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Rockwell Collins' New High-Fidelity Image Generation System to be Featured on Virgin Atlantic's 787 Flight Simulator

Rockwell Collins' new high-fidelity EP®-8100 image generation (IG) system with JVC Kenwood VS2500 laser-hybrid projectors will be featured on Virgin Atlantic Airways' Boeing 787 Dreamliner full flight simulator (FFS) as part of a contract with L-3 Communications. This will be the first implementation of Rockwell Collins' EP-8100 IG system on a commercial FFS.



"The safest flying environment stems from systematic training that replicates real life, and our newest visual system enables pilots to see the world they'll be flying in like never before," said LeAnn Ridgeway, vice president and general manager, Simulation and Training for Rockwell Collins.

Rockwell Collins' EP-8100 IG system delivers enhanced capabilities compared to previous-generation systems, including WholeEarth environment with small inset development, the largest catalog of high-resolution airport models, and superior picture quality along with lower life-cycle costs and reduced maintenance. Other features include:

- Fully backward compatibility with the EP-8000 IG
- Automatic generation of secondary airfields capable of supporting many training tasks
- High-fidelity snow and rain effects with a full-depth image rendering
- Regional weather, allowing up to eight simultaneous, unique weather patterns with smooth and continuous transition from one to another
- Real-world lighting with advanced, physics-based atmospheric light scattering and particle effects
- Adaptive architecture, providing efficient volumetric rendering (patent pending) for more realistic clouds, smoke and dust
- Industry-leading anti-aliasing algorithms, yielding superior moving image quality.

The EP-8100 is driven by real-time, simulation-specific graphics cards and software designed to support any virtual mission. Additionally, updates of the software for program-specific changes require no hardware change and can be performed in the field. The JVC Kenwood VS2500 projector brings together new extended-life laser-hybrid light source with e-shift technology that shifts sub-frames by 0.5 pixels both vertically and horizontally to achieve four times the pixel density of the original content. The projector keeps operational costs low and has high-native contrast with a large dynamic range for greater nighttime scene fidelity. Virgin Atlantic pilots will begin training on the new EP-8100 IG in 2016.

For more information, please visit www.rockwellcollins.com.