# Thomas Bock, Ph.D.

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# OPERATIONS RESEARCH ANALYST | MILITARY ANALYST | DATA MANAGER | M&S ANALYST

Award-winning Operations Research | Military Analyst and Leader with over 20 years' experience in business processes and systems analysis for commercial and government clients. Effective communicator, facilitator, and change agent with ability to collaborate with executive management, champion critical initiatives, and lead key efforts to improve processes across global enterprises. Clients and organizations include: Accenture | American Systems | BAE Systems | CACI | Cervello Global Corporation | Kapsuun Group | Kern Technology Group | Nakupuna Solutions | SAIC | SRC || Department of Defense (DoD) | North Atlantic Treaty Organization (NATO). Active \*\*TOP SECRET\*\* clearance.

Support government and commercial programs to streamline processes and enhance decision-making capabilities. Integrate ERP, C5ISR, DoDAF, and cloud-based environments and execute/guide/lead legacy systems conversions and global project activities. Acknowledged reputation as Subject Matter Expert (SME) regarding data practices; known for ability to identify, implement, and maintain processes, standards, and formal methodologies. Expertise includes:

- ♦ Operations Research Analysis
- ♦ Modeling and Simulation
- ♦ Digital Asset (Data) Management

- ♦ Extraction-Transformation-Loading
- ♦ Systems Integration
- ♦ Test and Evaluation

# Official Recognition:

- Received CACI's "Encore Excellence" award for exceeding customers' expectations & results in excellent customer service.
- Achieved **BAE Systems** 2011 "Chairman's Award" for "excellence in delivering benchmark performance solutions" in the Systems Engineering Solutions category (for automated **TRADOC** reporting system).
- Selected by executive team (4-star admiral & 3-star general) to receive NATO SACLANT July 2003 "Employee of the Month" award for successfully transitioning from maritime Atlantic HO to Allied Command Transformation (ACT).

Education: Ph.D., Engineering Management, Old Dominion University, Norfolk, VA, 2014 M.E., Modeling and Simulation, Old Dominion University, Norfolk, VA, 2008 B.S.B.A., Information Systems, Old Dominion University, Norfolk, VA, 1999

#### PROFESSIONAL EXPERIENCE

# NAKUPUNA SOLUTIONS, Honolulu, HI

July 2022-present KAPSUUN GROUP, Lorton, VA (transferred to NAKUPUNA SOLUTIONS in Jul 2022) February 2021-July 2022

Senior Data Analyst (Lead)

Support the Naval Safety Center (NAVSAFECEN) with delivering the Navy's Risk Management Information (RMI) application; function as key contributor for examining legacy data prior to RMI migration.

- Lead the data integration/mapping team and provide leadership & management oversight; serve as customer liaison and plan execution of all data migration aspects to ensure NAVSAFECEN's expectations are met or exceeded.
- Engage with program stakeholders to coordinate project scheduling activities and determine deliverables; analyze complex data sets and validate source-to-target mapping, SOL scripts, and VBA code/Alteryx workflow as part of transformation routines.
- Develop extraction-transformation-loading (ETL) procedures (using Alteryx Analytics Automation Platform) to convert legacy data into the RMI target system; collaborate with system administrators and test engineers to resolve data migration issues.
- Update and maintain metadata repositories and data dictionaries; support implementation of all business requirements throughout the systems development life cycle (SDLC).
- Demonstrate ability to work independently, collaboratively, creatively, and analytically; identify, communicate, and manage emerging project issues: implement corrective actions and mitigation strategies.

# **Key Accomplishments:**

Created a fully automated data migration tool/workflow to support the legacy data conversion for the RMI shipyard project; embraced the 'Agile' methodology to effectively fulfill stakeholder's schedule and delivery of emerging project requirements [Contractor Performance Assessment Report (CPAR) Quality & Management was rated "Exceptional"].

# CACI, Norfolk, VA Naval Operations Research Analyst / Statistician

May 2018-January 2021

Supported the Naval Forces Logistics (NFL) program at U.S. Fleet Forces Command (USFFC); analyzed special projects in support of Force Development (Fd), Force Generation (Fg), Force Employment (Fe) as well as Fleet readiness and maintenance.

