

WI-FI 101

Your Inflight Connectivity Questions Answered

Live Webinar Wednesday, December 6, 2017

Welcome & housekeeping notes



- Webinar covering everything you wanted to know about inflight Wi-Fi
- Want to ask a question?
 - All phones are muted during the webinar
 - To ask a question, use the chat function on the lower left side of your screen
 - Q & A at end of the webinar
- This webinar will be recorded and sent following today's webinar



Today's presenters





Dave Glenn
Vice President, Customer Operations
Gogo Business Aviation



Kristi Glassmann

OEM Business Development Manager
Gogo Business Aviation





NOMOPHOBIA

Nomophobia & connectivity fun facts

43% have used their smartphone to look up information about a job





72% of U.S. citizens own a smartphone



57% have used their smartphone to do online banking



77% of smartphone users use their phone to avoid being bored



72% of people state there is very little chance they will ever move more than 5 feet from their smartphone



75% of all Internet users use social media



62% of smartphone users
have used their phone in
the past year to look up
information about a
health condition



An average person checks their smartphone 110 times/day and the more addicted check 900 times/day

A history of connection



1973

Twelve military officers at the Pentagon discuss the Defense Navigation Satellite System (DNSS), the synthesis from which GPS is born.

1997

FCC authorizes
Aircell's firstgeneration
analog
cellular
network for
aviation.

2005

Aircell Axxess, aviation's first all-digital multichannel communications system, is introduced.

2007

The iPhone revolutionizes smartphone capabilities and is named the invention of the year.

2010

Apple announces a 2010 release date for the iPad.

2015

Gogo Vision introduces a new era of inflight entertainment.

2017 and beyond...

Gogo announces high-performance services: Gogo Biz 4G, Next Gen, and Gogo 2Ku.

1989

Apple, Zenith Data Systems, Compaq, and IBM release their versions of the laptop.

2001

Apple releases the iPod, a portable media player for music, eventually supporting photos, video, and more.

2006

Aircellis granted exclusive air-to-ground broadband frequency license in a historic FCC auction.

2008

Gogo launches the first air-toground connectivity network.

2013

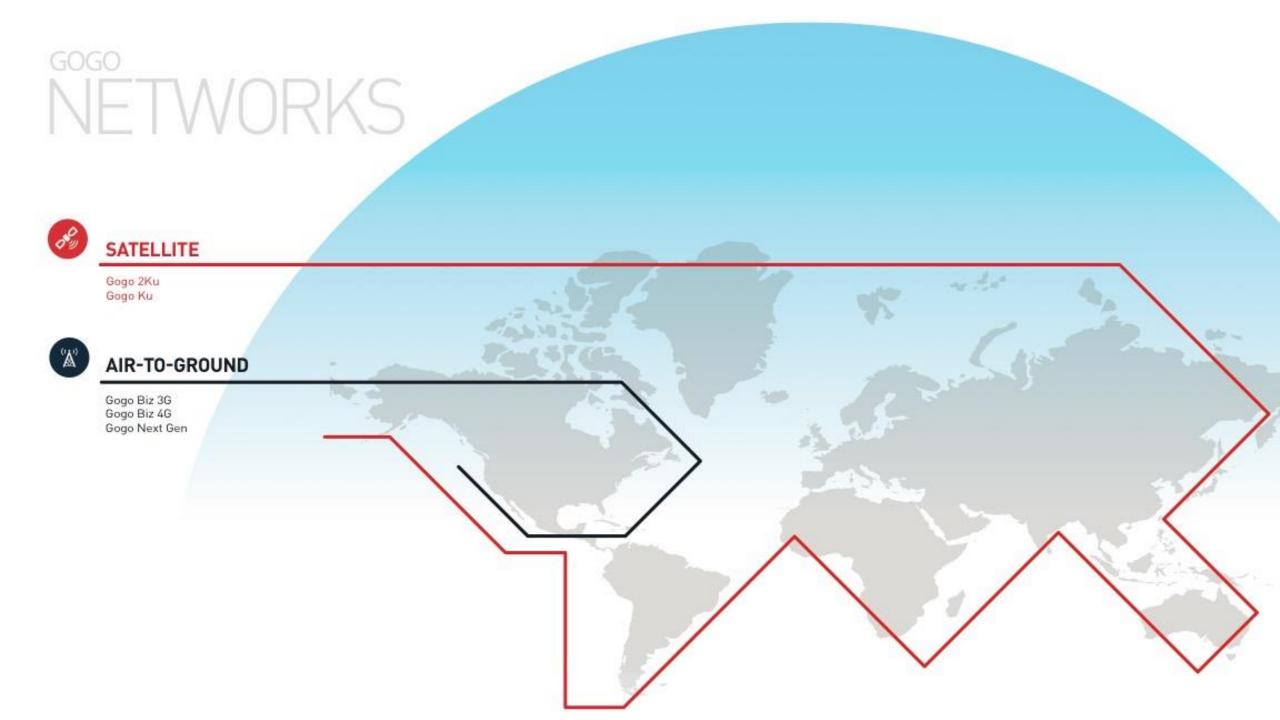
Gogo Text & Talk service enables the use of personal smartphones in flight.

