Stratospheric Wireless Communications Network

Secure, Reliable, Ubiquitous Wireless Communications for Rapid Deployment in Rural and Remote Areas

Many industries rely on telecommunications networks to support their critical objectives. Space Data’s stratospheric technology has applications across a broad spectrum of industries including public- and private-sector commercial uses. Safety, resiliency, reliability, and efficiency are key performance indicators in many industries that Space Data serves.

What do we mean by “stratospheric wireless communications network?” Imagine the space encircling the earth higher than terrestrial communications towers and antennas. Then think about the satellites orbiting the earth. The space between those two levels is considered ‘stratospheric’ space. Radios communicating in this area have much larger coverage radius and do not suffer from interference from crowded terrestrial wireless systems.

Stratospheric, high-altitude wireless communications through the SkySat™ platform is a cost-effective wireless network that supports numerous voice and data applications. It is highly effective for a wide range of government programs, including border monitoring and disaster response applications.

Space Data has flown more than 25,000 missions lifting wireless communications systems to stratospheric altitudes using military-grade balloon technology. U.S. and international governments have trusted Space Data technology for mission critical communication in some of the most remote areas from the equator to the Arctic Circle.

Our repeater platform extends the range of commercial and military-grade two-way radios from 10 miles to nearly 500 miles and enables for real-time voice and data services to be instantly deployed to support personnel under any conditions, including rugged terrain, remote areas, and even sandstorms. This is available to any government agency at a local, county, state or federal level.
Space Data’s SkySat™ Platform provides cutting-edge communications technology for coverage quickly in remote areas.

**SKYSAT™ PLATFORM:**
- Extends the range of standard issue military two-way radios from 10 miles to nearly 500 miles
- Uses high-altitude radio repeaters to relay critical combat voice information and data
- Operates as a military-UHF repeater covering 225-375 MHz
- Cutting-edge technology is currently supporting a variety of U.S. military missions

Some key applications for this type of system cross multiple industries and include Supervisory Control and Data Acquisition (SCADA) and Land Mobile Radio (LMR). Finding a reliable, cost-effective way to communicate with workers and devices in very rural and remote locations is a challenge that has not been addressed by currently available wireless networks. The SkySite® network is designed to provide two-way messaging service over wide swaths that encompass everything from cities to the most remote areas in the country.

Today's field personnel often use handheld devices to access such information as work orders, worker schedules and database content. Space Data works directly with businesses to integrate mobile applications and two-way messaging onto the newest generation of handheld devices, from almost any vendor.

Space Data's SkySite® offers a cost-effective solution for data, voice and video communications over private, flexible-use 900 MHz spectrum.

**SKYSITE® PLATFORM OFFERS**
- Stratospheric platform for cost-effective communications
- High-altitude balloon-borne transceivers launch every 8 to 12 hours
- Launches in 20 minutes and rises to 60000-100000 ft. altitude
- Communications in remote areas with coverage circle >400 miles

SkySite® integrates three proven technologies—nano electronics, industrial weather balloons and Global Positioning Satellite (GPS) technology.

The Federal Aviation Administration (FAA) allows Space Data’s SkySite® stratospheric platforms to be launched without restriction, since they are sufficiently small and light enough to pose no threat to aircraft safety.

The affordable and secure data services delivered over the Space Data stratospheric network enable critical applications across a wide range of industries to provide customers continuous coverage and ensure precise system timing and location information.

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