Responsible for conducting statistical research and analysis; established innovative assessment processes and ensured proposed initiatives met the command's campaign objectives.

# PROFESSIONAL EXPERIENCE, Continued

#### CACI, continued

- Developed informative metrics addressing specific problems and facilitated decisions to improve warfighting readiness; accountable for the adequacy of the statistical methods selected and the accuracy of the results obtained.
- Collected and screened data from a variety of sources; critically analyzed command-wide trends and interpreted fluctuations in support of USFFC's Optimized Fleet Response Plan (OFRP).
- Leveraged analytical methodologies to support quantitative and qualitative analysis, optimization, and process improvement; determined any limitations in terms of reliability or usability.
- Conducted studies and proposed courses of action (COA) in order to mitigate capability gaps; prepared reports and published white papers for assigned projects.

#### **Kev Accomplishments:**

- Developed a corporate database to support USFFC's 4-star led "Operationalize the Staff" initiative; as part of digital transformation, the **Chief of Naval Operations** (**CNO**) lauded effort during the CNO-led Navy Corporate Forum (NCF).

#### AMERICAN SYSTEMS, Suffolk, VA

July 2017-May 2018

# Lead Test Engineer

Supported the **Joint Test Unit (JTU)**; established analysis methodology of the *Joint Laser Systems Effectiveness* (JLaSE) joint test; led assessments applying mathematical, statistical, and other scientific methods to evaluate targeting procedures for high energy laser (HEL) weapon systems; conveyed that testing conclusions & recommendations are fully supported by test results.

- Assisted subject matter analysts (SMAs) with requirements identification for target vulnerability analysis, weapon capabilities assignment, feasibility assessment, and effects estimate; defined asset & target interactions (ATIs).
- Determined quantitative & qualitative test measures and developed dendrite decomposition; obtained desired level of data for evaluation of capability gaps and program requirements; coordinated the development of use cases/mission threads.
- Guided the production of data management analysis plans (DMAPs); applied human factors engineering (HFE) in support of survey and questionnaire design; communicated findings to senior management and key program stakeholders.
- Trained team members on topics such as design of experiments (DOE), instrumentation planning, and statistical analysis methods; coordinated and facilitated data collectors' training.

#### **Kev Accomplishments:**

- Obtained qualification as *Collateral Damage Estimation* (CDE) Analyst – completed course requirements at **Joint Targeting School (JTS)**.

#### CERVELLO GLOBAL CORPORATION, Suffolk, VA

May 2016-July 2017

#### Senior Systems Engineer

Supported the Coalition Interoperability Assurance and Validation (CIAV) Working Group of the **Joint Interoperability Test Command (JITC)** regarding **NATO** and **U.S.** military standards.

- Ensured a succinct exchange of critical warfighting data between the **United States** and multiple Coalition partners.
- Validated both data and systems interoperability of authorized Coalition Mission Threads (CMT); assessed standardized operational requirements in support of the Afghanistan Mission Network (AMN).
- Determined the feasibility of using the National Information Exchange Model (NIEM) conformant eXtensible Markup Language (XML) for exchanging data in an unmanned systems environment.
- Reviewed **DoD**, **Chairman of the Joint Chiefs of Staff (CJCS)** instructions and CCMD guidance issuances for their impact to support coalition operations involving the mission partner environment (MPE) and federated mission networking (FMN).

# **Key Accomplishments:**

- Initiated and led an integrated project team (IPT) which facilitated the development of a U.S. Strategic Communications Guide (SCG); delivered SCG product significantly ahead of schedule.

# AMERICAN SYSTEMS, Suffolk, VA

June 2014-May 2016

# Senior Operations Research Analyst

*Project #1*: Supported the **Army Test and Evaluation Command (ATEC)** test director with development of the test concept and overarching test strategy to address program issues as part of the *Joint Assessment Doctrine Evaluation* (JADE) quick reaction test; provided revision recommendations and inputs for Joint Publication (JP) 3-0 and JP 5-0; proposed changes for joint training and education on conducting operation assessment.

