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## **Risk Management Framework, Applying an IT Centric Process to Real-Time Embedded Systems**

### **Abstract**

Weapon systems are not the same as IT-based/enterprise networking systems. At Lockheed Martin Aeronautics Company, we have learned from past experience and know that the DoD NIST Risk Management Framework (RMF) is well established and understood for IT-based systems. This level of understanding does not, however, hold up under the pressures of designing and executing complex weapons systems or other non IT-based systems. Implementation of the Framework becomes complex as systems engineering processes meet the RMF. What makes it especially challenging is the extrapolation of “no-kidding” functional system security requirements and development of system artifacts from the security controls listed within NIST Special Publication 800-53 (SP 800-53).