

IN THE AIR

SUPPLIERS PRESENT THE LATEST TECHNOLOGIES TO OPTIMISE CABIN AIR QUALITY – FROM MONITORING TO DISINFECTION AND HUMIDIFICATION

Words by Izzy Kington

Ionisation for air and surfaces

Designed to protect passengers and crew from pathogens and other contaminants that may be circulating in the air or on surfaces, airborne and ground-use purification systems from Aviation Clean Air (ACA) use patented NeedlePoint Bi-Polar Ionization (NPBI) technology.

"In addition to ridding the cabin and cockpit of 99.9% of airborne and surface pathogens, the ACA system also sterilises bacteria and mould, neutralises most common VOCs and reduces static electricity," says Howard Hackney, ACA managing member. "In addition, the system also removes dust and odours, including fuel and exhaust fumes."

The airborne system is installed in the aircraft's existing environmental control system (ECS) and functions automatically whenever the ECS is running.

It works by creating positive and negative ions, electronically, from the hydrogen and oxygen molecules in the water vapour that is present in the air. "The process effectively cleans and disinfects the interior of a large-cabin aircraft in minutes," says Hackney.

The company reports that ongoing testing by independent laboratories

continues to show outstanding results in laboratory tests. The testing is conducted in a setting designed to replicate the conditions of corporate and commercial aircraft interiors.

While much of the testing over the last two years has been around COVID-19 and its variants, ACA shares that successful neutralisation of a wide range of pathogens has been achieved. Based on the system's efficacy with the viruses and bacteria already tested, ACA is confident the system will be equally as effective on viruses and bacteria that will be a threat in the future. The company continues to test as new pathogens – such as monkeypox – are identified, to ensure the system continues to provide essential protection.

ACA's Airborne Unit is certified for aircraft installation by FAA STC. The system is designed to provide constant decontamination of the interior without using or introducing chemicals. "The air quality of the cabin is noticeably improved, providing passengers and crew with fresher, cleaner cabin air," says Hackney. "The host of benefits provided by the ACA system ensure a clean, comfortable and healthy cabin/cockpit environment."

BELOW: ACA'S PURIFICATION SOLUTION INCORPORATES PATENTED NEEDLEPOINT BI-POLAR IONIZATION TECHNOLOGY