*Project #2*: Supported the **Joint Test Unit (JTU)**; responsible for operations research analysis of the *Joint Fiber Laser Mission Engagement* (J-FLaME) joint test; synthesized data collection, test issue resolution, post-test data analysis; developed, integrated, and evaluated tactics, techniques, and procedures (TTP) for the planning/execution/de-confliction of directed energy laser (DEL) capabilities in the joint battlespace (air defense and joint fires missions).

#### PROFESSIONAL EXPERIENCE, Continued

#### KERN TECHNOLOGY GROUP, Virginia Beach, VA

August 2013-May 2014

**Researcher / Innovator** (part-time)

Provided research expertise and innovative solutions to **Kern Technology Group** (**KTG**) in support of various projects sponsored by the **Office of Naval Research** (**ONR**); research activities focused on strategy, management, and system modeling in the technology sector; applied regular expression (RegEx) pattern analysis & deciphering to facilitate automation of data parsing/reduction and data transformation routines.

# **AMERICAN SYSTEMS,** Norfolk, VA (transferred from **SAIC** in Nov 2012)

**May 2012-January 2014** 

Senior Modeling Simulation Analyst

Assessed joint and naval acquisition programs at **Commander Operational Test and Evaluation Force** (**COMOPTEVFOR**); evaluated measures of effectiveness and critical operational issues of the Air Intercept Missile (AIM)-9X-2 program; assessed design of experiments (DOE) testing techniques; reviewed orthogonal designs and associated factors, levels, and response variables. Established program accreditation framework (i.e., Accreditation Plan/Report) in accordance with **DoD** standards.

#### BAE SYSTEMS, Fort Eustis, VA

March 2010-May 2012

Data Manager / Systems Analyst V

Guided/led efforts at **U.S. Army Training and Doctrine Command** headquarters (**TRADOC** HQ); functioned as subject matter expert (SME) on **Army** Data Steward requirements and decision processes within **TRADOC** Chief Knowledge Office (TCKO). Redesigned existing process and developed automated reporting regarding critical events for the **TRADOC** Operations Center (TOC); delivered initial operating capability (IOC) in less than 6 months.

# SCIENTIFIC RESEARCH CORPORATION, Suffolk, VA

May 2006-March 2010

Data Manager / Senior Analyst

Supported the **Joint Test Unit (JTU)**; assisted the Warfighter in solving operational problems through the development of tactics, techniques, and procedures (TTP). Provided key feedback and generated recommendations to **DoD** Architecture Framework (DoDAF) and DoDAF Architecture Repository System (DARS) working groups responsible for modifying architecture framework; instrumental in transitioning **DoD** to new generation of net-centric and data-centric capabilities.

# THE SIGMON GROUP, Norfolk, VA (acquired by Phoenix Group in May 2008)

January 2003-March 2006

Consultant / Systems Analyst III

Provided functional and technical consulting expertise to joint and multi-national military HQ reorganization project (NATO) for the organizational transition and strategic realignment from Allied Commander Atlantic (ACLANT) to Allied Command Transformation (ACT). Interpreted, produced, and presented results/recommendations to senior military and civilian decision makers. Conducted planning interviews with cross-functional teams (CFTs) to develop & integrate strategic work plans.

# ACCENTURE, Washington, DC

December 2000-September 2002

Consultant

Directed efforts as data readiness team leader and technology consultant on both domestic and international multi-million dollar ERP and SCM data migration projects (EMC Corporation & McGraw-Hill Publishing); assessed current processes, developed recommendations, and supported data cleanup activities in legacy systems, performed extraction-transformation-loading (ETL) in Oracle and Windchill for each test fire mode; identified and resolved system process and performance defects.

# MILITARY SERVICE

#### GERMAN NAVY, Norfolk, VA

1995-1999

Full-Time Student / Internship, Data Flow Management, Virginia Port Authority

Established office administration at new \$8M high-tech military simulation facility (**MarineSafety Int'l**) in 1998; streamlined **Virginia Port Authority**'s data flow management in 1999.

# USS KALAMAZOO, Norfolk, VA

1992-1995

Senior Chief Petty Officer (E-8)

Represented the **German Navy** under **NATO**'s international Personnel Exchange Program (PEP). Maintained ship's inventory system valued in excess of \$6M; analyzed and updated financial reconciliation reports.