

Futuristic Stratobus Project Takes Off



Thales Alenia Space has announced the official kick-off of its Stratobus research & development project. Stratobus is an autonomous stratospheric airship that was just approved by the French government's "investment in the future" programme, with funding of EUR17million. These funds cover a 24-month development phase for key enabling technologies, culminating in the construction of a demonstrator. Since the project has also won support from four different French regions, additional funding of about EUR3million is expected.

Stratobus will be positioned at an altitude of about 20 kilometres over its theatre of operations, in the lower layer of the stratosphere, which offers sufficient density to provide lift for the balloon. Winds at this altitude are moderate and stable throughout the entire zone between the tropics, at not more than 90 km/h, allowing the airship to remain stationary by using its electric propulsion system. Stratobus will carry payloads to perform missions such as the surveillance of borders or high-value sites, on land or at sea (video surveillance of offshore platforms, etc.), security (the fight against terrorism, drug trafficking, etc.), environmental monitoring (forest fires, soil erosion, pollution, etc.) and telecommunications (Internet, 5G).

High-altitude pseudo satellites

The new market for high-altitude pseudo satellites, or HAPS, is estimated at one billion dollars from now to 2020, but is awaiting a product. With Stratobus offering a field of view of 500 kilometres, Thales Alenia Space is convinced that it will win a large share of this market, said Jean-Loic Galle, president and CEO of the aerospace manufacturer.

Drone and satellite

Thales Alenia Space project manager Jean-Philippe Chessel added that Stratobus is midway between a drone and a satellite, making a low-cost product offering permanent regional coverage and ideally complementing satellite solutions. Using only solar energy and green technologies, Stratobus has a very small carbon footprint – much smaller than that of a small private plane.

Thales Alenia Space and partners plan to launch a demonstrator in 2018, followed by the first qualification and certification flights in 2020. A number of potential customers have already been identified. Market forecasts indicate a return on investment in less than three years following its commercialisation.

Stratobus Simulation

