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Flat satellite antenna with electronically steered beam communicates at multi Megabit rates.

The successful operational test of Phasor Solutions' flat, electronically steered antenna array puts the company on the fast track to deliver the world's first commercially available, highly affordable electronically steerable antenna at Ku band in 2014.

London - 14 October 2013 - The successful operational test of Phasor Solution's, flat, electronically steered antenna array, puts the company on the fast track to deliver the world's first commercially available, highly affordable electronically steerable antenna at Ku band in 2014.

The demonstration was achieved with the firm's fully operational, low profile, electronically steered, phased array antenna. The array, which is only 1" in height and covered a surface of 0.7m x 1m, supported an HD video transmission via Intelsat 905 operating at Ku band.

Phasor's patented technology successfully formed and auto-pointed the RF beam to acquire the signal emitted from the satellite and demodulated the high quality video.

The beam, which is entirely formed electronically using proven conventional technology, is steerable over a 70° cone and is totally inertia-free thus allowing extremely rapid scanning and at the same time overcoming the limitations of motorised parabolic reflector antennas and offering equivalent or greater gain. The array aperture, which is conformable to any curved surface such as an aircraft fuselage or train roof, may be extended to provide any required gain thus supporting very high data rate links with low satellite capacity demands and charges.

Phasor's engineers have fundamentally reconceived how a flat array antenna array can be constructed using low cost electronic components. Using this new approach, Phasor's technology will unlock new, ever more affordable applications for both satellite communications on the move (SOTM) for trains, planes, yachts & UAVs as well as distributed phased array radar systems. More than ever, consumers are demanding persistent high throughput communications even on board fast moving vehicles; a market need that existing SATCOM technologies cannot easily deliver.

Phasor's technology is applicable at X, Ka or other bands in addition to Ku.

Following last year proof of concept of communications to a satellite, this recent multi Megabit test has been achieved ahead of schedule auguring well for the commercial launch of Ku band product in 2014.

“With the world feeling ever smaller, we want to facilitate communication regardless of where we are or where we’re going. The recent test brings us closer to delivering an affordable electronically steerable antenna” – Vito Levi D’Ancona, Chairman, Phasor Solutions.

“The successful tests vindicate several years of development representing millions of dollars of investment offering the potential to enable major new markets for the satellite industry. This heralds the eagerly anticipated arrival of the holy grail of satellite antennas” - David Garrood, Chief Satellite Officer, Phasor Solutions.

Synopsis:

Phasor Solutions Ltd. is a London-based manufacturer of high gain electronically steerable antenna systems. The first application, its low profile affordable platform, is commercial and defence satellite communication on the move applications.