![Mercury Systems logo]

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Mercury Computer Systems to Support Powerful Technology Upgrade for Airborne Active Electronically Scanned Array Radar

Win demonstrates Mercury's commitment to supporting deployed solutions with significant technology upgrades over the life of a program

CHELMSFORD, Mass., Aug 31, 2011 (BUSINESS WIRE) --

Mercury Computer Systems Inc., (NASDAQ: MRCY, www.mc.com), a trusted provider of commercially developed ISR subsystems, announced it received a multi-year contract from a leading prime contractor to deliver extremely powerful signal processing modules that will be used to field-upgrade advanced active electronically scanned array (AESA) radar systems. These systems are used on-board military aircraft to broadcast strong radar signals while remaining undetected.

"Mercury's decade-long relationship with this prime contractor exemplifies our commitment to extending customer success over the entire life of a defense program and our ability to deliver critically important upgrades years after initial deployments,"said Didier Thibaud, senior vice president and general manager of Mercury Computer Systems' Advanced Computing Solutions business unit. "Mercury has a rich heritage of engaging closely with our customers to thoroughly understand their technical and business challenges and to create the best possible solutions. This in-field, module-level upgrade is a prime example of that caliber of partnership."

The technology Mercury is providing for the AESA system is significantly more powerful than currently deployed solutions. The signal processing modules are fully software compatible, meaning that upgrades can be made easily and quickly in the field. As Mercury continues to support legacy, deployed solutions with significant technology upgrades, it remains the only company to support this caliber of fully compatible, board-swap upgrades.

For more information on Mercury's subsystem solutions, visit www.mc.com/ARS, or contact Mercury at 866.627.6951 or info@mc.com.

Mercury Computer Systems, Inc. - Where Challenges Drive Innovation®

Mercury Computer Systems (www.mc.com, NASDAQ: MRCY) is a best of breed provider of open, commercially developed, application-ready, multi-INT subsystems for the ISR market. With more than 30 years of experience in embedded computing, superior domain expertise in radar, EW, EO/IR, C4I, and sonar applications, and more than 300 successful program deployments including Aegis, Global Hawk, and Predator, Mercury's Services and Systems Integration team leads the industry in partnering with customers to design and integrate system-level solutions that minimize program risk, maximize application portability, and accelerate customers' time to market.

Mercury is based in Chelmsford, Massachusetts, and serves customers worldwide through a broad network of direct sales offices, subsidiaries, and distributors.

Forward-Looking Safe Harbor Statement

This press release contains certain forward-looking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995, including those relating to the products and services provided for the contract described above. You can identify these statements by the use of the words "may," "will," "should," "plans," "expects," "anticipates," "continue," "estimate," "project," "intend," and similar expressions. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. Such risks and uncertainties include, but are not limited to, general economic and business conditions, including unforeseen weakness in the Company's markets, effects of continued geopolitical unrest and regional conflicts, competition, changes in technology and methods of marketing, delays in completing engineering and manufacturing programs, changes in customer order patterns, changes in product mix, continued success in technological advances and delivering technological innovations, continued funding of defense programs, the timing of such funding, changes in the U.S. Government's interpretation of federal procurement rules and regulations, market acceptance of the Company's products, shortages in components, production delays due to performance quality issues with outsourced components, inability to fully realize the expected benefits from acquisitions and divestitures or delays in realizing such benefits, challenges in integrating acquired businesses and achieving anticipated synergies, changes to export regulations, increases in tax rates, changes to generally accepted accounting principles, difficulties in retaining key employees and customers,

unanticipated costs under fixed-price service and system integration engagements, and various other factors beyond our control. These risks and uncertainties also include such additional risk factors as are discussed in the Company's filings with the U.S. Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended June 30, 2011. The Company cautions readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. The Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made.

Challenges Drive Innovation is a registered trademark and Ensemble is a trademark of Mercury Computer Systems, Inc. AdvancedTCA and ATCA are registered trademarks and Advanced MC is a trademark of the PCI Industrial Computer Manufacturers Group (PICMG). RapidIO is a registered trademark of the RapidIO Trade Association. Other product and company names mentioned may be trademarks and/or registered trademarks of their respective holders.

SOURCE: Mercury Computer Systems Inc.

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