

Randal E. Null, Ph.D.

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EXPERIENCE:

**Louisiana Tech University
Ruston, LA**

April 2010- Present

**Director, Institute for Micromanufacturing
Professor Biomedical Engineering
Entergy/Cordaro Distinguished Professor**

**L-3 COMMUNICATIONS – Security and Detection Systems Division
Washington, DC and Boston, MA**

April 2009-March 2010

Senior Director Checkpoint Solutions

- Product line responsibility for all technologies associated with checkpoints for screening people and their associated carry items.
- Next generation network solutions
- Managed the relationship with partner HCL Security Ltd in India

Director Strategic Business Development

- Market assessment of new business and product opportunities focused on revenue and profit growth
- Assessment of potential strategic partners and acquisition targets for the division

**COGENT SOLUTIONS, LLC
Independent Consulting Company
Phoenix, Arizona**

January 2007-March 2009

Founder and Owner

- Develop company and product strategies for engagement with Department of Homeland Security and Transportation Security Administration in the areas of Security Technology with a major engagement with the Security Detection Division of L-3 Communications.
- Emphasis on Risk Based Solutions, Strategic Marketing, Product development, and Government Contract Proposal development.

**DEPARTMENT OF HOMELAND SECURITY
Transportation Security Administration (TSA)
Arlington, Virginia**

January 2002-December 2006

Assistant Administrator for Operational Process & Technology/CTO/CIO (October 2005 – December 2006)

- Direct Report to Assistant Secretary Department of Homeland Security/Administrator Transportation Security Administration.
- Led an organization of ~350 federal employees and over 2000 contractors with an annual budget of ~\$1.5 B.
- Transportation Security Technology – Built a team from multiple divisions into a functional organization based around the delivery of an adaptive security architecture layered over an information infrastructure and risk methodology. Moved to a performance based organization driven by the strategic objectives of the agency and measured by metrics driven criteria.
- Implemented a management model for the delivery of total security systems with the addition of organizational components including Information technology, strategic planning, and risk management, operational process optimization and performance metrics.
- Developed and implemented a TSA wide methodology for risk-based strategic plans and tools

- Ensured the operational integration of new security technologies and processes through the use of Integrated Product Teams and effective pilot/trial validations.
- Extensive interaction with Congress including briefings and testimony before several different Committees.

Federal Security Director Phoenix Sky Harbor and South Central Area Director (July 2004 – October 2005)

- Sustained a robust security operation throughout the airport ensuring efficient utilization of the staff and equipment
- Workforce consisted of ~1000 employees performing passenger and baggage screening for weapons and explosives, regulatory inspection and enforcement, law enforcement, and intelligence coordination
- Management of an eight state region comprised of 87 airports and 26 Federal Security Directors, established standard management methodologies and performance metric criteria.
- At the time of assignment, this airport was one of the worst performing airports in the Transportation Security Administration network but through the application of fundamental factory operations concepts it reached a level of performance that exceeded all other large airports within 4 months.

Assistant Administrator for Aviation Operations (January 2004 - July 2004)

- Direct Report to Assistant Secretary Department of Homeland Security/Administrator Transportation Security Administration.
- Workforce of ~50,000 employees in HQs and ~450 airports across the country with an annual operating budget of ~\$2.5 billion
- Responsibilities included all screening operations for passengers and baggage as well as regulatory inspection for airports, air carriers and cargo operations
- 158 Federal Security Directors who had oversight for security operations for their airport and the surrounding smaller airports
- Law Enforcement organization that coordinated all involvement with Federal, State and Local Law Enforcement agencies
- Congressional briefings for both the House and Senate on all aspects of aviation security operations and technology, including testimony before the House Aviation Subcommittee.

Assistant Administrator and Chief Technology Officer/Transportation Security Administration (June 2002 – January 2004)

- Direct Report to Undersecretary Transportation Security Administration.
- Built a new organization consolidating groups from multiple agencies modeled around a technology/product life cycle starting with applied R&D through deployment and sustainment in the field.
- Met all technology mandates as prescribed to TSA by the Aviation Transportation Security Act (ATSA)
- Led and directed a large technology team consisting of the Transportation Security Laboratory in Atlantic City, New Jersey and the Security Technology Deployment Office (STDO) in Herndon, Virginia
- Workforce consisted of ~150 federal employees, and over 5,000 contractor/vendor personnel
- Annual budgets of \$150 million in research and development and ~\$1 billion for security equipment procurement, installation and maintenance with the objective of improving and sustaining operations at the nation's 450 commercial airports.

