

**RODNEY LAVAUGHN ROBERTSON, Ph.D.**

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**SUMMARY OF QUALIFICATIONS**

I have twenty-nine years of government service in a variety of positions with increasing responsibility and I have held Senior Executive Service (SES) positions for over 10 years in the U.S. Army Space and Missile Defense Command / Army Forces Strategic Command's Technical Center (SMDC/ARSTRAT) responsible for providing executive leadership and management for program planning, direction and execution; program oversight; budget planning and execution; business development; personnel management; organizational development; policy development and implementation; and customer interface. Programs included space, high energy laser, sensor, interceptor, advance technology development, test range operations, sensor data collection, data analysis, and modeling and simulation.

**PROFESSIONAL WORK EXPERIENCE**

**December 2005 to Present - Director, Technical Center, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command (USASMDC/ARSTRAT), Huntsville, AL**

As the Technical Center Director, I am responsible for managing the research, development, test, and evaluation activities for the Army's space and missile defense programs. I lead and manage a complex and diverse research and development organization of over 200 scientists and engineers, including two SES members, two Science and Technology members (ST's), one SES Highly Qualified Expert, 28 senior level supervisors, and a contractor workforce of over 4000 personnel. The Technical Center has an annual budget of over \$650M and spans four geographical locations including Huntsville, AL, U.S. Army Kwajalein Atoll / Reagan Test Site in the Marshall Islands, the High Energy Laser Systems Test Facility located at White Sands Missile Range, NM, and the Big Crow program office in Albuquerque, NM.

The major challenge for the Technical Center during this timeframe was to increase the business base in Army and other mission areas as the Missile Defense Agency (MDA) moved from Washington, DC to Huntsville, AL and pulled execution of key programs back into MDA as part of their reengineering and Base Realignment and Closure (BRAC) effort.

Major Accomplishments:

- Secured \$294M to develop, demonstrate, and operate a Hybrid Airship for the Intelligence, Surveillance, and Reconnaissance task force. The demonstrations will occur in Afghanistan.
- Demonstrated over 100kW output power from a solid-state laser. This is the first time this power level has ever been achieved from a solid state laser.
- Developed eight flight qualified nano-satellites in less than a year. This is the first Army satellites built in over 50 years.
- Successfully transitioned the Multiple Kill Vehicle (MKV) technology program to the MDA as a program of record. The \$2B MKV program is the most significant technology transition from the Technical Center in the last 20 years.
- Secured \$27M for the ORTHON sensor fusion program to develop and demonstrate an enhanced IED detection capability in one year. The ORTHON program successfully demonstrated that sensor fusion enhances the detection of Improvised Explosive Devices (IED's) while reducing the false alarm rate.
- Secured \$10M to develop compact High Power Microwave (HPM) devices that are capable of defeating IED's with minimal collateral damage. Initial tests for these devices have far exceeded expectations, and the program has received funding for limited production.
- Developed and deployed the Weapon Watch system that detects, classifies, and precisely locates hostile weapons fire in near real time to support joint operations in complex and urban terrain. The success of this program is shown by the 28 Weapon Watch systems deployed in the theater to protect soldiers against small arms fire and rocket-propelled grenades.
- Developed and deployed a satellite communications terminal that provides a 2.5 meter transmit/receive antenna that can be transported in two small cases by one or two soldiers. The success of this system is shown by the 15 systems that have been deployed in theater and the number of additional systems that have been requested by the Special Operations Forces, Air Force, and Marines.
- Operated the Technical Center as a fee for service organization without any institutional funding.
- Expanded the Technical Center budget and business base to compensate for the approximately \$280M mission loss to the MDA as part of the BRAC effort. We have developed approximately \$350M of new business from other mission areas in less than two years to compensate for this loss.

