

# AirShield gains FAA certification



AirShield from Pexco is installed over the top of existing passenger air vents

The US [Federal Aviation Administration](#) (FAA) has granted STC certification to a new technology designed to prevent airborne germs and odors entering the personal space of every airline passenger, for use on the A320 family of narrowbody aircraft.

AirShield is an extremely lightweight (weighing less than a pound) retrofit solution that fits over the existing passenger air vents above every seat. According to manufacturer [Pexco Aerospace](#), working with existing HEPA filtration system [AirShield](#) maximizes passenger wellbeing by reducing shared air by at least 76% (in a full narrowbody cabin with no facemasks) and increases the speed at which contaminated particles are expelled and replaced by freshly purified air by 230%.

Droplets from each breath, sneeze, and cough are captured, contained, and sent down to the HEPA filters before they reach other passengers or flight crew.

AirShield has been engineered to be simple to manufacture and quick to install. With its unique design, consisting of a three-piece clip-together assembly, each installation takes less than a minute and an entire aircraft can be completed during standard overnight aircraft maintenance. The design also benefits airlines who lease aircraft as they can remove AirShield equally as quickly, with no remodifications needed to the aircraft to return it to its original state.

As an additional layer of hygiene protection, Pexco also uses an antimicrobial additive to manufacture AirShield. This, the company claims, destroys 99.99% of bacteria (even antibiotic resistant strains such as MRSA, VRE and CRE) upon contact – supporting airlines and OEMs to maintain high standards of hygiene onboard.

“Bringing blue-sky innovation to the cabin interior is a challenge that requires investment of time, money, and engineering expertise. Achieving FAA certification was the last hurdle for AirShield. There is now nothing stopping airlines using AirShield to enhance the inflight experience and protect the personal space of millions of passengers who step onboard every day – something economy travelers have wanted for a long time,” the company said in a recent press statement.

To maximize the design and performance of AirShield, used more than 60 million data points of computational fluid dynamics to independently assess cabin airflow. This included undertaking on-wing tests in collaboration with major airlines and aircraft lessors, including American Airlines, Southwest Airlines, Alaska Airlines and Avolon.

Since the inception of AirShield, Pexco says it has invested in more than 8,000 subject matter expert person-hours, generated more than 60 million data points of CFD, created more than 30 prototypes for more than 100 lab tests, and completed 22 on-wing tests in the aircraft of three major airlines.

Pexco is currently in discussions with airlines across the US, Europe, and Asia with the aim of having AirShield installed on A320 aircraft sometime this year, and is also exploring certification options for AirShield on other narrowbody aircraft types, including the B737, as well as line-fit versions of its technology.