Senior Advisor to Transportation Security Administration (January 2002 - June 2002: on assignment from Intel Corp.)

- Managed all aspects of planning and execution, acquisition and deployment contracts to meet the critical legislative requirement (Aviation and Transportation Security Act(ATSA)) for deployment of explosives detection systems to all 429 commercial airports within the United States
- Supervised a workforce of approximately 100 federal employees (plus a contractor workforce that reached a maximum of 20,000 personnel)
- Deployed over 7000 explosives detection and related systems, with an approximate cost exceeding \$3 billion.
- All ATSA legislative milestones were met on-time.

INTEL CORPORATION
Chandler, Arizona

October 1990 – January 2002

Director (February 2001 - January 2002)

- Intel's Capital Mergers and Acquisitions office

- Responsibilities included the complete acquisitions process starting with opportunity evaluation, to managing due diligence, and managing the integration of the acquired company into Intel.
- Finalized four acquisitions during the first year and two (\$550M and \$300M) in the second year.
- Received high marks on all of the Integration scorecards.

Director, Technology & Manufacturing Group Year 2000 Program (March 1998 - February 2001)

- Managed the worldwide Year 2000 program for internal systems and manufacturing equipment in the Technology & Manufacturing Group.
- Responsibilities included assessment, remediation and deployment of all computer systems, equipment, and facilities in Intel's manufacturing operations (>100,000 elements).
- At its peak the program included the oversight of over 4000 staff in 10 countries.
- All major milestones were met on time or under budget.

Director, IT Engineering (August 1995 - March 1998)

- Managed all aspects of IT engineering corporate wide
- Led a team consisting of ~650 engineers.

Director, Enterprise Applications (July 1994 – August 1995)

- Responsible for all application development, support and systems engineering.
- Group consisted of ~200 people.

Director of Planning & Logistics Systems (May 1993 - July 1994)

- Led an office consisting of both development and support with a group size in excess of 300 people.
- Manufacturing Planning organization responsible for factory production planning

Director of Manufacturing Systems Technology (October 1990 - May 1993)

- Responsible for the computerization and automation of all Intel's manufacturing facilities
- Approximately 180 people covering shop floor control, engineering data systems, equipment interfacing, artificial intelligence, mechanical automation, and systems integration and networking
- Major focus on enterprise integration of business, manufacturing, and design systems.

MICROCHIP TECHNOLOGY, INC.
Chandler, Arizona

1988 – 1990

Vice President Memory Products (1989 – 1990)

- Directed the total product line and profit/loss for all memory and military products
- Marketing, design engineering, and product engineering
- Managed shared service organizations of information systems and materials. Product line consisted of standard EPROM, high speed EPROM, serial EPROM, high density EPROM, and military products

Director of Operations Services (1988 – 1989)

- Support of the manufacturing operations including information systems, materials, product/test engineering, product line/production planning, foundry photo mask shop, and package engineering
- Structured and enhanced the interface between the Chandler wafer fabs and the assembly/test operation in Kaohsiung, Taiwan.

FAIRCHILD SEMICONDUCTOR CORPORATION
Santa Clara, California

1984 - 1988

- Corporate Director of Information Systems (1987 - 1988)
- Director of Information Systems (1985 - 1987)
- Division Operations Systems Manager (1984 – 1985)

TEXAS INSTRUMENTS CORPORATION
Dallas, Texas

1978 - 1985

- Systems/Automation manager (1983 - 1984)
- Systems Branch Manager (1980 - 1983)

- Product Engineering Section Manager (1979 - 1980)
- Product Engineer (1978 – 1979)

EDUCATION:

Post Doctorate (Dual appointment in Depts of Anesthesiology and Biomedical Engineering), 1977, University of Virginia

Ph.D., Engineering (Majors in Biomedical and Chemical Engineering), 1976, Louisiana Tech University

Bachelor of Science, Chemical Engineering, 1972, Louisiana Tech University