

Response to Question 5 of Antenna Registration Form (Height of Antenna):

Space Data's network utilizes an innovative balloon-borne system, a type of stratospheric high altitude platform ("HAP"), which differs from traditional terrestrial, tower-based networks.¹ Space Data's system utilizes inexpensive weather balloons to carry miniature radio base stations to altitudes of between 65,000 and 90,000 feet. These balloon-based platforms are known as SkySite[®] platforms.

Space Data continuously launches platforms to fill the constellation so that as one platform drifts out of range another platform drifts into range. The weather patterns at the altitude to which SkySite platforms are deployed are generally uniform, allowing Space Data to predict a platform's movement and when to deploy additional platforms, ensuring consistent coverage. An on-board Global Positioning System ("GPS") receiver and associated processing provide tight control of transmit frequency, protocol timing, and transmit power near service area borders. Thus, Space Data's HAP network is highly reliable. The lightweight (less than six pounds) platforms parachute gently back to earth 12 to 24 hours after deployment and are recovered and reused.²

The SkySite platforms are so small that the FAA has concluded that Space Data's system is safe and has approved its use in the United States.³ Exhibit 3 includes a January 29, 2003 letter from the FAA to Space Data indicates the FAA's findings with regard to Space Data's SkySite platforms. While it is expected that in the future LTE equipment may be reduced in mass to meet the requirements of Title 14 of the Code of Federal Regulations (14 CFR) Section 101.1(a)(4), the LTE equipment flown in these trials will weigh more than allowed under 14 CFR 101.1(a)(4). Thus the flights for this trial will be flown in compliance with 14 CFR FAR 101 Subpart D -- Unmanned Free Balloons. To the extent necessary, Space Data will acquire any required Federal Aviation Administration ("FAA") flight clearances and will provide the needed flight controllers, technicians, and all logistics for the flights.

¹ The Commission has authorized Space Data to operate its balloon-borne devices as terrestrial base stations on narrowband PCS frequencies. See *Petition for a Declaratory Ruling, a Clarification or, in the Alternative, a Waiver of Certain Narrowband Personal Communications Services (PCS) Rules as they Apply to a High-Altitude Balloon-Based Communications System*, 16 FCC Rcd 16421 (WTB 2001) ("Space Data Order").

² Additional information regarding the technical operations of Space Data's network of SkySite platforms is set forth in the construction notification for one of Space Data's narrowband PCS licenses, WQBZ642 (File No. 0005759606).

³ See *Space Data Order*, 16 FCC Rcd at 16427 (noting that Space Data has coordinated with the FAA regarding its balloon launches).



David Alban
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November 1, 2017

Mr. Gerald Knoblach
CEO
Space Data Corporation
2535 West Fairview St. Suite 101
Chandler, AZ 85224

Re: Consent to obtain Special Temporary Authority on licensed spectrum

Dear Mr. Knoblach:

By this letter, Sensus Spectrum LLC (“Sensus”) consents to the Federal Communications Commission (“FCC”) Office of Engineering and Technology granting to Space Data Corporation, a Special Temporary Authority (STA) to conduct experimental operations from November 5, 2017 until November 10, 2017 in the 901.150-901.250 MHz band and in the 940.150-940.250 MHz band for the area within the Arizona Counties of: Mojave, La Paz, Yuma, Pima, Maricopa, Pinal, Gila, Coconino, and Yavapai as well as Imperial County California, Riverside County California east of 116° East Longitude, San Bernardino County California east of 116° East Longitude and south of 35° North Latitude (as shown on attached map). This consent is for an STA allowing operation of transmitters within the limits of the current narrowband personal communications services (“NPCS”) rules and in accordance with Space Data’s 2001 waiver granted by the Wireless Telecommunications Bureau that allows Space Data to operate its high altitude balloon-based communications system on its licensed NPCS spectrum.¹ Furthermore, Space Data shall not transmit any signals from balloon-borne transmitters at a signal level of -102 dBm or more measured 2 meters above the ground anywhere outside the STA area.

Sensus is licensee of following NPCS licenses which together comprise the frequencies covered by this consent.

CALL SIGN	MARKET#	BLOCK	MARKET NAME	FREQUENCIES (MHz)
KNKV204	NWA255	4	Nationwide	901.15-901.200 and 940.150-940.200
KNKV205	NWA255	5	Nationwide	901.200-901.250 and 940.200-940.250

¹ *Petition for Declaratory Ruling, a Clarification, or, in the Alternative, a Waiver of Certain Narrowband Personal Communications Services (PCS) Rules as They Apply to a High-Altitude Balloon-Based Communications System*, Memorandum Opinion and Order, 16 FCC Rcd 16421 (WTB 2001) (“2001 Waiver Order”).



