

Dr. Daniel R. Georgiadis

EDUCATION

- 2013 George Washington University, PhD. Systems Engineering
- 2009 Troy University, Master of Science in Management, Leadership and Organizational Effectiveness
- 2005 Florida State University, Bachelor of Science, Electrical Engineering
- 2001 Co-Op Naval Surface Warfare Center Panama City Division, Panama City, FL

PROFESSIONAL AFFILIATIONS/CERTIFICATIONS

- Professor of Systems Engineering, George Washington University
- American Society of Naval Engineers (ASNE) Member
- International Society for Optical Engineering, SPIE Member
- International Council of Systems Engineers (INCOSE); Published Author in Journal of Systems Engineering
- DAWIA Level III certification in Systems Engineering
- DAWIA Level III certification in Program Management
- US Federal Government, Top Secret Clearance

CAREER DETAILS

May 2018 to Present
Florida State University Panama City
Panama City, Florida

Assistant Teaching Professor, Master of Science in Systems Engineering (MSSE) Program Coordinator

- Faculty responsible for developing the MSSE program
- Research and select quality textbooks for the MSSE program
- Coordinate with the Navy (sponsor) and the College of Engineering IME department to stand up program
- Develop and submit quality graduate level syllabi for graduate engineering coursework
- Develop lectures, homework, case studies, assignments, & exams for all core MSSE coursework
- Work with local engineering industry to establish relationships to grow awareness of the MSSE program
- Advise graduate students in pursuing the MSSE degree and have understanding of admission requirements

April 2015 to Present
Hepburn and Sons LLC
Manassas, Virginia

Chief Technology Officer

- Responsible for providing executive level vision and direction for technology insertion and transition of Science and Technology (S&T) to the Maritime Industry Research and Development (R&D) in a small business veteran owned consulting firm.
- Develop technology roadmaps, manage and execute contracts with multiple defense prime contractors in the areas of systems engineering, electrical engineering, ship integration and design.
- Seek out business opportunities in multiple technical areas within the U.S. Navy Surface, Undersea, and Aviation Warfare areas.
- Provide business development support and relationships with U.S. Navy leadership and major DoD Prime Contractors related to US Navy technologies and life cycle maintenance including:

February 2013 to Present
George Washington University
Washington DC

Adjunct Professor of Systems Engineering

- Graduate level Professor teaching courses in Systems Engineering in the School of Engineering and Applied Science, Department of Engineering Management & Systems Engineering. Adjunct Faculty Professor duty involves teaching one course a semester.
- Experience includes teaching 11 Graduate level courses at GWU with roughly 300 students taught.

- Courses taught for The George Washington University at the National Geospatial Intelligence Agency, St. Louis, MO onsite; Lockheed Martin cohort in Las Cruces, NM; multiple Master's and Ph.D. cohorts in Graduate Education Center of Arlington
- Skills include high performance in public speaking and lectures with strength in connecting professional experience with course related theoretical modeling in engineering disciplines.
- Credible experience in creating/teaching graduate level curriculum and coursework. Graduate students instructed have included junior and senior engineers including Senior Executive Service (SES) and retired USAF LtGen (3 Star General).

April 2014 to April 2015

**Government, Program Executive Office Submarines, Undersea Defensive Warfare Systems, PMS 415
Washington Navy Yard, DC**

