**Daniel R. Forster**

LinkedIn: www.linkedin.com/pub/daniel-forster/73/a18/b11/

40497 County Road 152 240.434.1604

Albany, MN 56307 DForster315@outlook.com

**Systems Engineer**

Proactive leader with 7+ years of experience handling high-profile defense projects; holds Department of Defense Secret Security Clearance. Provides R&D, aerospace, test, project and systems engineering support for critical initiatives with no margin for error. Experience with fielding weapon systems, managing program risk, projectile accuracy modeling, commercial modifications for special mission programs, and analysis of alternatives studies. Specialized work with smart sensor applications and aircraft weapons carriage. Analyzes test and legacy data to create clearly written manuals and other documentation, identify errors, and reduce risk. Presents findings to internal leadership, military officials, and contractors. Delegates tasks to team members while managing resources to improve productivity. Regularly beats projected deadlines for assignments and training programs. Serves as a technical area expert in air-vehicle performance modeling, mission planning systems, and propulsion integration in support of Joint Strike Fighter and P-8A development and acquisition; also functions as an airworthiness technical authority responsible for approving flight clearances and conducting safety assessments associated with developmental test. Technical and programming knowledge includes:

MS Office Suite ▪ VersaCAD ▪ Solid Works ▪ OpenFX ▪ Wiki-site ▪ Office Live Small Business

C++ ▪ FORTRAN ▪ LabVIEW ▪ Mathematica ▪ MATLAB ▪ Simulink

**Career History**

**U.S. Navy Naval Air Systems Command (NAVAIR)** Patuxent River, MD

*Government organization that develops and provides service support to aeronautical and technology systems.*

***Air Vehicle Performance Engineer*** 2008 to Present

Supports multiple aircraft program offices (P-8, Advanced Airborne Sensor, P-3, EA-6B, Joints Strike Fighter, and C-130J) as the air vehicle performance technical area expert. Reviews and approves fleet and flight clearance requests. Provides specification tracking status reports, comparative assessments, reviews test data, produces and certifies performance models, chart data, and digital planning products. Follows established formats, Standard Work Packages, and delivery methods for all delivered products. Communicates data requirements, tracks aircraft configuration and test analyses to ensure quick turnarounds of safety approvals, and writes operator bulletins and advisories. Presents briefs and product study results to directors, provides technical directions to contractors, and allocates tasks. Collaborates with other technical leads in order to resolve engine to vehicle integration issues and ensure customer requirements are can be met.

* **Lead Aircraft Performance Engineer for Special Mission Programs for the P-8A,** managing aircraft integration, performance spec compliance and real time development and test of the Advanced Airborne Sensor Program – Boeing & Raytheon contract.
* **Led efforts to resolve important airspeed display issues on a COTS aircraft platform;** directed discussions with government agencies, contractors, and military leaders; generated limitations on aircraft to leverage charts in the existing flight manual while not impinging significantly on fleet and test team, assessed safety margins, and implemented initial limitations within 24 hours of discovery; researched legacy aircraft to determine how existing programs managed similar risks.
* **Served as lead engineer of the first-ever in-house partial certification program** for the P-8A aircraft Onboard Performance Tool, a modified commercial product, to ensure it met U.S. Navy standards; created test matrix, reviewed scope, and tracked timeline to grant limited certification within two months.
* **Revised post-maintenance check procedures for large aircraft** following the discovery of issues with stall warning systems and documentation that improved accuracy of results and confidence in future configuration tracking and resulting maintenance actions without causing delays.
* **Nominated for Navy Air Vehicle Engineer of the Year Award.**

***Flight Test Engineer*** 2010

Provided real-time load monitoring support for flutter flight tests. Supported test plan writing efforts, data generation, and reviews that delivered metrics for tracking flight test progress pathways. Assisted with scheduling, training, and briefings. Attained flight status and project specialist certification for two specialties as well as completed survivability training.

