Chairman McKeon, Ranking Member Smith, Members of the Committee, thank you for the opportunity to present this testimony on the FY2015 National Defense Authorization Act.

As the Committee considers the NDAA, I would like to express my support for 5 specific defense priorities. Before going into further detail, below I have provided a brief overview of these requests:

1. Support full funding for Increment 3 of the P-8A Poseidon aircraft program.
2. Support full funding of the P-8A Poseidon’s APY-10 Maritime Radar program.
3. Support full funding of SOCOM’s Silent Knight Radar Program.
4. Oppose the Army’s plan to divest the Kiowa Warrior modifications, line 24, in order to maintain a viable armed reconnaissance aviation platform.
5. Direct the U.S. Army to maximize the use of existing EPLRS Radios while pursuing a modernization strategy initially focused on non-digital combat teams.

**P-8A Poseidon Multi-Mission Maritime Aircraft**

Mr. Chairman, I would like to express my strong support for the P-8A Multi Mission Maritime Aircraft which will replace the aging P-3 aircraft. Specifically, I would like to express my support for Increment 3 of this program. The P-8A MMA program is a joint U.S. Navy-Australian development program, and based on an evolutionary acquisition strategy consisting of sequential increments that will retain aircraft and systems effectiveness throughout the acquisition.

While both Increment 2 and Increment 3 are in development today, they are independent programs with separate capabilities. Increment 2 is integrating mature technologies into the P-8 for an Initial Operational Capability (IOC) in 2016. Increment 3 is developing new technology that will be part of a suite of capabilities with a planned IOC of 2020. Both Increments are part of the P-8A modernization roadmap.

Increment 3 is focused on implementing a common, commercial off the shelf based, onboard central processor and data storage infrastructure. Increment 3’s formally defined requirements are contained in a Capability Development Document (CDD 815-88-10) which was approved by Joint Requirements Oversight Council (JROC) in June 2010. The program directly supports OSD Better Buying Power directives the implementation of open architectures that break vendor lock and enable affordable competitions for best of breed solutions. The system must be compliant with DoD open architecture requirements and is planned for installation in all P-8A variants. The stated purpose of the program is to achieve substantial cost savings and enable Rapid Capabilities Insertion (RCIs) and Legacy Subsystem Migrations from single purpose computers or stove-piped unique data storage devices. The P-8A Increment 3 program lays the foundation for a rapidly reconfigurable, open architecture aircraft mission system able to affordably keep pace with our warfighters needs. The program currently is on track to develop acoustic sensor enhancements required to meet modern submarine threats, and eventually deliver fifteen critical capabilities to the U.S. Navy and to the Australians.
Raytheon is one of four prime contractors who was awarded a study phase contract and has submitted a prime proposal for the System Development phase of Increment 3, which is expected to start in the 4th quarter of FY14. The Raytheon led team includes Northrop Grumman, GD/AIS, L-3 and Rite Solutions Inc, a SDVOSB. Reduction in funding would result in a suspension or significant delay of Increment 3 activities in FY15 and a costly multiple year delay as the program is stretched out or restarted in FY16. Overall, there would be a multi-year delay in providing critical operational capabilities to the U.S. Navy, a reduction in the potential effectiveness of the P-8A platform in several mission areas, including for our Australian partners. Full funding in FY15 is required to continue the System Development phase and achieve predicted cost savings during Rapid Capability Insertions through best of breed competitions independent of the platform prime which Increment 3 enables.

In summary, I support the President’s budget request for the P-8A Poseidon including full funding for Increment 3, in order to continue development. Thank you for your consideration of this request.

**P-8A Poseidon APY-10 Maritime Radar**

Mr. Chairman, I would also like to express my strong support for the P-8A Multi Mission Maritime Aircraft which will replace the aging P-3 aircraft. Specifically, I would like to express my support for the President’s budget request for the P-8A APY-10 Maritime Radar.

The P-8A Poseidon, formerly known as the Multi-mission Maritime Aircraft (MMA), is based on the 737-800 ERX developed by The Boeing Company. P-8A is the replacement system for the P-3C, Orion. The P-8A system will sustain and improve the armed maritime and littoral intelligence, surveillance, and reconnaissance (ISR) capabilities for U.S. Naval forces in traditional, joint and combined roles to counter changing and emerging threats. The P-8A program is structured on an evolutionary systems replacement approach that aligns the processes employed for requirements definition, acquisition strategy, and system development into a dynamic and flexible means to attain the strategic vision for tomorrow’s Naval forces.

The P-8A program reached initial operating capability (IOC) in November 2013. The first squadron, Patrol Squadron-16 (VP-16), deployed with six Poseidons to Kadena Air Base, Okinawa, Japan. The 7th Fleet Commander, Vice Admiral Robert Thomas, and the Navy Pacific Fleet Commander, Admiral Harry Harris, cited the aircraft’s success during its ongoing maiden deployment. The Full Rate Production decision was announced by NAVAIR on January 3, 2014.

Through system design and development phase, Raytheon developed the Poseidon’s APY-10 radar, which is largely a redesign of the APS-137 system currently operational on the P-3C. With the approval of Full Rate Production, Raytheon will produce future years’ radars and supply directly to the Navy.

Maintaining the current yearly production rates allow economies of scale that will be lost if there is a reduction quantity or funding. Current budgeted quantities are below:

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In summary, I support the President’s budget request for the P-8A including full funding the P-8A APY-10 Maritime Radar. Thank you for your consideration of this request.
SOCOM Silent Knight Radar System

I write to express my strong support for SOCOM’s Silent Knight Radar program, and the President’s budget request for this system. In order to maintain the production schedule for this program, funding must stay secure.

