
Gogo announces its next generation inflight internet technology for North America

By **Tanya Filippelli** on September, 17 2013 | Inflight Entertainment



Gogo GTO, or Ground to Orbit is a proprietary hybrid technology that combines the best aspects of existing satellite technologies with Gogo's Air to Ground (ATG) cellular network. The technology will use satellite for receive only (transmission to the plane) and Gogo's Air to Ground network for the return link (transmission to the ground). Virgin America will be the launch partner of the new service, which is expected to be available in the second half of 2014.

"Gogo has proven time and again that it's the leader in developing new technologies that will bring more bandwidth for the buck to the aero market. GTO is the next step in our technological evolution and is a ground breaking new technology for the commercial aviation market in North America," said Michael Small, President and CEO of Gogo.

"We were proud to be the first to offer Gogo's ATG-4 product last year and we are pleased to be the launch partner for GTO, which will be another leap forward in terms of speed and performance of in-flight Wi-Fi for our guests," said David Cush, President and CEO of Virgin America.

Gogo will be utilizing a Ku antenna developed specifically for receive only functionality. Existing two-way satellite antennas in the commercial aviation market have limited power for transmissions so they don't interfere with other satellites. This dynamic makes the connection from the aircraft to the ground using two-way satellite an inefficient and expensive return link compared to Gogo's ATG Network. Gogo's receive only antenna will be two times more spectrally efficient and half the height of other antennas in the commercial aviation market. The low profile of the antenna will result in much less drag and therefore fuel burn on the aircraft and, ultimately, greater operational efficiencies for airlines.

Gogo's new satellite antenna can also leverage a number of today's Ku band satellites as well as future Ku band satellites, including spot beam Ku satellites. This enables Gogo to take advantage of new Ku satellite technologies as they become available without having to install a new antenna. The ability to use multiple satellites avoids reliance on a single satellite and provides a more robust and reliable network for airline partners and end users. The system is also backed up by Gogo's Air to Ground network, which gives the service significant advantages in terms of resiliency.