2016

Gogo and Weather Services International join forces to crowdsource turbulence data for better awareness and smoother flights.

NETWORKS









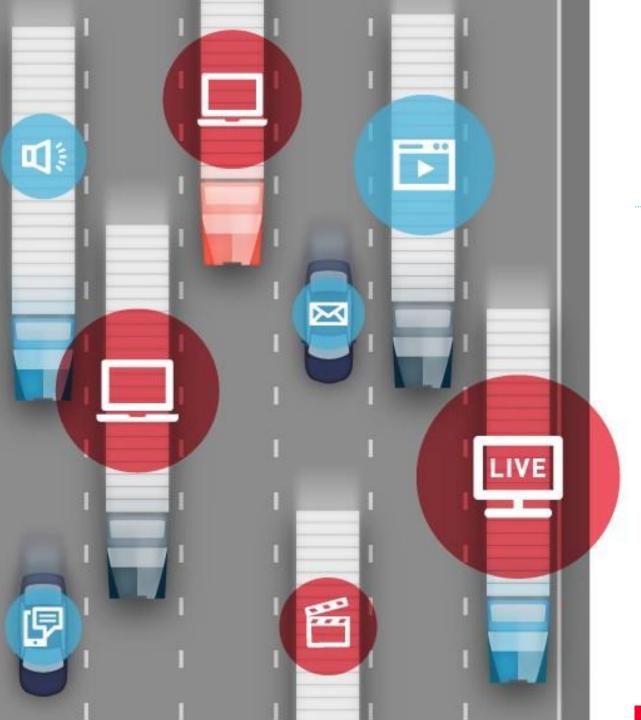


Satellite g

- Ground-based cellular towers transmit up to aircraft
- North American coverage only
- Offers voice and broadband connectivity for light jet aircraft
- Lower cost of entry for Wi-Fi systems – more affordable and cost-efficient service plans available

- Data transmissions travel to satellites in space (and back)
- World-wide coverage for global travelers
- Offers voice connectivity with limited broadband capabilities for light jet aircraft
- Higher cost of entry than ATG systems – more expensive service costs







