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Three Spire Global Satellites Successfully Launch on SpaceX Transporter-7 Mission

Two satellites will serve customer missions focused on sustainability on Earth and in space, leveraging Spire's Space as a Service business

The Company's third satellite will collect weather measurements that can enhance the value and accuracy of global weather forecasts

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, successfully launched three satellites on the SpaceX Transporter-7 mission from Vandenberg Space Force Base. Spire Space Services, the Company's Space as a Service business, launched two 6U satellites for its customers.

Satellite mission to help characterize land and water resources

Spire launched a satellite developed for King Abdullah University of Science and Technology (KAUST), which aims to collect high-quality and high-resolution data across global terrestrial, coastal and ocean ecosystems and to help observe and characterize natural resources. The 6U satellite hosts a hyperspectral camera with advanced on-board processing capabilities in combination with Spire's Global Navigation Satellite System-Reflectometry (GNSS-R) sensor payload that will collect intelligence on soil moisture. The data collected will allow KAUST researchers to compile and analyze high-resolution imagery that can be used for mapping terrestrial habitats, monitoring vegetation health and condition, exploring coastal ecosystems and coral reefs, and advancing agro-ecological research, as well as many other Earth and environmental science applications.

"Working with Spire Space Services has allowed us to fast-track our satellite mission, which will provide unique insights to monitor, protect and preserve precious terrestrial and ocean systems in Saudi Arabia," said Matthew McCabe, Director of the KAUST Climate and Livability Initiative. "Spire's expertise in GNSS-R paired with the hyperspectral instrument will yield valuable new information on both the state of existing ecosystems and for observing and characterizing changes resulting from ambitious national scale restoration and conservation strategies."

ADLER-2 to monitor space debris in-orbit

Spire also launched ADLER-2, the second satellite developed in partnership between the Austrian Space Forum (OeWF), a national space research organization, and Findus Venture GmbH, an Austrian investor in new space technology. ADLER-2 continues the mission of ADLER-1, which was launched in January 2022, to provide insights into space debris in low Earth orbit (LEO) and expand novel atmospheric sensing capabilities to study clouds and aerosols in the atmosphere. ADLER-2 carries three payloads that detect and track orbital

debris and perform air quality measurements around the globe, and it is expected to increase the debris detection rate.

“Space debris is a challenging issue we must address as quickly as possible. To develop solutions, we first need a better overview of the current situation in Earth orbit,” said Dr. Gernot Grömer, Director of the Austrian Space Forum. “To that end, the Austrian Space Forum has teamed up with Spire Global, an expert when it comes to tailor made satellites and swiftly adjustable projects. With the successful launch and operation of ADLER-1, we now have proof of concept, and ADLER-2 will provide further valuable insights into space debris in low Earth orbit.”

Spire Space Services, with a $39 billion total addressable market, allows organizations to deploy and scale their own satellite constellation at maximum speed and reliably, all through a subscription model that eliminates the high upfront cost of building and maintaining infrastructure in space. Commercial and government organizations can deploy and operate a constellation of satellites, a hosted payload, or a software application in space with Spire’s infrastructure.

“With Spire Space Services, our goal is to simplify space and make it accessible so that anyone is able to benefit from the insights and intelligence that can be garnered from the ultimate vantage point,” said Frank Frulio, General Manager of Space Services, Spire. “Both KAUST and ADLER-2 are prime examples of organizations that have leveraged our platform to build space-based applications and gather intelligence to promote sustainability on Earth and beyond.”

Spire enhances Weather intelligence

Spire also launched one satellite to support its data solutions business, which encompasses the tracking of maritime, aviation, and weather activity from space. Spire’s data solutions constellation is fully deployed with high asset utilization and only requires about $10-12 million per year of capital expenditures to maintain. This satellite is furthering Spire’s competitive advantage while leveraging a technology improvement curve that is delivering 10X performance improvements every five years.

This satellite is equipped with Global Navigation Satellite System (GNSS) sensors to collect radio occultation (RO) and polarimetric radio occultation (PRO) data. These GNSS sensors gather precise data about the Earth's atmosphere, including measurements on temperature, humidity, and precipitation, as well as ionospheric electron density. RO and PRO data can be assimilated into weather models to enhance the value and accuracy of global weather forecasts. Spire launched its initial PRO payloads, which were the first sent to orbit by a private company, in January 2023. Spire is the largest producer of radio occultation data, which is leveraged by government agencies like NOAA, NASA, ECMWF, and EUMETSAT to drive global weather predictions.

The satellites were manifested on the mission through a multi-launch agreement between Spire and Exolaunch, which includes access to the Transporter missions through Exolaunch’s long-term launch arrangements with SpaceX. Spire will launch additional satellites on SpaceX Transporter missions later this year.

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 eight offices across the U.S., Canada, UK, Luxembourg and Singapore. To learn more, visit www.spire.com.

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