**Spire Federal**

*Mission-critical satellite data and space services to protect and empower.*

Spire Global, Inc. is a satellite powered data services and analytics company that is focused on the collection of Radio Frequency (RF) signals from Low Earth Orbit (LEO). Our government-tailored portfolio of global maritime, aviation, and weather solutions is built for peak situational awareness and environmental monitoring.

**Key Contacts & Contracts (if applicable):**

* Spire Maritime/Global AIS data implemented at NGA and USCG
* Spire Earth Intelligence data (radio occultation, reflectometry, total electron content, ionospheric density profiles, magnetometer observations, etc.) implemented at NASA, NOAA
* Key relationships with NGA, NRO, NRL and US Space Force

**Company Overview**

* Founded in 2012, publicly traded (SPIR)
* Significant US Intelligence Community investment in Spire
* Diverse customer base (commercial and Government, CONUS and OCONUS)
* Government customers include NGA, NOAA, NASA, US Coast Guard, US Navy, US Space Force, the Australian Office of National Intelligence (ONI)

**Brief Summary:**

Spire offers a suite of commercial RF sensing products including: Automatic Identification System (AIS) based maritime data and analytics, Automatic Dependent Surveillance-Broadcast (ADS-B) aviation data, and Global Navigation Satellite System (GNSS) signals collection that are transformed into atmosphere, ionosphere, weather data services and a GNSS Interference Detection & Geolocation solution.

Spire designs, builds, and operates a growing constellation of over 120 3U and 6U Low Earth Orbit (LEO) satellites that are equipped with flight controls, reprogrammable software defined radios, analog to digital RF front ends, antennae, solid state storage, and communication systems. Spire LEMURs can collect signals in a cone within 60 degrees of nadir, enabling an instantaneous ground track over tens of millions of square kilometers. The Spire Constellation is deployed in a diverse set of orbital inclinations that enable hundreds of revisits per day.

Spire’s approach is to collect, demodulate, and process signals of interest on board the satellite, and then transmit the finished data to our ground station network. Spire owns and operates a global network of 30 ground stations with various combinations of UHF, S, and X-Band communications capabilities. The ground stations operate in a bent pipe mode, which means data remains encrypted until it arrives into our US-based cloud computing instantiations. When the data arrives in the cloud, it is cleaned, enriched, and transformed into user-facing restful Application Program Interfaces (API) for dissemination.

**Visit us during GEOINT 2022**

Booth #1701