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# Spire Global Unveils Plan to Augment its Weather Data and Forecasting with Microwave Sounders

*Spire will offer robust weather data and forecasting capabilities from space with the addition of atmospheric moisture measures from microwave sounders*

VIENNA, Va.--(BUSINESS WIRE)-- [Spire Global, Inc.](#) (NYSE: SPIR) (“Spire” or “the Company”), a leading global provider of space-based data, analytics and space services, today announced plans to build upon its fully deployed constellation of over 100 multipurpose satellites with satellites carrying microwave sounders to gather atmospheric moisture and temperature measurements. The measurements collected by these instruments will expand the company’s data offerings and, when coupled with the weather and Earth intelligence data that Spire currently collects through radio occultation and reflectometry measurements, will further enhance the value and accuracy of its global weather forecasts.

Spire entered a partnership with RAL Space, a part of the Science and Technology Facilities Council (STFC) in the UK, to further develop and deploy the Hyperspectral Microwave Sounder (HYMS) on Spire satellites. The HYMS instrument is a new, advanced millimeter wave technology that delivers microwave sounding information to improve weather forecasting. Spire and STFC will work together on a demonstrator mission of the HYMS, launching it on a 16U Spire satellite, with the long-term objective of launching a full constellation for atmospheric monitoring.

“Satellites play a vital role in modern weather forecasting, providing over 90% of data that go into models,” said Kevin Petty, VP, Weather and Earth Intelligence, Spire. “By collecting additional near real-time weather observations, we’re providing meteorological agencies across the globe that use our space-based data with the inputs needed to deliver even more accurate forecasts. We’re also helping commercial organizations increase their operational effectiveness and efficiency in the face of high-impact weather.”

Satellites are vital for tracking fast-moving extreme weather events and generating critical observations in data-sparse regions, such as in developing countries or over oceans where weather can change quickly.

Spire and RAL Space’s collaboration demonstrates the power of public and private organizations partnering to bring innovative solutions to market, as well as the UK’s advancement in space and meteorological technologies.

Business and Energy Secretary Kwasi Kwarteng said: “This project is a major milestone for our National Space Strategy. We are developing the UK’s capabilities as a spacefaring nation and in the process boosting the economy and delivering high-skill jobs. I am delighted

the HYMS technology, developed in Oxfordshire, will be put into service by Spire Global. It is further proof of how the UK's space sector is setting the pace, when it comes to developing products that deliver tangible benefits to businesses and governments.”

Today, Spire is the largest producer of radio occultation data and offers a vast portfolio of current weather, historical weather data, and weather forecasts solutions. Spire harnesses its constellation of multipurpose satellites and unrivaled radio occultation technology to power highly accurate, targeted forecasts for the world's key industries. Moreover, Spire's data is leveraged by government agencies, such as NOAA, NASA and EUMETSAT, to drive global weather predictions and gain additional insights about the Earth system.

Spire frequently launches satellites with advanced sensors to collect more weather data and continuously improve its forecasts. In addition, Spire's satellites are software-defined, meaning they can be updated in orbit after they've been launched by uploading software, which allows the company to continuously innovate and stay ahead of the curve in meeting customer needs.

For additional information on Spire's weather data and forecasts, visit [www.spire.com/weather](http://www.spire.com/weather).

### **About Spire Global, Inc.**

Spire (NYSE: SPIR) is a leading global provider of space-based data, analytics and space services, offering access to unique datasets and powerful insights about Earth from the ultimate vantage point so that organizations can make decisions with confidence, accuracy, and speed. Spire uses one of the world's largest multipurpose satellite constellations to source hard to acquire, valuable data and enriches it with predictive solutions. Spire then provides this data as a subscription to organizations around the world so they can improve business operations, decrease their environmental footprint, deploy resources for growth and competitive advantage, and mitigate risk. Spire gives commercial and government organizations the competitive advantage they seek to innovate and solve some of the world's toughest problems with insights from space. Spire has offices in San Francisco, Boulder, Washington DC, Ontario, Glasgow, Oxfordshire, Luxembourg, and Singapore. To learn more, visit [www.spire.com](http://www.spire.com).

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