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News

For Immediate Release

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PARCA™ Software-Defined Antenna Technology Exhibited at Navy Opportunity Forum

COLUMBIA, MD. June 12, 2009 . . . Syntonics LLC, based in Columbia, Md., announces that its innovative PARCA (Pixel-Addressable Reconfigurable Conformal Antenna) software-defined antenna technology was exhibited June 8-10 at the Navy Opportunity Forum. PARCA technology is now the subject of multiple discussions and Non-Disclosure Agreements with interested defense contractors and government offices.

The PARCA Software-Defined Antenna™ is a reconfigurable multi-function phased array aperture. Rapid reconfiguration means PARCA apertures can be used by different radios simultaneously or in sequence, increasing weapon system effectiveness and flexibility. Applications include satcom-on-the-move (SOTM) for aircraft, ground vehicles, and ships; high gain radar threat receivers; and electronic warfare (EW) jamming.

PARCA uses pixel-by-pixel physical reconfiguration of microstrip feed-lines and radiating structures to provide antenna capabilities such as beam steering, beam shaping, operation at multiple frequencies and polarizations, and connections for multiple radios using a single reconfigurable antenna structure. Reconfiguration occurs rapidly and high RF power levels can be handled. Antenna elements and transmission lines are configured, reconfigured, tuned, and steered as needed under microprocessor control during an operational mission. Thus, a PARCA aperture can be shared between applications with different antenna requirements.

PARCA technology has been developed since 2004 under projects with the Missile Defense Agency (MDA), the Naval Air Warfare Command Weapons Division (NAWCWD), the Naval Air Systems Command (NAVAIR), and the Air Force Research Laboratory (AFRL).

Syntonics provides advanced RF-over-Fiber systems and innovative RF technologies for military, civil, and industrial markets. For more information on Syntonics and its products, please see the company's website at www.SyntonicsCorp.com.