

**MR. ROBERT E. DVORAK, P.E.**

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**EDUCATION, TRAINING AND UNIQUE QUALIFICATIONS**

**B.S., Naval Architecture/Marine Engineering**, Webb Institute of Naval Architecture 2007  
-Rank : 1, Average: 96  
**M.S., Naval Architecture/Marine Engineering**, MIT 2009  
**M.S., Transportation**, with a specialization in Ocean Systems Management, MIT 2009  
-Awarded the NDSEG Fellowship for Naval Architecture  
**Principles of Engineering Exam** 2013  
-Naval Architecture and Marine Engineering  
**Top Secret Clearance (Valid through Sept 2015)** 2010  
**Completed SUBSAFE, Fly-by-Wire, IA, OpSec, PII, and NATO Training** 2013  
Computer Skills: **AutoCAD, GHS, POSSE (HECSALV), ALGOR, PC-SHCP, Microsoft Excel, Word, Power Point, Project, ASSET, FastShip, MaxSurf, Rhino, Java, C++, VBA, MathCAD, LabView, MatLab, Maple**

**PROFESSIONAL SUMMARY**

Mr. Robert Dvorak has been **providing on-site engineering and programmatic support to PMS397 for over three years.**

**WORK HISTORY/PROFESSIONAL EXPERIENCE**

**Orbis, Inc., Washington, DC** **August 2009 - Present**  
Provides support to the business development team. Drafts entire technical sections for a variety of large contracts (including SEA04P, SEA04L, SEA04X, Team SUB, and MSC) as a company Subject Matter Expert, leads efforts as the Capture & Proposal Manager on multiple proposals, participates in Red Team reviews and the editing of proposals to ensure contractual compliance. Other duties include mentoring new-hire employees, preparing burn charts, approving timesheets and leave for several employees, and compiling monthly reports.

***Naval Architecture SIT and Weights & Stability SIT*** **March 2012 - Present**  
Provides on-site engineering and programmatic support to the PMS397 Concepts Major Area Integration Team (MAIT) leader. Supports the integration and implementation of programmatic and technical decisions for the “design, build, sustain” team. Works on several issues supporting the OHIO Class Replacement Program Naval Architecture Concepts Group including stability, weight reports, equilibrium polygon, reserve buoyancy, solid ballast, weight margin, tankage, ship length studies, and commonality. US and UK Naval Architecture SIT Leader.

***Principal Naval Architect*** **April 2012 – June 2012**  
Performed various calculations on a Hydrographic Survey Launch including required and minimum section modulus, hull moment of inertia, and ABS and ISO requirements. The analysis was completed to determine the effect of the installation of a sonar transducer in the keel.

***Dry Combat Submersible – Light Design Team*** **March 2012 – June 2012**  
Member of a three-person team for the Dry Combat Submersible – Light design effort for SOCOM. Orbis is the lead for certification to P9290 requirements and the system safety plan along with determining the cost and technical differences between certifying to commercial classification societies (e.g. ABS) versus NAVSEA standards.

***Missile Tube Integration SIT*** **November 2009 – March 2012**  
Provides on-site engineering and programmatic support to the PMS397 CMC Major Area Integration Team (MAIT) leader in support of the Prototype and Tactical Missile Tube design.

Member of several working groups supporting the OHIO Class Replacement Program Mechanical Systems Group including interface coordination, specification review and various System Integration Teams. PMS397 representative on the Missile Service Unit Working Group. Site visits to Electric Boat in Groton, CT, Quonset Point, RI, SUBASE in New London, CT, TRIDENT Refit Facility (TRF) in Kings Bay, GA, and Cape Canaveral Air Force Station.

*Assistant Facility Security Officer*

*May 2010 - Present*

Manages the badging and security for over 60 employees. Responsible for processing clearances through e-QIP and JPAS from application to final eligibility, conducting indoctrination (e-Verify Program Administrator), refresher and exit briefings as required, tracking and updating visitor authorization letters, and reviewing and writing DD254s.

### **American Bureau of Shipping, Houston, TX**

**2007**

**Naval Architecture Intern:** Mr. Dvorak performed hydrodynamic studies on the LCS, Egyptian fast missile craft & Indian offshore patrol boat. He analyzed many different speeds and headings in various sea states and produced response amplitude operator (RAO) curves & determined the vertical bending moment & shear force, and lateral & vertical accelerations at the bow. His report detailed those conditions that were deemed acceptable and those that needed further analysis.

### **NSWCCD, West Bethesda, MD**

**2006**

**Naval Architecture Intern:** Mr. Dvorak participated in the concept design of a fast heavy lift trimaran for seabasing which led to the paper, 'Joint High Speed Truck.' Working as part of a team including Navy personnel and civilian employees, he participated in the AoA, CONOP development, and the interaction with the seabase. This led to the mission of deploying a Marine Expeditionary Brigade (MEB) from the seabase to the shore as quickly and safely as possible. He extensively modeled and animated the trimaran in Rhino 3D.

### **MSC: USNS Rappahannock, Pearl Harbor, HI**

**2005**

**Engine Cadet:** Mr. Dvorak completed an extensive report on the USNS Rappahannock (T-AO 204) including tracing every system of the ship and drafting original schematics and arrangement drawings. While on board, he was involved in operations to resupply many ships including the USNS Mercy (on her way to help the tsunami victims), frigates, destroyers, and Canadian vessels. This included operations at night, and both CONREP and VERTREP. He also participated in the replacement of a cylinder liner and piston on the starboard main engine.

### **Baltimore Coast Guard Yard, Baltimore, MD**

**2004**

**Machine Shop Intern:** Mr. Dvorak worked for several departments on site including the machine, ordnance, structural, and electrical shops. He participated in the dry-docking and removal of the tail shaft of a *Famous* class cutter. He disassembled, overhauled, and reassembled several deck guns for the *Reliance* class cutters & assembled several electronic control modules.

## **PUBLICATIONS**

Dvorak, Robert. *Engineering and Economic Implications of Ice-Class Containerships*. Dual MS Thesis. Massachusetts Institute of Technology, Cambridge, MA, 2009. Print.

Dvorak, Robert and Carr, Brendan. *Trimaran Interference Effects*. BS Thesis. Webb Institute of Naval Architecture, Glen Cove, NY, 2007. Print.

Dvorak, Robert, Lee, Tom, Marra, Joseph, and Brown, Michael. *Joint High-Speed Sea Truck*. NSWCCD. May 2006.

## **AWARDS**

Letter of Appreciation from the OHIO Replacement Program (PMS397) for being "a key contributor and leader in the design development of the OHIO Replacement" and playing "a major role in the OR Program through his responsibilities as both the Naval Architecture SIT [Systems Integration Team] and Weights SIT Leader." CAPT Brougham. 01 March, 2013.