

Press release

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RUAG technology is key enabler for OneWeb

Zurich, Titusville, FL. RUAG Space will supply the structures for the OneWeb satellite constellation. A contract between OneWeb Satellites, the company responsible for constructing the OneWeb satellites, and RUAG Space has been signed that anticipates delivery of structures for 900 satellites by the end of 2020.

OneWeb is revolutionizing global connectivity and by far the largest satellite constellation ever. In just a few years' time, about 900 satellites will be manufactured to be launched into low Earth orbit at an altitude of around 1,200 kilometres. These will offer broadband internet with up to 50 Mbps around the globe.

Those who stand to gain the most from OneWeb are the four billion people who currently have no access to fast internet. Particularly in developing and newly industrialised nations, OneWeb will offer people new opportunities for information, education and economic growth.

OneWeb shareholders are Virgin Galactic, Qualcomm, Intelsat, Hughes Network Systems and Coca-Cola. OneWeb Satellites, the company responsible for the satellites' construction, is a joint venture between the OneWeb consortium and Airbus Defence and Space, Europe's largest satellite builder.

RUAG Space plans to start manufacturing the satellite structures early next year. Comparable to an automotive chassis, this structure serves as the backbone for all other modules on the satellite. In total, RUAG Space will build 900 satellite structures, the largest mass production of satellites in history.

Entering industrial-scale production

"The aerospace industry is undergoing a disruptive transformation," explains Peter Guggenbach, CEO RUAG Space. "In what's known as new space, innovative start-ups and private investors are developing new commercial business models for aerospace applications. Several years ago, we started technology and product developments to be a competitive player in this segment. The current OneWeb order proves that we're on the right path," he says.

For the production of the OneWeb satellite structures, RUAG is relying on systematic use of automated processes and employing a lean manufacturing philosophy. For instance, one new production method is to use robots to position special equipment inserts within the satellite structure's sandwich panels. These inserts can then be used to firmly attach

equipment such as instruments or sensors to the structures. A typical communications satellite has up to 5,000 such inserts. Thus far, the aerospace industry has always positioned them using manual processes. RUAG has now developed a method that makes use of robots, which significantly reduces the time and cost of manufacturing satellite structures.

The satellite structures order is already the second successful contract for RUAG Space in the OneWeb project. The Swedish business unit received the order to supply the dispenser, which functions as an interface between the rocket and satellite. This component ensures that, with one Soyuz rocket, up to 32 OneWeb satellites can be gradually deposited in space safely.

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RUAG Space is Europe's leading supplier of space products to the industry. With 1,200 people employed at 10 locations in Switzerland, Sweden, Austria, Finland and the USA the RUAG Space Division achieved a total sales of 310 million Swiss Francs in 2015.

RUAG develops and markets internationally sought-after technology applications in the fields of aerospace and defence for use on land, in the air and in space. 55% of RUAG's products and services are destined for the civil market and 45% for the military market. The Group is headquartered in Berne, Switzerland. It has production sites in Switzerland, Germany, Austria, France, Sweden, Finland, Hungary, Australia and the USA. Around 8,200 employees – of whom 410 are trainees – generate sales of some CHF 1.75 billion.