NASA On-Demand Mobility and Emerging Aviation Technology Roadmapping Workshop

Ryan Stone, President

March 9, 2016
SmartSky 4G, the first 4G ATG network, takes flight this year, enabling an authentic office-like internet experience, for as low as 18 cents/MB!

**Bi-directional, High Bandwidth** + **Low Latency** + **Affordable**

- Phone calls. 
- Texts. 
- Receive & Send large files. 
- Enhance cockpit connectivity & applications.
WHY IS SMARTSKY BETTER?

SMARTSKY: THE CLEAR ATG CHOICE

- 20 X the spectrum
- Patented Beamforming Technology
- Private, Encrypted, Secure Network

Spectrum Used (MHz)

ATG Competition
3G EVDO based

SmartSky Competition
SmartSky’s engineering team designed our network to typically deliver a rich, 4G inflight connectivity experience. SmartSky cannot guarantee service availability within this map of its planned U.S. coverage area. Actual service, quality and availability (including initiation, validation and maintenance of an inflight connection) can be affected by signal strength, aircraft and network traffic volume, service outages, network changes, site rollout sequencing, governmental regulatory changes and other conditions.
SmartSky 4G – Beta Network Test Bed
SmartSky 4G Aircraft Antennas
BEST IN CLASS WEATHER TOOLS

4DAero, an extremely intuitive EFB application built upon the Panasonic 4D Weather platform, provides a visual display of the planned flight route synchronized in time and space with forecasted weather and other aviation hazards. Our proprietary forecasting skillset allows us to deliver the most accurate weather forecast available, giving pilots unprecedented situational awareness to optimize strategic flight planning and real-time, in-flight tactical navigation decision making.

4DAero in-flight updates are facilitated by the high bandwidth from a real-time SmartSky 4G connection!
PWS FORECASTS CRUSH THE STATUS QUO

Hurricane Joaquin

84% improvement in forecast skill

© 2016 SmartSky Networks, LLC. All rights reserved.
Connected Aircraft Solution

**Swift Broadband / Iridium NEXT**
Global Low Speed Data coverage for Safety Services

**Ka / Ku Band** (or High Altitude UAS) Regional High Throughput for Oceanic / Non-ATG regions

**SmartSky 4G**
ATG Network

**SmartSky Networks**

**Cockpit Avionics**
- EFB Applications
- Operations Data & Voice
- Flight & Maintenance Data
- Software & File transfers
- Aircraft Health Monitoring

**Example Intelligent Router / CWAP**
Local Domain segregation and data security across all mediums

**Cabin Entertainment & Mgmt**
- Internet
- Streaming Video Voice
- Entertainment Applications

**Wi-Fi and/or 3G-4G**
On-Ground

**Internet Streaming Video Voice**