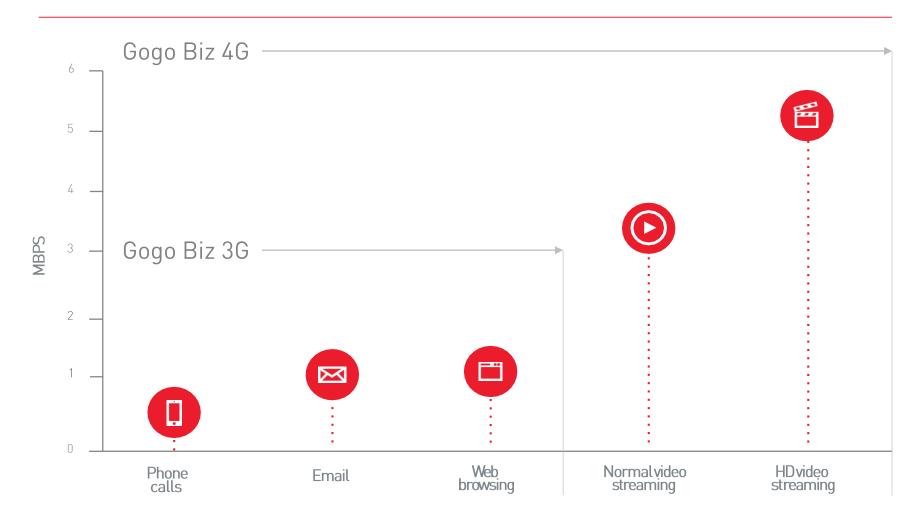
A highway analogy...

- Speed = how fast you can drive
- Capacity = how many lanes on the highway
- With more lanes, you're more likely to reach the speed limit
- Our networks are built with more lanes

Not all usage is created equal



SPEED REQUIREMENTS FOR COMMONTASKS



Tips to get the most from in-cabin Wi-Fi



- Limit the number of devices that are active
- Suspend cloud services

 (iCloud, Google Drive, etc.)
 & auto-app updates
- Be aware of what data types you're consuming







Know your plane, know your solution

Four factors commonly affect connectivity choices across plane types

01

Physical/structural considerations



03

Mission type



02

Flight profile



04

Service cost and experience







Physical / structural considerations

- Airframe size
- Equipment specifications
- Antenna size and placement





Flight profile

- Where you fly
- Average number of passengers
- Average flight duration





Mission type

- Owner/pilot do you need cockpit information and flight apps?
- What types of applications and activities are needed in the cabin?
- How many connected devices?





Service cost and experience

- Megabyte allowance / time allowance
- Monthly or annual operating costs
- Optional value-added services
- Service level experience





Without Wi-Fi, you're wondering, 'How long is this flight, how long until I'm on the ground and back online?' It makes trips feel much longer than they really are. It's also much harder to be productive. You're just sitting there, and our passengers can't afford that.

Jonathan Corcoran
Founder
Corcoran Aviation

Fully connected passengers

- Connect to their office, clients, families, friends, tools, services and apps
- Seamlessly work, live and play in flight



Having Wi-Fi opens up a very broad range of weather products that you wouldn't be able to access even with a full avionic suite installed on your panel. I could have aircraft with the latest avionics and I still couldn't get the pilot reports and weather information that I need without the internet. That's a big advantage to our pilots.