Supervisory Acquisition Manager

- Responsible for managing all PMS 415 Acquisition milestones, Gate Reviews, Contracting, Cost Estimating, S&T, SBIR/STTR, Rapid Innovation Funding, and 32 Foreign Military Sales cases.
- Supervised ten personnel within the Acquisition Division. Expertise in Navy ERP time keeping and time approving supervisory functions. Responsible to develop and maintain acquisition strategies and vision for a budget of roughly \$50M/year reporting directly to the Program Manager.
- PMS 415 includes ACAT II and III programs including multiple In Service programs. Surface Ship Torpedo Defense (SSTD) and Submarine Countermeasures are the two primary focus areas within PMS 415. The mission of PMS 415 is to ensure our Navy Fleet (surface combatant ships and submarines) has the most up to date torpedo defense capabilities.
- Responsible for SBIR/STTR management and S&T portfolio of program office related topics that have high transfer probability to USN surface ships including those operating torpedo defense operations on CVN, and Amphibious Ships (LHA, LHD, LPD, LSD).
- Performed risk assessments, trade-off analysis of S&T, SBIR/STTR development decisions with the objectives of assessing maturity of the effort, clarify the requirements, monitor compliance to Government requirements, evaluate validity and completeness of technical documentation and assess the S&T, SBIR/STTR product readiness to proceed to the next phase. Managed multiple SBIR Phase IIs that transferred successfully into torpedo defense systems currently onboard CVNs.
- Developed multiple strategic technology and acquisition roadmaps including programmatic information such as cost and resources to accomplish PEO driven goals while assessing multiple alternatives.

August 2012 to April 2014

**Government, Program Executive Office Submarines, Undersea Technology (SEA 073), Advanced Submarine Systems Development, SEA 073
Washington Navy Yard, DC**

Deputy Director of SSN/SSGN Survivability Program (S3P) & Assistant Program Manager for Contracts

- Responsible for leadership and execution of all SSN/SSGN Survivability Program (S3P) management working with N97 and the Intelligence Community on classified vulnerability analyses and assessments. Responsible for execution of all contracting activities within 073R portfolio. Develop and manage the contracting strategy for the SSN/SSGN Survivability Program (S3P) to include co-chairing the technical evaluation group and maintain the evaluation plan of various whitepapers from industry.
- Contract Officer Representative (COR) on two R&D Concept & Formulation contracts covering over \$770M of effort with the two Navy Nuclear Shipyards, General Dynamic (GD) Electric Boat Division (EB), and Huntington Ingalls Industries (HII) Newport News. These two shipyards are the sole builders of all current Classes of nuclear powered submarines for the US Navy.
- Manage and oversee cost, schedule, and technical performance of Ship Modernization efforts and concept formulation for the two contracts. Coordinate, manage, and chair all quarterly program reviews

with both shipyards. Developed contract metrics to track and inform leadership on all open contract tasks with the shipyards. Write monthly performance assessments on 12 contracts and deliver to the Contracting Officer. Closely work with NAVSEA 02 on contract surveillance. Write IPARs and CPARs for all 073 contracts. Developed new procedures for contract actions and have implemented many paper reduction and lean operation efforts to include maintaining the iNAVSEA 073 contracts webpage.

- Manage and oversee cost, schedule and technical performance of 10 Small Business Innovative Research (SBIR) contracts covering over \$8M of innovative effort. Submarine system SBIR topics include precision control, dynamic camouflaging, maneuverability, composite material, damping technology, towed SONAR array handling, software tools, and synthetic oil, all of which provide promising technological improvements to our current submarine force and capabilities.
- Represented 073 as the technical representative in the ONR FNC for submarine towed array reliability competitive evaluation panel and successfully down selected the winning proposal. Managed a STTR for particle image velocity (PIV) and acceleration measurements for hydrodynamic fluid structure interactions associated with marine vehicles which has high probability of transition to Ph III.
- While assigned to SEA 073, toured USS Minnesota (SSN 783), at HII Newport News becoming intimately familiar with the structure, modular design process, and systems of the Virginia Class Nuclear Submarine. Toured HII Newport News and GD EB shipyards to be accustomed to shipyard work and process. Toured the Acoustic Research Detachment (ARD), Lake Pend Oreille, Bayview Idaho and have become very familiar with the Large Scale Vehicle (LSV) and the Intermediate Scale Measurement System (ISMS) operations which are managed by 073.
- Developed extensive knowledge of submarine systems in development including towed array handling improvements, hydraulic elimination technologies which includes electrically actuated retractable bow planes, and Universal Launch & Recovery Module (ULRM).