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Please contact the undersigned if you have any questions.

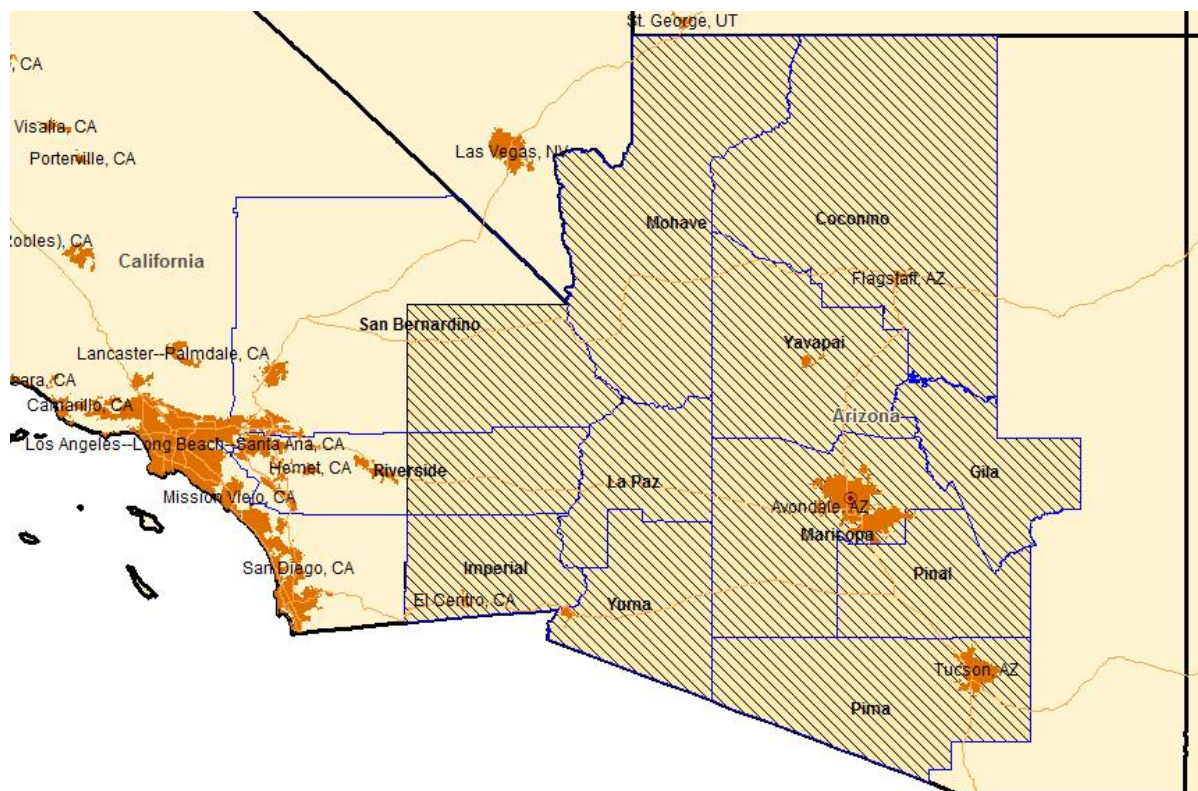
Sincerely,

A handwritten signature in black ink that reads "David M. Alban". The signature is fluid and cursive, with a long horizontal stroke at the end.

David Alban
Vice President and Assistant Secretary
Sensus Spectrum LLC

David Alban
Associate General Counsel
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Map of STA Area





U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave, SW
Washington, DC 20591

JAN 29 2003

Mr. Charles H. Tracy
Vice President, Flight Operations
Space Data Corporation
P.O. Box 1866
Chandler, AZ 85244-1866

Dear Mr. Tracy:

This is in response to your letter regarding your company's draft concept of operations for unmanned balloons.

We have reviewed and concur with the subject draft; however, we offer the following comments.

Space Data's utilization of a payload weighing less than six-pounds in total weight and three-ounces per square inch density are exempt from the Federal Aviation Administration (FAA) notification. Payload markings and in-flight reporting requirements are pursuant to Title 14 Code of Federal Regulations (14 CFR) Section 101.1(a)(4).

Additionally, the payload as described and being operated is consistent with 14 CFR part 101, and with special consideration to 14 CFR part 101, Section 101.7. This would not require FAA notification, payload markings or any in-flight reporting requirements.

If you have any questions on this matter please contact Kevin Haggerty at (202) 267-9295.

Sincerely,


Reginald C. Matthews
Manager, Airspace and Rules Division