

MICHAEL C. BOERNER

POSITION: PROGRAM DIRECTOR

EDUCATION

Electrical Engineering, Moore School, University of Pennsylvania, 1967
B.A., History, University of Pennsylvania, 1970
Naval Flight Officer School, Pensacola, Florida, designated NFO, 1971
Airborne Target Systems & Controller School, designated Controller, 1972
Joint Aviation Supply Maintenance Material Management School, Athens, Georgia, 1974
General Motors ADP Inventory Control and Parts Department Administration, 1975
Shiplely Associates "Writing Winning Proposals," 2007

PROFESSIONAL EXPERIENCE

PROGRAM MANAGER - BOERNER ASSOCIATES, Inc., 01/90 to present - Sales, Marketing, Proposal and Project Management, Cost Analysis, Operational Readiness Analysis, Maintenance Management Systems, Logistic Support Analysis (LSA), and a wide variety of planning, assessment, proposal and improvement projects on the EA-6B ICAP-2, ADVCAP, AIP, REMAN, ACCELERATED, BLOCK 89/A, and ICAP-III aircraft, and a variety of other aircraft, shipboard, and ground-based systems. This experience includes daily client liaison meetings with Government and prime contractor clients at all management levels, to identify and pursue marketing opportunities and to resolve program management, performance, organizational or business process problem issues.

PROGRAM MANAGER - KETRON, Inc., 09/78 to 01/90 - Sales, Marketing, Proposal and Project Management, Cost Analysis, Operational Readiness Analysis, Maintenance Management Systems, Logistic Management, and Logistic Support Analysis (LSA) on the A-6, EA-6, KA-6, SH-60, F-14, S-3, CV Helo, P-3 Update IV, and AMSS aircraft and related systems.

SERVICE MANAGER - HIGH REACH CO., Inc., Philadelphia, PA, 1977-1978 - Profit Center Management for 26-man, 200 unit, three operating site construction equipment fleet, instituted employee and customer training; conducted union negotiations; and increased service sales 25%, cutting overtime by 90%. Reduced on-hand stock investment by establishing and updating initial outfitting and spares lists for all sites, including the central inventory control point, based on OEM-recommended spares, operating environment, turnaround time, mix of equipment on site, and usage data; and, identified alternate sources of supply for high-cost, high-usage piece parts, to effect a substantial cost reduction.

PARTS DEPARTMENT MANAGER - H. Faulkner Inc., Philadelphia, PA, 1976-1977
Converted an inventory control system for automotive replacement parts from a manual card file to an in-house, CRT-entry computer system, resulting in reduced inventory cost, increased inventory turnover rate, implementation of obsolete parts return program, establishment of 45-day supply, reduction in manpower (from 11 to 8 men), and increased sales (15%).

NAVAL FLIGHT OFFICER/MAINTENANCE OFFICER - US Navy, 1970-1975

Summary Overview of Program Management Experience - Michael C. Boerner

Over the last 26 years, Mr. Boerner has been proposed, accepted, and successfully performed as Program Director/Manager/Senior Analyst for a wide variety of programs. He is a 1970 graduate of the University of Pennsylvania, with a B.A. in History, and advanced military and private industry courses in management, maintenance, logistics, and inventory control, in addition to Navy flight training. He has over 25 years of experience directing, managing and performing Naval aircraft and system acquisition, readiness analysis, maintenance and logistics planning, and over twenty-four years on the EA-6B aircraft. Mr. Boerner's experience includes direction and management of multiple subcontract efforts conducted on behalf of NGC, including the EA-6B ICAP III Post-Production Support (and DMS-MS) Plan, completed in April 2005; the EA-6B ICAP III SD&D LSA effort, concluded in 2002, as well as similar efforts supporting program planning, management, and product support for EA-6B REMAN, AIP, ADVCAP, ICAP II Block 86, and ICAP II development efforts, and ICAP II and ICAP I life cycle support. These efforts have included proposal development, program direction, planning and management; budgeting, forecasting and contract funds and program technical status reports; personnel training, assignment, administration and management; and, profit-center management.

Additionally, his experience includes program management on an NSWC Crane contract in support of PMA-234 and AIR-410 (now AIR-3.1.1) in the areas of readiness evaluation, SCIR reporting and analysis, and A-6/EA-6 avionics systems ILS acquisition, Life Cycle Cost, and maintenance planning. His efforts involved acquisition planning, and implementation of logistic support planning for the EA-6B and A-6F programs and directing the preparation and review of readiness improvement (RISE) reports, supportability assessments, Maintenance Plans, ILSPs and OLSPs for systems and equipments. His products include a MIL-STD-1388-1A Alternate Support Concepts Study and Comparative Analysis for the EA-6B RPG, a Unit History Data Base for EA-6B ICAP-2 peculiar items, a Depot Phased Support Plan for EA-6B ICAP-2, Supportability Assessment Plans for EA-6B AIP and ICAP-3, and the Block 89A and ICAP-3 LSAs under contract or subcontract to Grumman; a Use Study and Comparative Analysis for the proposed AMSS weapon system, under contract to Boeing Military Aircraft Company; a Life Cycle Cost (LCC) analysis for the proposed P-3C UPDATE IV, under contract to Boeing Aerospace Company; and, the Supportability Assessment Plan for EA-6B Accelerated under subcontract to Vitro. Mr. Boerner is a recognized expert in the area of ILS acquisition planning, Operational Availability (Ao), Mission Essential Subsystems Matrices (MESMs), 3M data systems/retrieval, the SCIR data reporting system, and Level Of Repair Analysis (LORA). Mr. Boerner has successfully exercised overall management responsibility for these programs and projects, from preliminary identification, through proposal development, contract performance, completion and closeout.