August 2009 to August 2012

Government, Program Executive Office Littoral Combat Ships (LCS) Mine Warfare Program Office, PMS 495 Washington Navy Yard, DC

Assistant Program Manager (APM) for Airborne Laser Mine Detection System (ALMDS)

- Responsible for execution of the ALMDS Acquisition Category (ACAT) II program as part of Littoral Combat Ship Modernization: maintain cost, schedule and performance. Track technical performance measurements, maintain a risk database, direct, oversee, and manage 70 personnel that work on the ALMDS program including NSWC PCD Government employees, and Contractors including Northrop Grumman, ARINC, METRON, CACI, and ALION.
- Direct all LIDAR Program efforts including strategic planning, contracting, design and development, budgeting and life cycle support initiatives related to fielding a mine warfare system. Report directly to Program Manager for PMS495 and effectively communicate programmatic vision, informing senior executive personnel regarding technical matters, contractor performance and overall programmatic progress. Establish clear fiscal program plans and ensure financial and personnel resources have been identified and allocated to successfully execute program requirements.
- Extensive experience in managing acquisition policies, practices, and application in Navy programs, including the DoD 5000 series; Successfully led an ACAT II program through a Full Rate Production Independent Logistic Assessment, Led ALMDS through Developmental Testing and have prepared for and entered Operational Testing by COMOPTEVFOR.
- Followed and managed through the DoD/DoN Planning, Programming, Budgeting and Execution System (PPBES); Extensive experience in development and submittal of Program Objective Memorandum (POM) and Program Review (PR) submissions, POM and PR Issue Papers, Reclamas and briefs; Working with Other Procurement, Navy (OPN) and Research, Development, Testing and Evaluation, Navy (RDTE), and Operations and Maintenance, Navy (OMN) appropriations.
- Consistently have met acquisition reporting requirements, and successfully have produced justifiable budgets to Congress; directing and evaluating program execution performance. As the APM for an ACAT II LIDAR program, I directly report to ASN (RDA) on status of contractor performance via Dashboard, communicate programmatic risks and brief resource sponsor on emergent issues as required. Conduct contract reviews to assess progress towards incentive fee goals and generate contractual modifications as

required. Establish key program metrics and convene quarterly reviews to evaluate earned value management data and track completion of critical tasks.

- Ensure management visibility on critical technical issues and implement risk mitigation efforts on key programmatic risks. Review and coordinate development of all acquisition documentation including Single Acquisition Management Plan (SAMP), Acquisition Strategy and Test and Evaluation Master Plan (TEMP) in support of FRPDR exit criteria. Implement plans for insertion of new technology by working closely with Office of Naval Research and Naval Surface Warfare Centers to leverage advances in science and technology development through PrePlanned Product Improvements (P3I) and Engineering Change Proposals (ECP).
- Successfully participated in negotiations and awarded a \$45M LRIP contract in FY10. Completed DT in FY10 and completed Integrated Test (IT, TECHEVAL) in FY11 working closely with NAVAIR Test Pilots from HX-21 Squadron and VX-1 Operational Test Pilots. Successfully held supervision role over my Deputy in tasking and assistance in writing mid-year evaluations.
- Supervised and evaluated performance of TDA and Prime contractor via quarterly IPAR and annual CPAR and reported to leadership through quarterly execution reviews. Successfully managed over \$90 Million (OPN, RDTE, and OMN) of Test and Evaluation, production, and maintenance requirements for an ACAT II program. Trained and used Enterprise Resource Planning (ERP) as program manager on a weekly basis.
- Completed COR training to remain aware of COR duties and to understand the newest NAVSEA contract management policies per NAVSEA INST 4200.17D. Experience in Foreign Military Sales (FMS) and Direct Commercial Sales (DCS) of LIDAR systems.
- Four ALMDS production units were recently procured through DCS by the Japan Maritime Self Defense Force from Northrop Grumman (the prime Contractor I managed). There is a small portion of this effort that is FMS. The logistics support: training material, post mission analysis hardware and software, and training hardware is bought through an FMS case that I managed.

