Menzies Aviation, a leading global provider of passenger, ramp and cargo services, stored all of its important and confidential information in a communications room that needed reconstruction to optimize airflow and improve cooling inefficiencies. So, Menzies Aviation partnered with Impact Data Solutions (IDS), a designer and installer of IT equipment, to help remodel the communications room.

After assessing the needs of the communications room, IDS professionals recommended using passive cooling technology, making Chatsworth Products (CPI), the pioneers of Passive Cooling® Solutions, the best choice for the project.

CPI’s Passive Cooling has become a blueprint for optimal thermal management at the cabinet level because it completely segregates hot exhaust air from the cold intake air.

Menzies Aviation visited CPI’s United Kingdom office, where they were able to ask CPI’s team questions, view product information and experience hands-on interaction with possible products and solutions for its new communications room.

“CPI’s custom solution was the only solution that would work in this scenario.”

Robbie Williams, CEO Director of IDS

Challenge
The main challenge in Menzies Aviation’s communications room was the low plenum ceilings. In some instances, structural beams passed a mere 300 mm above the tops of cabinets. The beams supported trusses, so there was sufficient space for airflow above the finished ceiling plenum, but the space between the tops of the cabinets and the finished ceiling was limited.

This affected Menzies Aviation’s ability to regulate air efficiently, so they needed to deploy an effective cabinet and duct solution to maintain a standard volume but fit in the restricted overhead space.

Solution
To accommodate the limitations of the building’s design and the low plenum ceiling in the communications room, CPI designed custom GF-Series GlobalFrame® Cabinets with Vertical Exhaust Ducts, split rear doors, solid side panels and vented front doors.
CPI cabinets have completely transformed our environment.

Justin Apps, Head of Enterprise Architecture for Menzies Aviation

“CPI’s custom solution was the only solution that would work in this scenario,” Robbie Williams, CEO Director of IDS, stated.

CPI’s GlobalFrame Cabinets are standard server and network equipment storage solutions that feature smart airflow management and 78 percent perforated doors to maximize airflow.

The top-mount Vertical Exhaust Ducts guide the hot exhaust air away from the cabinet to support a closed return application. This ability to isolate, redirect and recycle hot exhaust air was just what Menzies Aviation wanted for its new communications room.

With this solution, Menzies Aviation was able to maximize its cooling efficiencies without the need for additional CRAC units, in-row air conditioners or liquid cooling solutions.

Now Menzies Aviation’s server room is running on free air cooling, and they are looking to achieve better efficiencies, while increasing their infrastructure footprint with ease.

In addition to the custom cabinet and Vertical Exhaust Duct solution, Menzies Aviation deployed CPI Cable Trays, Finger Cable Manager accessories and Vertical Cable Managers with T-shaped cable guides with cable openings that align with each U space for patch cord management.

Working closely with the CPI team enabled us to fine tune a small delivery window, which was essential in the success of this project.

Robbie Williams, CEO Director of IDS
IDS utilized a unique approach for cable pathways, installing the Cable Trays upside down, which minimized the space needed to access the tray but still provided proper support to cables.

Why CPI?

“CPI had the best cabinet compared to other manufacturers,” Williams stated. “The sales process within CPI played an integral part in securing the Menzies Aviation project.”

“CPI cabinets have completely transformed our environment.” added Justin Apps, Head of Enterprise Architecture for Menzies Aviation.

In addition to a full line of custom cabinets, CPI also provided all of the products needed for complete equipment and cable support throughout the network.

“Working closely with the CPI team enabled us to fine tune a small delivery window, which was essential in the success of this project. On top of that, IDS’ experience working with CPI products enabled us to build custom Vertical Exhaust Ducts for some of the cabinet positions due to restrictive steel members. I really believe we would have struggled with another manufacturer’s product” Williams also added.

CPI custom Vertical Exhaust Ducts isolate, redirect and recycle hot exhaust air to improve cooling inefficiencies.

“I really believe we would have struggled with another manufacturer’s product.”

Robbie Williams, CEO Director of IDS

About Chatsworth Products

Chatsworth Products (CPI) is a global manufacturer providing voice, data and security products and service solutions that optimize, store and secure technology equipment. CPI Products offer innovation, configurability, quality and value with a breadth of integrated system components, covering virtually all physical layer needs. Unequaled customer service and technical support, as well as a global network of industry-leading distributors, assures customers that CPI is dedicated to delivering products and services designed to meet their needs. Headquartered in the US, CPI operates global offices within the US, Mexico, Canada, China, the Middle East and the United Kingdom. CPI’s manufacturing facilities are located in the US, Asia and Europe.

CPI is listed with the General Services Administration (GSA) under Federal Supply Schedule IT 70. Products are also available through GSA Advantage and through Government Wide Acquisition Contracts (GWACs), including GSA Connections and NITAAC-ICS III. (www.chatsworth.com/gov).

About Impact Data Solutions (IDS)

Impact Data Solutions is a United Kingdom- and Netherlands-based industry award winning business that carries out technical installation and support services for many global companies and data centers. IDS services are utilized by Menzies Aviation, as well as many other global corporate businesses on a daily basis. All installations are carried out with the same high-quality support and aftercare service that has kept their 100 percent customer retention record intact. (www.impactds.com)

About Menzies Aviation

Menzies Aviation is a leading global provider of passenger, ramp and cargo services. It also owns AMI, the world’s only trade-only global airfreight and express wholesaler. The Menzies Aviation business is highly successful, operating at 149 airports in 31 countries, with annual revenue in excess of US $1.1 billion and supported by a team of over 20,000 highly-trained people. Menzies Aviation serves over 500 customers, handling over 1 million flights and 1.5 million tonnes of cargo per annum. Customers include EasyJet, Cathay Pacific, British Airways, Alaska Airlines, Lufthansa, Thai Airways, Flybe and many others. Best in class safety and security, the most resilient and innovative technology in its peer group and flawless customer service sets Menzies Aviation apart from other service providers. (www.menziesaviation.com)