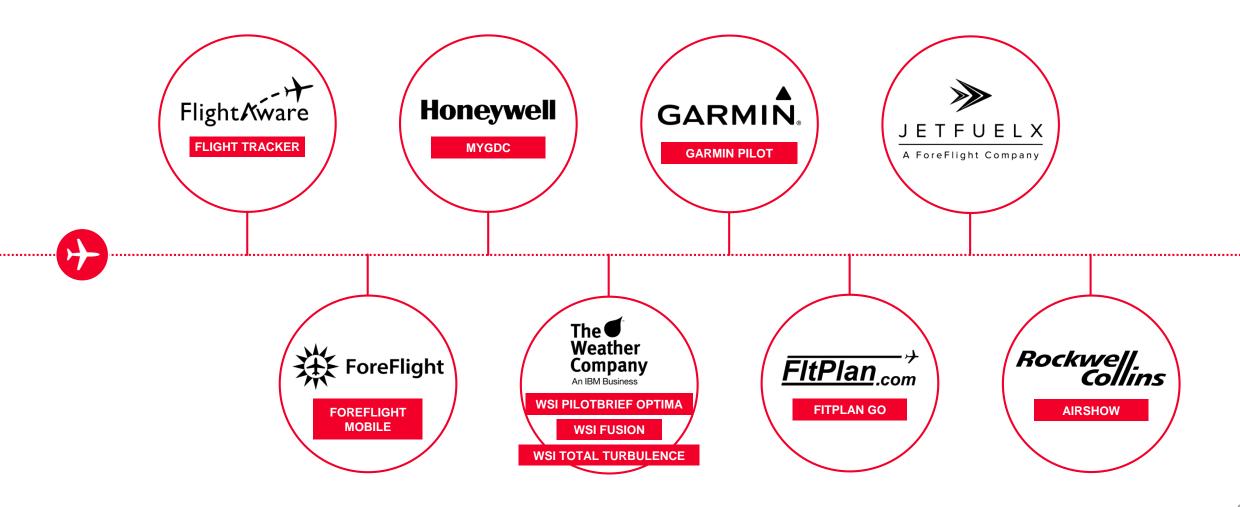
Denise Wilson President, CEO, Director of Operations *Desert Jet*

Better informed pilots

- Real time data in flight that powers cockpit apps
- Delivers more current, accurate information from turbulence to fuel prices

Real-time data unlocks the full potential of cockpit and entertainment apps







Before onboard Wi-Fi, changing the itinerary due to weather added hours to the day for our passengers. We couldn't make any arrangements until we were on the ground. With Wi-Fi, we're in constant communication with dispatch. We're calling them with Wi-Fi calling, they're texting us, passengers are emailing dispatch - it's seamless.

> Jon Becker Chief Pilot, Director of Operations Don Davis Aviation

Stronger, more efficient operations

- Gogo solutions help operators of all types realize new efficiencies
- Connectivity is a proven competitive advantage and can impact your bottom line through lower costs

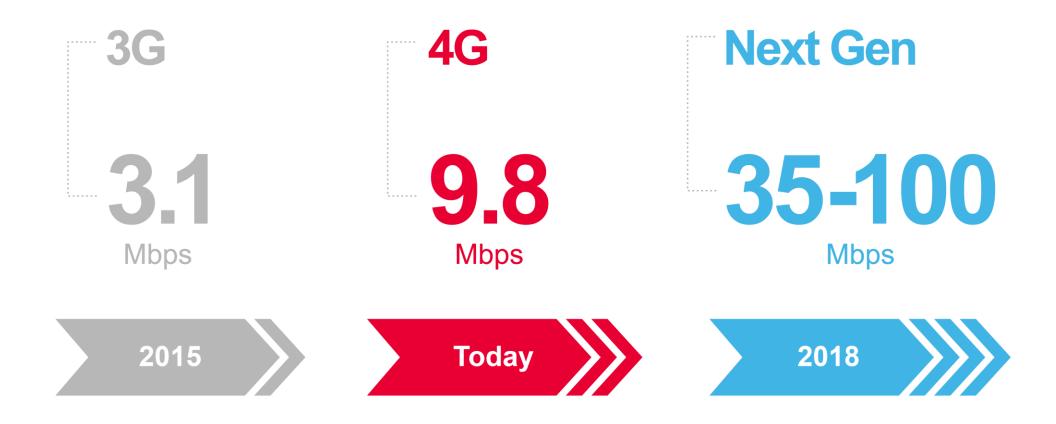




THE FUTURE OF CONNECTIVITY

Faster and future ready (ATG)





One solution that brings it all together



Connectivity control

and tools

Real-time support



Information and entertainment

Smart cabin customization

CJP members only – new service offering



- New hourly rate pricing for the Gogo ATG 5000 inflight connectivity system
 - \$99/hour same usage experience as the current ATG 2000 hourly plan
 - You will only pay for what you use
- To get started, contact <u>connect@gogoair.com</u> or 303-963-9228.



Q&A





Thanks for attending!