**April 2005 to December 2005 - Director, Systems of Systems Directorate, U.S. Army Program Executive Office, Missiles and Space (Detailed Assignment), Huntsville, AL**

Because of my reputation as a team builder, I was tasked by the USASMDC/ARSTRAT Commanding General to serve on a special assignment to the U.S. Army Program Executive Office, Missiles and Space as the Director, Systems of Systems Directorate. In this assignment, I had responsibility for coordinating the planning and execution of the Army Integrated Air and Missile Defense (IAMD) Systems-of-Systems (SoS) capability.

that provides integrated fire control to the Army Air and Missile Defense (AMD) Systems (Patriot, SLAMRAAM, and JLENS). Prior to my taking this assignment, there were strained relationships and poor communications between the Army AMD project management (PM) organizations (Patriot, SLAMRAAM, and JLENS) and the SoS Directorate. As a result the IAMD mission was stalled and in disarray.

Major Accomplishments:

- Successful in getting AMD PM Organizations engaged in the systems-of-systems activities. I gained agreement between user and AMD PM Organizations on a 2011 Army Integrated Air and Missile Defense architecture. For the first time, all of the stakeholders worked together to establish priorities, review programs, manage resources, and establish a unified Campaign Plan.
- Gained cooperation to align individual Army AMD PM system test into integrated systems-of-systems test and produced system-of-system related program documentation.
- Recommended an organizational construct that was adopted to integrate the IAMD activities across AMD PM and program executive office stakeholder organizations.

**October 2004 to April 2005 - Director, Test and Evaluation Directorate, U.S. Army Space and Missile Defense Command, Huntsville, AL**

As Director, Test and Evaluation (T&E) Directorate, I was responsible for providing executive leadership to the T&E Directorate which includes subordinate elements of the MDA Ballistic Missile Defense System (BMDS) T&E programs and two major range test facility bases: U. S. Army Kwajalein Atoll / Reagan Test Site (USAKA / RTS) and the High Energy Laser Systems Test Facility (HELSTF). The subordinate staff included approximately 200 scientists and engineers (including seven GS-15 supervisors) in three geographical locations and a contractor workforce of over 2000 personnel. The T&E Directorate's annual budget was approximately \$500M.

Prior to my accepting this position, the Army had cut the USAKA/RTS POM budget starting in FY07 from approximately \$165M to less than \$80M annually throughout the Program Objectives Memorandum (POM). I was personally tasked by the SMDC Commanding General to lead an Independent Assessment Team (IAT) that consisted of customers and stakeholders to review the USAKA/RTS technical and logistical operation with the goal of determining the most efficient method of operating USAKA/RTS and still meet mission needs.

### Major Accomplishments:

- Under my leadership, the IAT developed options that would reduce the cost of operations at USAKA by \$17.5M annually. The most dramatic change involved installing fiber optic cable and remoting range operations back to continental U.S.
- Through numerous high level meetings, I was able to convince the Army G8 to restore the USAKA/RTS budget to the minimum operating point of \$185M annually and to invest in the installation of fiber optic cable. The investment will result in a reduced operating budget in future years.
- Led efforts to develop a strategic plan for the HELSTF facility that would modernize HELSTF and make it a relevant test range in the near term.

### **April 2001 to October 2004 - Deputy Director, Technical Center, U.S. Army Space and Missile Defense Command, Huntsville, AL**

As Deputy Director, Technical Center, I was responsible for the day-to-day operations of the Technical Center. I also provided executive leadership to the MDA Test and Evaluation (T&E) programs during this timeframe. During this time, the Technical Center's budget grew from approximately \$200M to over \$525M annually.

The MDA had tasked the SMDC Technical Center, T&E Directorate to execute four multi-campaign flight tests during a two year period (12 total flight tests). The T&E Directorate was also tasked to launch two Lance Missiles and a liquid fueled target from the Mobile Launch Platform during this same timeframe. Each of these tests was a complex one-of-a kind flight test and involved coordinating with the MDA, other services, test ranges, national laboratories, and numerous contractors. The number of flight tests severely challenged the T&E Directorate's ability to provide qualified personnel to execute these tasks. Due to the large investment and high visibility of these flight tests, any failure could have been devastating to the Technical Center.