* **Guided a review of an Experimental Flight Test Manual** that was initially a compilation of technical data; cooperated with a local project officer and utilized technical publications to expand manual with new material.
* **Identified test progression obstacles and schedule discrepancies** that could have delayed testing for up to a week through attending multiple scheduling meetings and participating in metric tracking efforts.
* **Examined strength and load parameters during flight as well as trends during day-to-day test operations** after obtaining certification to fill in manpower gaps; was able to assist in multiple functions in ways others couldn’t and earned a promotion as a result of the work.

**Daniel R. Forster**

LinkedIn: www.linkedin.com/pub/daniel-forster/73/a18/b11/

40497 County Road 152 240.434.1604

Albany, MN 56307 DForster315@outlook.com

**Career History**

**U.S. Navy Naval Air Systems Command (NAVAIR) – Continued** Patuxent River, MD

***Flight Dynamics Engineer*** 2008

Tracked flight and wind tunnel tests and analyzed results and program risks, presenting results upon request. Reviewed clearance requests against envelope expansion test efforts to ensure safety. Examined legacy data analysis tools and produced user guides for future users.

* **Addressed data reporting problems with a legacy wind tunnel MATLAB GUI tool** by working with original script writers to improve data plot generation and create new documents with screenshots, and nomenclature.
* **Monitored risks to the E2-D program, taking the initiative to clarify and research means to mitigate them**; wrote a cautionary memo to the test community and operators upon the discovery of a new risk, which resulted in resolution upon proper implementation and communication.
* **Expanded upon a post-test E2-D wind tunnel report** that contained information from a test that took place over three years prior and was previously only 10% complete; expanded existing outline, compiled source data into sections within the report aligning with the online document, and converted it into a standard Navy format.
* **Updated and expanded a legacy flight test-tracking tool to allow completion of a day’s work in an hour** using a new template that ported data into plots and tracking sheets and caught potential concerns earlier.

***Fixed Wing Performance Engineer*** 2007 to 2008

Progressively attained more responsibility while completing engineering training and assignments involving program (P-8, P-3, C-130, and EA-6B) aircraft. Managed aerodynamic and propulsion databases with mass property definitions necessary to review and produce flight vehicle performance characteristics for fleet mission planning products. Conducted performance analysis for platform programs, including milestone decisions, test planning, analysis, and other needs.

* **Generated a new series of emergency fuel charts for the EA-6B manual** that provided an expanded capability that did not exist within legacy charts; created an updated analysis model and aligned model to published performance to attain proper calibration and leave no margin of error and a Word template that matched existing charts.
* **Assisted in designing an effort to test “bent” aircraft**, which didn’t fly like others in the fleet and imposed special limitations, by generating an in-depth analysis on safety margins that existed in all flight operations for the P-3 aircraft, which accelerated the clearance process and returned planes to operations faster.
* **Independently built a takeoff/landing model and briefed a Navy commander on procedural revision options** that could reduce operator risk following an investigation of a field abort mishap involving EA-6B Prowler aircraft and ongoing runway overrun concerns.
* **Finished individual development plan ahead of schedule** despite extended rotation work and few training opportunities; joined intern council and took measures to improve educational materials, develop welcome packages, and conduct tours; participated in career fairs and meet-and-greet conferences.

**Education & Affiliations**

**Bachelor of Aerospace Engineering & Mechanics**, University of Minnesota

Defense Acquisition University Certification

Level III: Systems Planning, Research, Development, and Engineering - Systems Engineering

Level I: Program Management

Airplane Flight Dynamics: Open & Closed Loop, University of Kansas

Operational Aircraft Performance and Flight Test Practices, University of Kansas

Modern Design of Experiments, NASA

Journeyman Leadership Development Program graduate

Engineering and Scientist Development Program graduate

“Aircraft Dynamics, Handling Qualities, and PIO” short course, Aerospace Control and Guidance Systems Conference (ACGSC)

Aviation Survivability Training, Aviation Survival Training Center - Patuxent River

Private Pilot Ground School, NAS PAX Flying Club

Supporter of Toys for Tots Marine Corps Shooting Tournament

Outdoors and Firearms advocate