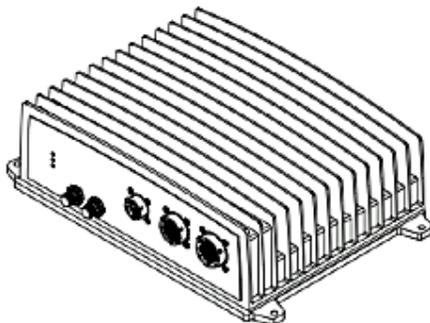# SmartSky's Connectivity Ecosystem for Best Inflight User Experiences

In the world of wireless communications, an end-to-end solution from a reliable provider can enable good performance and a satisfactory end-user experience. However, vertical integration of all components from a single supplier can also lead to technology limitations that inhibit maximum capabilities as technology advancements occur. Further, aircraft owner/operators typically want the freedom of component choice in order to personalize cost and functionality trade-offs. SmartSky has designed its 4G air-to-ground network to be an *open ecosystem* in which various components critical to exceptional user experiences can be flexibly integrated to maintain compatibility with the latest advances in personal communications.

Key benefits:

- o SmartSky's software defined radios are capable of online upgrades and have built-in frequency flexibility for future international use

- o Robust compatibility maintained with the wireless industry as air-to-ground (ATG) and wireless technologies evolve

- o TCP/IP over Ethernet provides universally adopted interfaces for interconnecting devices and software

- o Network accessibility provided to qualified 3rd party developers for creation of new technologies, services, and applications for future integration

- o Selections of the best telecommunications, networking, and aviation technologies are made from suppliers committed to the SmartSky 4G value proposition

Challenge

SmartSky's commitment to an *open connectivity* ecosystem is exemplified by the Cabin Wi-Fi Access Point (CWAP – pronounced cee'-wap) – a component critical to optimum user experiences in the Airborne Office. Like the wireless access points in your office or at home, this device is the network connection for the variety of Personal Electronic Devices (PEDs) that are likely to be brought onboard by your passengers and crew (such as smartphones, tablets, laptops, wearable devices, or PEDs likely to emerge from the Internet of Things movement). The CWAP is also the critical interface between the new technologies being incorporated into rapidly evolving mobile devices and the SmartSky 4G network. The challenge for SmartSky was to engineer into our network architecture the flexibility to upgrade critical components, such as the CWAP, as these technologies continue to rapidly evolve.

Solution

SmartSky has designed its 4G network to be a connectivity ecosystem in which components can be upgraded or changed in order to prevent premature obsolescence. In addition, this modularity also enables each aircraft owner/operator to have *choices* for the CWAP and other onboard system components resulting in the ability to uniquely customize each Airborne Office environment to personal preferences. Because of the critical role the CWAP plays in assuring an exceptional user experience, SmartSky has elected to qualify devices from a variety of industry leading suppliers for use in the onboard Wi-Fi system. This maximizes

flexibility in adapting to ongoing technical advancements in wireless communications to enable the latest in access point and Wi-Fi technologies to always be available for your inflight users.

The SmartSky engineering team has integrated this connectivity ecosystem plan into our network architecture to provide the best user experiences through customization, upgradability, and maintainability. The CWAP is but one pertinent example of our efforts to assure the very best experiences for you as a subscriber to the SmartSky 4G network. After all, while building the aviation industry's first 4G network from the ground up, it was a great time to reach for the stars.

Why SmartSky?

SmartSky's innovation includes seeing what others have seen, thinking what no one else has thought, and putting it all together. Leveraging a highly experienced, interdisciplinary management team, we are implementing comprehensive solutions that address the connectivity needs of the global aviation industry, starting with the launch of SmartSky 4G in the continental United States. High speed. Low Latency. Reliable. Affordable. Just like in your office or at home. At SmartSky, we push the envelope of technology and are passionate about performance – both ours and yours.

Learn More

To learn more about SmartSky contact us at:
www.smartskynetworks.com/contact