August 2008 to July 2009

**Government, Expeditionary Warfare Division (N85), OPNAV, Mine Warfare Branch, N852
Pentagon, Washington DC**

Requirements and Resource Assistant for the Organic Airborne Mine Countermeasures (OAMCM)

- Served at ND- 05 level as Requirements and Resource Assistant for the Organic Airborne Mine Countermeasures (OAMCM) programs consisting of 5 major ACAT II systems with high congressional visibility.
- Directly responsible for strategic planning, primary development, and critical staffing of the U.S. Naval Mine Countermeasures (MCM) Plan covering the future mine warfare (MIW) programs, vision, roadmap, and budget for the FY10 and FY11 FYDP budget cycles. The MCM Plan requires approval signature, and adjudication of issues from OSD USD (AT&L), CJCS, JCS (through JCIDS), SECNAV, USMC, CNO, VCNO, FMB, OLA, ASN (RDA), N8, N6/N7, CFFC, CMWC, CNSL, and numerous others. Resolved all comments through multiple revisions of each MCM Plan.
- Developed broad knowledge of the JCIDS review process and Joint Staff approval procedure through staffing of the MCM Plan and numerous other requirements documents. Supported technical reviews and contributions to legacy ORDs, MIW CONOPS, ICDs, CDDs, and CPDs for the MCM programs.
- Critical MIW representative on naval and joint working groups and Integrated Product Teams (IPTs) coordinating MIW objectives and initiatives within OPNAV and the joint services and ensuring MIW visibility and Ship Modernization is a key component of the Sea Shield Pillar.
- Provided daily professional and technical systems engineering advice to the N85, USMC Major General office and responded to N8, CNO, SECNAV, and OSD tasking. Researched and produced information and action memorandums concerning issues and questions for the MIW Branch which defend budgeted MCM systems allowing the Navy to maintain funding and execution of vital MIW programs.
- Generated numerous Power Point presentations for N852 for both Navy review and Joint review. My presentation materials have been used to brief senior leadership of the Navy including CNO, VCNO, N8, and DNS.

September 2006 to August 2008

**Government, Naval Surface Warfare Center Panama City Division (NSWC PCD)
Panama City, FL**

ALMDS Deputy Project Engineer, Lead Electrical Engineer for LIDAR, Contract Officer Representative

- ALMDS Deputy Project Engineer, Lead Electrical Engineer, Contract Officer Representative with the joint responsibility for successful integration of the ALMDS to the MH-60S Helicopter through Developmental Testing and Production.
- As Deputy Project Engineer, managed and coordinated engineering, logistics, tactics, schedule, budget, planning, performance reports, and programming of ALMDS resources. Experience in executing and leading multi-disciplinary engineering IPTs. Conducted weekly coordination with the Assistant Program Manager at PMS495. Extensive experience in creating, managing and tracking government and contractor programmatic metrics including risks, hazards, cost, schedule and technical performance.
- As lead flight operator, flew 13 flights with over 30 hours in the MH-60S helicopter as the ALMDS LIDAR operator. Qualified in Flight Physiology, Underwater Helicopter Egress training, and swim qualifications as an helicopter crewman.
- As Contract Officer Representative (COR), co-wrote multiple Statements of Work (SOW), led request for proposal efforts (RFP), contract proposal technical evaluation, and maintained EVMS metrics. Participated with Contracting Officer in negotiating a \$25M Low Rate Initial Production Contract to Northrop Grumman for three LRIPs.
- As lead Electrical Engineer for LIDAR, conducted electromagnetic interference (EMI) and power testing on ALMDS to test its compliance with MIL STD 461E and MIL STD 704A. Reviewed multiple design drawings, participated in Acceptance Testing Procedures (ATP) and Physical Configuration Audits (PCA) of the hardware and software of ALMDS.
- Filling these roles provided expert experience in systems engineering and execution, development, production, and the planning and operational testing efforts that go into fielding and supporting the life cycle of an acquisition program in the United States Navy.

