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## **EMCORE Announces New Precision Fiber Optic Gyro-Based Inertial Measurement/Navigation Unit for Replacement of Legacy Systems**

ALHAMBRA, Calif., Sept. 11, 2017 (GLOBE NEWSWIRE) -- EMCORE Corporation (NASDAQ:EMKR), a leading provider of advanced *Mixed-Signal Optics* products that provide the foundation for today's high-speed communication network infrastructures and leading-edge defense systems, announced today the introduction of its new EN-300 Inertial Measurement/Navigation Unit for platform stabilization in unmanned aerial vehicles, dismounted soldier applications, aeronautics and aviation. Designed with options for full navigation capability, or as a higher performance, lower cost replacement for legacy Inertial Measurement Units (IMUs), the EMCORE EN-300 IMU is being introduced at DSEI, September 12-15 at the ExCel Centre in London, England, UR Group stand #S5-356.

The EMCORE EN-300 Inertial Measurement/Navigation Unit is a three-axis design using the Company's proprietary, solid-state Fiber Optic Gyro (FOG) transceiver with advanced integrated optics and Digital Signal Processing (DSP) electronics to deliver up to five-times better performance, increased reliability and lower cost than legacy IMUs. The EN-300 can be ordered in performance versions with bias drift as low as 0.035 degree/hr and ARW (Angle Random Walk) of 0.0040 degree/rt-hr. This makes it better suited for precise targeting, line-of-sight stabilization and GPS denied navigation than older generation units with higher bias drift typically between .5 to 3.0 degree/hr. Bias drift is an important measure of accuracy and precision of the IMU, with lower bias models delivering higher performance overall.

The internal signal processing of the EN-300 IMU provides options for an Attitude Heading Reference System (AHRS), or full standalone navigation software with coning and skulling compensation and sophisticated Kalman filtering. The unit can also utilize external sensors such as GPS for aided navigation. When configured with the full standalone navigation software, the highest performing EN-300 model can statically find north to less than 5 milliradian through gyrocompassing. The unit can also north keep for over an hour and a half, which makes the EN-300 an extremely valuable asset to the warfighter.

"Our new EN-300 is designed to operate as an IMU or navigator to provide customers the flexibility in choosing navigation options, or simply a higher performance replacement for their legacy IMU," said Dr. K.K. Wong, Senior Director of Fiber Optic Gyro Products for EMCORE. "The unit's digital interface is fully programmable within EMCORE's factory allowing it to directly replace lower performing competing units," added Dr. Wong.

"We designed our new IMU as a higher accuracy unit that is form, fit and function compatible with a legacy product, but with the better performance being demanded by the market," said David Faulkner, EMCORE's Vice President and General Manager of Aerospace & Defense. "This latest addition to our IMU and navigation systems product line further leverages EMCORE's unique vertical integration capabilities to deliver greater precision and lower cost to our customers."

EMCORE's new EN-300 Inertial Measurement/Navigation Unit and the Company's complete line of Fiber Optic Gyro and Inertial Navigation products are being showcased at DSEI, September 12-15 at the ExCel Centre in London, England, UR Group stand #S5-356.

### **About EMCORE**

EMCORE Corporation is a leading provider of advanced *Mixed-Signal Optics* products that provide the foundation for today's high-speed communication network infrastructures and leading-edge defense systems. Our optical chips, components, subsystems and systems enable broadband and wireless providers to continually enhance their network capacity, speed and coverage to advance the free flow of information that empowers the lives of millions of people daily. The *Mixed-Signal Optics* technology at the heart of our broadband transmission products is shared with our fiber optic gyros and military communications links to provide the aerospace and defense markets state-of-the-art systems that keep us safe in an increasingly unpredictable world. EMCORE's performance-leading optical components and systems serve a broad array of applications including cable television, fiber-to-the-premise networks, telecommunications, wireless infrastructure, satellite RF fiber links, navigation systems and military communications. EMCORE has fully vertically-integrated manufacturing capability through its world-class Indium Phosphide (InP) wafer fabrication facility at our headquarters in Alhambra, California and is ISO 9001 certified in Alhambra, and at our facilities in Warminster, Pennsylvania and China. For more information, please visit [www.emcore.com](http://www.emcore.com).

### **Forward-looking statements:**

The information provided herein may include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements include statements

regarding EMCORE's plans, strategies, business prospects, growth opportunities, changes and trends in our business and expansion into new markets. These forward-looking statements are based on management's current expectations, estimates, forecasts and projections about EMCORE and are subject to risks and uncertainties that could cause actual results and events to differ materially from those stated in the forward-looking statements, including without limitation, the following: (a) the rapidly evolving markets for EMCORE's products and uncertainty regarding the development of these markets; (b) EMCORE's historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) delays and other difficulties in commercializing new products; (d) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (e) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (f) actions by competitors; and (g) other risks and uncertainties discussed under Item 1A - Risk Factors in our Annual Report on Form 10-K for the fiscal year ended September 30, 2015, as updated by our subsequent periodic reports. Forward-looking statements contained in this press release are made only as of the date hereof, and EMCORE undertakes no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

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