse, rather

than constantly changing seats. Data from any system can be displayed on the video wall and supporting displays. To further aid operator efficiency, Cinos delivered an integrated AMX control system. This allowed operators to control multiple systems from a single display including:

- Video Wall – control of pre-set layouts and configurations
- Heli Pad Lights – control of landing and strip lights including brightness adjustment
- Heli Pad Safety – control of safety equipment including barrier and beacon
- Blind Controls – controls of the blinds in the control room

A Network Attached Storage (NAS) system was installed which allows 3 years of helicopter video footage to be stored whilst also improving the process for real-time retrieval and review of video. Previously all aircraft footage was burnt to DVD for storage.



☺ The ASU can now control the helipad lights, landing lights, siren, beacon and barriers from a single screen.



## The Benefits

Cinos completed the upgrade on time and within budget, delivering improvements in four key areas:

### Integrated Control

- Operator control of the external helipad environment (landing lights, beacon, siren and barriers) and the internal control room environment (video wall, ancillary displays, interactive whiteboard and blinds) all from a single screen.

### Operator Efficiency

- Three person bespoke operator console installed along with high resolution video wall, ancillary displays and an interactive whiteboard.
- Multiple systems and technologies controlled from a single keyboard and mouse.

### Enhanced Capability

- Real time access to thousands of cameras allows operators to display helicopter and CCTV video footage alongside each other.
- Network storage system allows 3 years of helicopter video footage to be stored and retrieved instantly by operators.

### Extended Service Life

- Modular design allows for systems and components to be easily replaced, upgraded and expanded in future.
- Room design allows maintenance activities without affecting operations. Relocation of equipment to dedicated cabinets with signal transmission over structured cabling.

## The Technology

For an in-depth look at the technology we used on this project or to download the relevant data sheets please visit our website. You can also see the other projects we have been working on and catch up on any company news.

**AMX**

**NEC**

**Avocent**

**SAMSUNG**

**Extron**

**Synology**

