The first one is Nuance V2 Dark, already exhibited at EAA AirVenture Oshkosh 2017 last July, and the second one is Nuance V2 Ultra Clear, a new solution responding to the specific demand for shading systems that allow for brighter cabin interiors.

PPG and Vision Systems are working together to develop new applications utilizing Vision Systems' electronically dimmable window shading solutions for aircraft. Visitors to the PPG booth at NBAA-BACE can see the technology that is the focus of the collaboration, according to Brent Wright, PPG global business director, aerospace transparencies.

"Our customers will have the opportunity to talk with us and Vision Systems representatives about the possibilities that we bring for innovative window shading solutions by combining our expertise," Wright said.

Vision Systems' electronically dimmable solutions offer a sleek, elegant design adapted to the VIP style of business aviation. They enable passengers to tune the tint of their window from clear to dark to regulate daylight, glare and heat entering in while preserving the view or blocking outside light. They also enhance visual, thermal and acoustic comfort, for a peaceful atmosphere.

Vision Systems' EDWs offer many advantages over other systems. Based on SPD (Suspended Particle Device) technology, they provide infinite variable shading from fully clear to an extremely dark state and instant response time. They automatically switch to their darkest possible state when unpowered, keeping the interior cooler on the tarmac and reducing air conditioning consumption. These solutions block harmful UV light (and IR as an option), and their fabrication involves noise barriers to keep the cabin quieter. Vision Systems' EDWs also deliver a weight reduction of about 30 percent compared with motorized shades, and do not add weight in comparison to a window with a manual shade. Furthermore, they have no moving parts as the electronics are fully integrated, reducing maintenance costs and downtime. They can be incorporated into flat or curved surfaces (2D, 3D), and use plastic or composite glass. These solutions can come as a whole to replace the entire window; installation is often limited to a simple mechanical operation, which is very advantageous for the aftermarket.

With Nuance V2 solutions, Vision Systems continues to widen the gap with competing products; the new systems provide unprecedented optical quality, with haze as low as 2.5 percent and clarity close to 100 percent.

Based on an innovative interlayer that will integrate UV, IR and hydrophobic barriers, the solutions benefit from a new lamination process for enhanced reliability. They also comprise embedded electronics and a laminated touch panel developed in-house, to be more compact and for easy retrofit.

Further information at: www.visionsystems.fr