The Silent Knight radar, Raytheon’s AN/APQ-187, addresses obsolescence issues for today's legacy radar system on the MH-47G Chinook and the MH-60M Blackhawk aircraft. The Silent Knight Radar is the next generation Multi-Mode Radar (MMR) providing Terrain Following/Terrain Avoidance (TF/TA) capabilities. This MMR provides Special Operations Forces safe low-level flight, and safe ingress and egress in adverse environments. Silent Knight builds upon proven TF/TA lineage and incorporates next generation capabilities such as navigation support, ground mapping and weather information. The Silent Knight MMR provides safety, speed and surprise for airborne Special Operations Forces. Initial installation is targeted for the MH-47G & MH-60M platforms, with future installations planned for the CV-22 Osprey and MC-130 Combat Talon platforms. The total planned procurement is for 240 Silent Knight Radars.

In July 2013, SOCOM held a successful Milestone C, and has since engaged Raytheon for the first low rate initial production (LRIP) build for six Silent Knight Radars. Those six radar units are currently in production at Raytheon’s Consolidated Manufacturing Center in Forest, Mississippi. The two year development phase continues toward its completion in April 2014. The progress toward tuning the radar’s capability and functionality remains solid. In summary, I support the President’s budget request for SOCOM’s Silent Knight Radar Program.

OH-58D/F Kiowa Warrior Helicopter Program

Additionally, Mr. Chairman, I would like to express my strong support for the Army Kiowa Warrior OH-58D/F Helicopter Program. The Kiowa Warrior OH-58D is the Army’s only light weight armed reconnaissance / scout helicopter. The OH-58D is the most utilized aircraft in combat today. It has the highest operations tempo (flight hours per aircraft per month) than any other Army helicopter and maintains the highest operational readiness rates (~85%). The Cockpit and Sensor Upgrade (CASUP) program is upgrading the Army’s OH-58D Kiowa Warrior fleet of rotary wing aircraft with more capable, more reliable and more supportable sensors and cockpit avionics including Raytheon’s Common Sensor Payload (CSP). The upgraded OH-58F First Flight was successfully completed in April 2013, and additional flight testing is now underway. The Army planned to upgrade 368 aircraft between FY14 and FY25 per requirements and planned operation of the Kiowa fleet until 2036.

Recent Army analysis explaining the KW Divestiture Option appear to overstate near term cost avoidance without considering the cost increases due to the higher operational and support costs of the Apache versus the KW. Army states there is a $6.96B cost avoidance for a KW Service Life Extension Program (SLEP) and Upgrade which equates to $18.9M per platform versus previously approved estimates of $7.0M per platform. $3B. The Army also has implied that the Apache AH-64E is already a sunk cost; however, the AH-64E upgrade has only been in production for less than 3 years and is budgeted as a yearly procurement well into the future. The annual operational cost per aircraft of an Apache is ~$3.1M versus $2.1M for a KW and the Apache requires more personnel to support. The 20 year life cycle cost of operating Apaches versus the KWs results in a cost increase of $4.9 billion over divestiture of the KWs.

The KW is also much more deployable than the Apache. It can be rapidly deployed in a C-130 transport aircraft while the Apache cannot, which requires time consuming disassembly and re-assembly. Overall the KW’s deploy-ability makes it the ideal choice for quick reaction type missions that are highly likely in
the future. In summary, I oppose the Army plan to divest the Kiowa Warrior fleet and recommend continuing to fund the Kiowa CASUP program under the Army’s Kiowa Warrior modifications, line 24, in order to maintain a viable armed reconnaissance aviation platform. Thank you for your consideration of this request.

**Enhanced Position Location Reporting System (EPLRS) Radio**

Mr. Chairman, I would also like to express my strong support for the Army’s EPLRS radio system. EPLRS continues to provide a critical tactical network capability for all DoD services and for Canada and Australia.

EPLRS provides the backbone data carrying capability for much of the USAF, the US Navy’s Amphibious Assault Direction System, and the armies of Canada and Australia, two of the United States’ most important allies in the Pacific Rim. Further, the EPLRS waveform was developed to counter the Electronic Warfare effects expected from a peer adversary, including heavy jamming and GPS denial in a contested A2/AD environment. It is the only Army lower tier waveform in the inventory designed to do so. EPLRS fits within the established Army networking architecture’s lower tier, has authorized radio frequency spectrum and is already installed on vehicles within 15 Army brigade combat teams. EPLRS recently completed a $20M cryptographic modernization and modern cryptographic keys are used by Army units in Korea and Afghanistan.

The Army’s tactical radio strategy to divest EPLRS raises concerns given DoD has invested over a billion dollars to develop the capabilities found in EPLRS today. In the current budget constrained environment the Army should consider a bridging strategy to allow modernization of non-EPLRS equipped BCTs with JTRS HMS capability while continuing use of the EPLRS networking capability which DoD has already invested. Such an approach would maximize the DoD investment in EPLRS and JTRS while providing networked capabilities to a greater number of brigade combat teams.

Maximizing the use of existing EPLRS radios the Army owns today would provide a $480M cost savings to DoD while affording greater capability across the Army by allowing the Army to pursue its network modernization strategy beginning with non-networked brigade combat teams. In summary, I recommend the US Army maximize the use of existing EPLRS radios while pursuing a modernization strategy initially focused on non-digital combat teams. I believe this approach will yield the greatest amount of capability for the Army at the lowest cost.

Thank you again for the opportunity to present my testimony on the FY2015 NDAA, Mr. Chairman. I look forward to working with the Committee to craft legislation that addresses these issues and supports our national security interests. Thank you again for your consideration.