September 2005 to September 2006

**Government, Expeditionary Warfare Division (N85), OPNAV, Mine Warfare Branch, N852
Pentagon, Washington DC**

Requirements and Resource Assistant for the Organic Airborne Mine Countermeasures (OAMCM)

- Served as the Requirements and Resource Assistant for the Organic Airborne Mine Countermeasures (OAMCM) programs consisting of 5 major ACAT II systems with high congressional visibility. Directly responsible for strategic planning, primary development, and critical staffing of the U.S. Naval Mine Countermeasures (MCM) Plan covering the future mine warfare (MIW) programs, vision, roadmap, and budget for the FY07 and FY08 FYDP budget cycles.
- Broad knowledge of the JCIDS review process and Joint Staff approval procedure through staffing of the MCM Plan and numerous other requirements documents. Supported technical reviews and contributions to legacy ORDs, MIW CONOPS, ICDs, CDDs, and CPDs for the MCM programs.
- Key stakeholder in the development and execution of an acquisition change for the Airborne Laser Mine Detections System which was approved at N85 to change ALMDS from a single step acquisition program to an Incremental evolutionary acquisition program.
- MIW representative on naval and joint working groups and Integrated Product Teams (IPTs) coordinating MIW objectives and initiatives within OPNAV and the joint services and ensuring MIW visibility as a key component of the Sea Shield Pillar.
- Provided daily professional and technical advice to the N85 office and responded to N8, CNO, SECNAV, and OSD tasking. Researched and produced information and action memorandums concerning issues and questions for the MIW Branch which defend budgeted MCM systems allowing the Navy to maintain funding and execution of vital MIW programs.

July 2001 to September 2005

Government, Naval Surface Warfare Center Panama City Division (NSWC PCD)

Panama City, FL

Electrical Engineer, Co-Op

- Conducted research, development, and engineering in various Airborne Mine Countermeasure programs. Trained in the logistics, research, and engineering development processes of U.S. Naval Airborne Mine Countermeasures acquisition. Conducted developmental testing of the Airborne Mine Neutralization System, Airborne Laser Mine Detection System LIDAR, Organic Airborne Surface Influence Sweep, Unmanned Surface Vehicle Sweep; all of which are used in either locating or neutralizing underwater mines.
- Developed extensive experience with hands on engineering and at sea testing. Extensive experience with prototyping and manufacturing Naval airborne, surface, and underwater designs.
- Applied for and received U.S. Navy Patent# 6851381B1; Co-Inventor of AMNS Pressure Relief Valve Feb 2005

September 2000 to July 2001

Nix Engineering Inc.

Panama City, FL

AutoCad Technician/Draftsman

- Created electrical drawings following NEC (National Electrical Code) guidelines for commercial, public, and government construction projects in Florida, South Carolina, Alabama, and Georgia. Reviewed and approved electrical schematics and wiring diagrams.
- Expert in AutoCad 14 as electrical engineering draftsman. Many elements of systems engineering learned and practiced in this position. Job required job site visits to analyze overall impact of electrical designs put on paper that would be part of an overall system design.

December 1998 to June 2000

Pate Electric Inc.

Panama City, FL

Electrical Apprentice

- Served as an electrician in commercial and industrial construction. Received full time on-the-job and classroom training as an electrician apprentice.
- Professional installation of conduit, high voltage and low voltage wiring, panel boards, switch gears, transformers, specialized electronics, in hospitals, military installations, commercial buildings, and civil engineering outdoor applications.
- Installation and checkout experience in industrial, commercial, and military construction projects including high voltage, low voltage, communications, networks, fire alarm systems, security/intrusion detection systems, HVAC control systems, and fiber optic installation and termination techniques.

PUBLICATIONS & CONFERENCES

Georgiadis, D.R., Pruitt, T., & Papciak, J., (2005). U.S. Patent No. 6,851,381. Airborne Mine Neutralization System, Neutralizer Pressure Relief Valve, Washington, DC: U.S. Patent and Trademark Office, Feb 8, 2005, US Navy

Georgiadis, D.R., Mazzuchi, T.A., & Sarkani, S., (2011). Using Multi Criteria Decision Making for Analysis of Alternatives in System Design, National Defense Industry Association (NDIA) Expeditionary Warfare Conference, "Integrating Future and Present Capabilities, Oct 25, 2011, Panama City, FL

