

JAL Develops Operational Prototypes That Leverage Microsoft HoloLens, Microsoft's Latest Holographic Computer

~ New Technology for Education and Training of Flight Crew and Mechanics ~

Tokyo April 18, 2016: Japan Airlines (JAL) has been working with Microsoft Corporation since August 2015 to explore the utilization of Microsoft HoloLens (hereafter "HoloLens"), a new holographic computer developed by Microsoft Corporation, in its operations. JAL, the first company in Asia and also the first airline to partner with Microsoft on HoloLens, has developed prototypes for potential application to the training of flight crew and mechanics. JAL will continue to develop these prototypes with the aim of utilizing them in actual operations moving forward.

JAL is committed to leveraging new technologies to provide its customers with higher-quality services and drive the further evolution of its business operations.



Overview of JAL's HoloLens application development

JAL has used HoloLens to develop proofs of concept for two. It will continue development aimed at practical implementation of both of these concepts, and will also explore the possibilities for application to other fields.

1. Training tool for Boeing 737-800 flight crew trainees

As a device that enables the wearer to experience a realistic cockpit environment irrespective of location or time of day, HoloLens will be used as a supplementary training tool for flight crew trainees seeking promotion to copilot status.



A cockpit as seen through HoloLens (conceptual rendering)

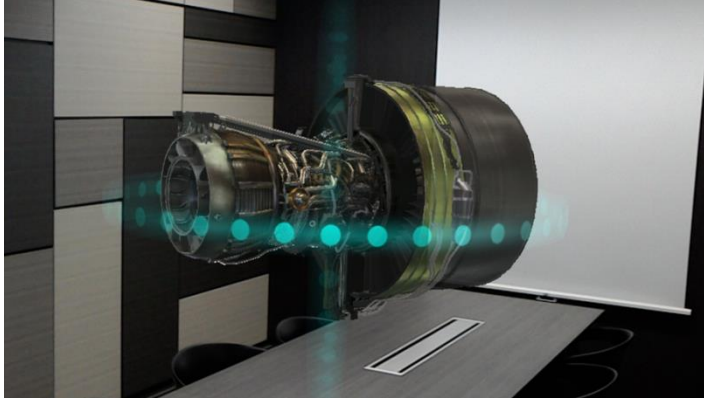
During the initial stages of training, such trainees currently train mainly on panels displaying photos of cockpit instruments and switches to envisage and learn operational procedures.

The tool is expected to enhance training by providing trainees wearing the device with a detailed hologram in the space in front of their eyes displaying cockpit devices and switches that they can operate using their own bodies in accordance with visual and voice guidance fed through HoloLens.

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2. Training tool for Boeing 787 engine mechanics

This tool will enable aircraft mechanics training to experience a realistic engine environment in which to learn the names of parts and study the structure of engines and surrounding systems, regardless of location or time of day.



An engine as seen through HoloLens (conceptual rendering)

Such training is currently limited by the availability of aircraft not in operation, and education on engine structure that cannot otherwise be viewed without opening engine panels is currently provided using textbook diagrams and the like.

This HoloLens tool promises to enable mechanics to gain even higher-quality skills by providing a more realistic training environment that can be used at any time.

About Microsoft HoloLens

Microsoft HoloLens is the first fully untethered holographic computer running Windows 10. It is completely untethered—no wires, phones, or connection to a PC needed. Microsoft HoloLens allows you to place holograms in your physical environment and provides a new way to see your world.

HoloLens Development Edition is available in the United States and Canada. It looks forward to expanding its international reach, and will have more details to share at a later time. (There is no information about the availability in Japan at this time.)

More details of Microsoft HoloLens can be found on the website below:

<https://www.microsoft.com/microsoft-hololens/en-us>.

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