

# Case Study



United Kingdom

# Overview

In addition to providing services to UK airports, and managing all upper Airspace in the UK, NATS also provides services around the world spanning Europe, the Middle East and Asia. To function safely and efficiently, the ATC industry needs to stay at the forefront of cutting edge second-to-none technology solutions.

## The Challenge

The National Air Traffic Service (NATS) is the UK's leading provider of air traffic control services. Collectively NATS Air Traffic Controllers (ATCOs) handle around 2.6 million flights and more than 250 million passengers in UK Airspace annually, providing services across 14 UK airports. In the past ATCOs were suffering up to forty failures a month using competitor headsets and trialling new partner models. In consideration of the critical nature of their operations, there is no room for failure when it comes to navigating the UK's Airspaces as safely as possible.

## The Solution

NATS partnered with EPOS, (formerly Sennheiser Communications) in 2004 and EPOS has to date delivered more than 4,000 COMMAND HME 46-II headsets to the company. As the principal headset provider for NATS across its UK territories, EPOS has the responsibility of providing essential equipment for air traffic controllers who'd struggle to operate effectively without the very best in audio technology. The COMMAND 46-II Series headsets from EPOS are not only a critical accessory for their role but also act as an essential enabler of safe journeys for people who fly across, in and out of UK Airspace.

### Customer

NATS

### Product

HME 46 ATC 300 headset  
- COMMAND 46-II series

### Website

[www.nats.aero](http://www.nats.aero)

### Country

UK

### Profile

NATS is the UK's leading provider of air traffic control services. Each year it handles 2.6 million flights and keeps 250 million passengers safe throughout UK Airspace.

”The COMMAND 46-II Series boasts impressively low distortion and unprecedented frequency response – key for navigating busy Airspaces with utmost accuracy. Chosen for its audio clarity, high quality speakers and microphones that block ambient noise with ultra-efficiency – the headset features a range of ‘must-haves’ for the role of an Air traffic control officer.”

The NATS audio solution had to meet a range of criteria including:

- Low distortion and frequency response were needed to help navigate busy Airspaces with accuracy
- Uncompromising audio clarity with high quality solutions to block out ambient noise and interference
- A robust and durable audio device to mitigate any risk of tech failure was a must have for ATCOs

Since 2004 EPOS has the responsibility of providing essential equipment for air traffic controllers (ATCOs) who depend on the audio technology to operate effectively.

Richard Langley, Senior Category Manager and Head of the Supply Chain team at NATS, has been at the company for 30 years, initially training as an ATCO and is now responsible for managing supply chain strategies and supplier relationships relating to ATC Communications, overseeing a typical spend of in excess of £20m a year. A key part of his role is ensuring the ATC team have the very best technological equipment. The COMMAND 46-II Series was initially chosen by NATS for its En-route Controllers through competitive tender over 15 years ago.

### Partnering with EPOS

Talking about the decision to partner with EPOS – over 1,300 HME 46-II headsets are currently used by NATS’ ATCOs across the country, he says: “By necessity, the ATC industry depends on high quality and reliable communications and requires second-to-none technology across the board to achieve this. The HME 46-II headset boasts impressively lower distortion and well adapted frequency response. The headset is designed with noise-cancelling technology meaning that a microphone filters out interruptive and distracting background noise, the device also enables ATCOs to deliver optimal speech clarity ensuring that no communications are ever missed.”

“The COMMAND 46-II headsets are specifically designed to ensure consistent and reliable communication that enables our ATCOs to remain in complete control throughout demanding scenarios and environments. The headset is designed with noise-cancelling technology meaning that a microphone filters out interruptive and distracting background noise, the device also enables ATCOs to deliver optimal speech clarity ensuring that no communications are ever missed.”

### Why EPOS

Having enjoyed a 16-year partnership with EPOS, NATS can point to several specific benefits for both the company and employees from using the HME 46-II headset.

Beyond the functionality of the devices, Richard Langley also notes the durability and comfort of the product, he says: “What has really impressed us with the products and the company, in addition to the excellent audio performance, is the robustness and durability of its headsets and the proactive approach EPOS have taken to continuous improvement. Headset failures have significantly reduced over time and where they do occur EPOS have been willing to examine the root cause and where appropriate refine the design of the headset and connectors in order to minimize re-occurrence. Reliability cannot be underestimated – the role of an ATCO requires clear thinking and serenity at all times and key to this is total peace of mind when it comes to everyday technology companions – whether it’s a headset, radar equipment or display system.”

Adam Spink, ATC Operations Project Support, is well versed when it comes to

the challenges faced by ATCOs, having been at NATS for 20 years. Although Adam believes ATC is one of the most exciting and rewarding industries to be in, he also recognizes the huge challenges and pressures faced daily by ATCOs.

However, even the most level-headed controllers need all the help they can get when it comes to ensuring they can tackle everyday challenges with the utmost calm, with reliable and effective technology a critical component for maintaining equilibrium. Adam says: “Clear communication with pilots and the accurate delivery of critical messages is vital for the smooth running of airports and Airspace. The communication loop must always be clear and correct and audio quality consistently high – there is simply no time for repetition. Clear and concise communication ensures the safety of pilots and passengers alike and could save lives. Lines of communication must remain stable, secure and effective at all times  
– every second counts.”

It is for this reason that the COMMAND 46-II Series is the chosen audio solution for the ATC force at NATS.



## COMMAND 46-II Series

Ensure consistent, reliable communication and all-day comfort, with a headset designed to keep you in total control in demanding sound environments. The noise-cancelling microphone filters out background noise and delivers optimal speech clarity perfect for ATC and C3 use. Your comfort is prioritized with a patented split headband and soft acoustic foam ear pads. Customize to your preference and enjoy multi-channel communication with a headset designed to guarantee your performance.

The headsets are defined by their quality, craftsmanship and functionality. With HME 46 users can stay aware of their surroundings with a flip away headphone for single-sided listening. Customise their device with a flexible microphone boom that allows for left or right sided users. Most importantly, users hearing is protected from sudden sound bursts on the line with EPOS ActiveGard® - a unique technology that protects while preventing communication drop-outs.



# EPOS

THE POWER OF AUDIO