Georgiadis, D.R., Mazzuchi, T.A., & Sarkani, S., (2012). Using Multi Criteria Decision Making in Analysis of Alternatives for Selection of Enabling Technology, INCOSE Journal of Systems Engineering, Vol.16, No. 2

Georgiadis, D.R., (2013). Using Multi Criteria Decision Making in Analysis of Alternatives for Selection of Enabling Technology (published doctoral dissertation). The George Washington University, Washington DC

Georgiadis, D.R., et al., (2015). Laser Peening of Ship Structures to Reduce Production Costs, National Shipbuilding Research Program (NSRP) Final Report, Hepburn and Sons LLC, Technology Investment Agreement #2015-446

Georgiadis, D.R., (2016). Contributing Author of Military Standard, MIL-STD 4023, High-Altitude Electromagnetic Pulse (HEMP) Protection for Military Surface Ships, Defense Threat Reduction Agency (DTRA) support at Hepburn and Sons LLC

Georgiadis, D.R., (2016). Laser Peening of Ship Structures to Reduce Production Costs, Technical Sessions Conference Presentation, SHIPTECH 2016, Feb 29-Mar 2, 2016

Georgiadis, D.R., et al., (2016). Mitigation of Stress Corrosion Cracking, Cavitation Erosion & Forming Complex Shapes Using Laser Peening, National Shipbuilding Research Program (NSRP) Day Conference, Washington Navy Yard, Washington DC, Oct 25, 2016

Georgiadis, D.R., (2017). Medium Voltage Direct Current Grounding Method, Final Report, Small Business Technology Transfer Program, contributing author at Hepburn and Sons LLC

Georgiadis, D.R., et al., (2017). Laser Peening Metal Enhancement Critical for Component Lifetime, Industrial Heating, Thermal Processing Technical Journal, Nov 7, 2017

Georgiadis, D.R., Hepburn, R.D., Lahrman, D.F., Dulaney, J.L., (2017). US Patent Application No. 15,484,184, Method and Apparatus for Laser Shock Peening Ballistic Armor

Georgiadis, D.R. & USN CAPT (ret.) Porter, W., (2017). Laser Peening Projects, National Shipbuilding Research Program (NSRP), All Panel Meeting Conference, Ship Design & Material Technologies, Mar 7-9, 2017

Georgiadis, D.R., (2017). Insulated Bus Pipe, Introduction & Discussion of ABS Type Approval Process, American Bureau of Shipping (ABS) Seminar, Houston, TX, Oct 27, 2017

Georgiadis, D.R., (2017). Foundational Technology for Scanning & Laser Peening in Shipyards, American Bureau of Shipping (ABS) Seminar, Houston, TX, Oct 26, 2017

Georgiadis, D.R., (2017). Foundational Technology for Scanning & Laser Peening in Shipyards, National Shipbuilding Research Program (NSRP) Day Conference, Washington Navy Yard, Washington DC, Sep 28, 2017

Georgiadis, D.R., et al., (2017). Mitigation of Stress Corrosion Cracking, Cavitation Erosion & Forming Complex Shapes Using Laser Peening, National Shipbuilding Research Program (NSRP) Final Report, Hepburn and Sons LLC, Technology Investment Agreement #2016-434

Georgiadis, D.R., Ford, B., Hepburn, R., (2018). Insulated Bus Pipe, Revolutionary Alternative to Cables for Shipboard Power Distribution, Advanced Machinery Technology Symposium (AMTS), Mar 28-29, 2018, Hosted by the American Society of Naval Engineers (ASNE)

Georgiadis, D.R., Hoffman, E., Bovid, S., Parker, F., (2018). Using Laser Peening to Improve Shipbuilding and Material Life in Maritime Industry, Advanced Machinery Technology Symposium (AMTS), Mar 28-29, 2018, Hosted by the American Society of Naval Engineers (ASNE)

Georgiadis, D.R., (2018). Insulated Bus Pipe, Revolutionary Alternative to Cables for Shipboard Power Distribution, SHIPTECH 2018, Shipbuilding Processes & Technologies, Mar 28-29, 2018