### Major Accomplishments:

- Applied sound system engineering principles to the planning and development of these flight tests to ensure mission success. I balanced the T&E Directorate personnel resources to sufficiently staff the flight tests without burning out key personnel. As a result, the T&E Directorate successfully executed each of these missions. The success of these programs increased the T&E Directorate's activities from nine programs to 17 programs over a two-year time period with a budget of approximately \$182M annually.
- Under my leadership, the T&E Directorate developed strategies and plans for testing the MDA BMDS. This task required the ability to manage and direct test efforts across diverse organizations such as the services, MDA, Office of the

Secretary of Defense, Intel Agencies, and foreign governments. The test data collected and the analysis performed would drive system development and/or block upgrades for major BMDS elements. This effort resulted in the MDA selecting the Technical Center as the executing agent for BMDS test planning. This resulted in a budget increase of \$16M for FY05 and \$28M for FY06 for the T&E Directorate.

**January 1999 to April 2001 - Director, Sensors Directorate (Acting), U.S. Army Space and Missile Defense Command, Huntsville, AL**

Served as Acting Director, Sensors Directorate responsible for providing executive leadership and direction for T&E test planning and execution; Critical Measurement Program flight test execution; Airborne Sensor Platform Operation and Data Collection; Data Exploitation, Processing, and Algorithm Development; Data Dissemination; providing direction and execution of programs in the areas of Sensor Integration; Radar, Laser Radar, Optics, and Microelectronics Technology Development; and Space Technology Development. During this timeframe, the budget for these programs grew from approximately \$70M to over \$100M annually.

Major Accomplishments:

- Under my leadership, the Sensors Directorate successfully executed the System Integration Test (SIT II) and the Critical Measurement Program (CMP) 3B missions. SIT II and CMP 3B missile reentry vehicles were threat representative targets launched to allow systems and components the opportunity to collect realistic data to assess system capabilities. The data was used to make system improvements to increase weapon system readiness in support of our nation and our allies. These programs included multiple missile launches from Wake Island into the Reagan Test Site. Both the SIT II and CMP 3B programs were executed on schedule, within budget, and met technical goals.

**PRIOR EXPERIENCE:**

**September 1988 to January 1999 - Electronics Engineer / Deputy Director, Sensors Directorate, U.S. Army Space and Missile Defense Command, Huntsville, AL**

**August 1980 to September 1988 - Instrumentation Engineer, Tennessee Valley Authority (TVA), Bellefonte Nuclear Plant, Hollywood, AL**

## **EDUCATION**

Ph.D. (Industrial and Systems Engineering and Engineering Management), 2004 University of Alabama in Huntsville, Huntsville, AL

MS in Engineering, (Industrial and Systems Engineering and Engineering Management), 1996 University of Alabama in Huntsville, Huntsville, AL

BS in Electrical Engineering, 1980  
Auburn University, Auburn, AL

Certified Acquisition Professional Level III in Systems Planning, Research, Development and Engineering

## **PERSONAL INFORMATION**

Level of Clearance: Top Secret – 2 March 2005

Appointed to the Senior Executive Service (SES) in September 2001

## **AWARDS**

2007 Auburn University Alumni Engineering Council's Outstanding Auburn Engineer Award

2007 Air Defense Association's Ancient Order of Saint Barbara Award

2006 Superior Civilian Service Award

2006 University of Alabama in Huntsville, Distinguished Engineering Alumni Academy Award

2004 Auburn University Electrical and Computer Engineering Outstanding Alumnus Award

2004 Huntsville Technical Society (HATS), Army Space and Missile Defense Association's Professional of the Year

2003 Ted Eschenbach Best Engineering Management Journal Paper Award

Numerous Performance Awards

## **PROFESSIONAL MEMBERSHIPS**

Air, Space and Missile Defense Association (Past and current President)

National Space Club - Huntsville (Current board member)

Von Braun Center for Science and Innovation (Government Liaison)

National Defense Industrial Association (Past board member)

Auburn University Electrical and Computer Engineering Industrial Advisory Board  
(Current board member)

University of Alabama in Huntsville Industrial and Systems Engineering and Engineering  
Management Industrial Advisory Board (Current board member)

American Institute of Aeronautics and Astronautics (AIAA)