Additional details are provided on the following pages.

Program Phase-Specific Program & Project Management Experience-Michael C. Boerner

Completed Programs and Projects

Mr. Boerner has directed, managed and performed a wide variety of Government and Prime Contractor Programs, Projects and Proposals through all phases of the system life cycle, ranging from concept to disposal. His experience includes all progressive hardware configurations, i.e., breadboards and brassboards, Advanced Development Models, Engineering Development Models, Service Test Models (when applicable), Initial or Limited Production (LRIP) Models, and Full Production Models. The following paragraphs describe this experience by program phase.

Concept, Technology Development, and System Development & Demonstration Phase Experience

Mr. Boerner has directed, managed, and performed a Government contract project that:

- provided key members of the Logistics Requirements Generation Team (LRGT), and prepared ILS Detail Specifications, SOWs, the Plan for Support, draft contract lines, CDRLs, and Proposal Information Requirements for the A-6F Radar, Airframe, Engine and GFE Avionics, the F-14D Airframe and GFE Avionics, the EA-6B ADVCAP, RPG and AN/ALQ-149, and the A-6/EA-6 Digital Fuel Quantity Indicator procurements;
- produced a Plan of Action and Milestones (POA&M) to enable satisfaction of the A-6F Milestone II (FSD) audit requirements in conformance with the 90-day deadline imposed by SECNAV, and performed an ILS assessment of all hardware specifications used in the procurements;
- developed, utilizing the methodology and rationale provided by OPNAVINST 5000.49, preliminary operational and inherent availability thresholds for the A-6F Radar, Airframe, Engine, and GFE Avionics, the EA-6B RPG, the CIU/Encoder, and the CRE, for use in procurement process planning, hardware specification preparation, and proposal evaluation;
- developed a logistics management plan for the ALQ-149 (TACCOMJAM) and a Government ILS internal management plan for the ASPJ program, along with preliminary operating and support (O&S) cost studies for many programs, including the P-3C UPDATE IV;
- developed an interactive O&S model for NAC, the Naval Avionics Life Cycle Cost Model (NALCC), for ALQ-149 (TACCOMJAM); and,
- provided on going review and assessment of the LSA and its impact on the design of the ALQ-149 in support of NSWC Crane.

Mr. Boerner has directed, managed, and performed government contract and prime contractor subcontract projects that:

- prepared and implemented the Block 89A LSA and LORA Plans, conducted all requisite analyses, and prepared LSA output reports and contract deliverables, under contract/subcontract to NGC;

- prepared the EA-6B Accelerated Supportability Assessment Plan for NSWC Crane, under contract to Vitro Corporation;
- performed an investigation of CALS-related cost reduction opportunities in LSA, Training, and Publications areas for EA-6B REMAN, under NGC subcontract;
- performed an assessment of DOD/Navy organic SMT repair capability for EA-6B RPG, under NGC subcontract;
- developed an ILS Evaluation Plan for EA-6B AIP for NSWC Crane, under contract to EG&G Corporation; ;
- developed aircraft support system performance data for use in the EA-6B REMAN ILSDS, under NGC subcontract ;
- conducted a review of the AIP Phase 2 procurement request and proposed to both the government and prime contractor a method to contractually effect required ILSDS revisions, under NGC subcontract;
- provided an ARC-210 Radio support system synopsis for EA-6B AIP, under NGC subcontract;
- researched and documented the Logistics Review Group Audit requirements for the EA-6B ADVCAP/RPG Milestone III limited production (LRIP) decision, under NGC subcontract;
- investigated the support concepts for EA-6B Block 91 GFE and prepared briefing material in support of the Grumman proposed Electronic Repair Support Activity at Whidbey Island, under NGC subcontract;
- performed an investigation to identify the PHS&T-related LSA Tasks in MIL-STD 1388-1A, and provided an assessment of the potential support impact resulting from deletion of the PHS&T Chapter from the CRE ILSDS, under NGC subcontract;
- performed an assessment of the extent to which data developed for the RPG FMECA effort would satisfy the NAVAIR requirement for formal Test Requirements Documents (TRDs), under NGC subcontract ;
- performed an LSAR Data Element investigation resulting in verification that "E" Record ILS requirements and cost data elements pertain to support of the SE that is the subject of the "E" Record, and that the LSAR does not include Data Element Descriptions (DEDs) for airborne end item Technical Manual or Training costs, under NGC subcontract ;
- performed an investigation to determine the full range of ILS requirements for Milestone IIIB Approval for Full Production for the EA-6B ADVCAP/RPG, under NGC subcontract;
- performed an assessment of the Grumman-proposed Environmental Use Study Statement of Work for AIP. In addition, performed an analysis to determine the full range of government Hazardous Material identification, acquisition, use, handling, storage, disposal, and training requirements, and to determine the extent to which the

proposed AIP ILS and LSA work breakdown structure would satisfy said requirements, under NGC subcontract;

- conducted an investigation to determine the impact of an impending NAVAIR requirement to include Maintenance Significant Consumables in the LSA-024 report on in-progress RPG/ADVCAP LSA efforts, under NGC subcontract ;
- conducted an investigation to determine the support concept for the Standard Automatic Flight Control System (SAFCS) planned for incorporation in Block 91 EA-6B aircraft, and to determine the NAVAIR cognizant program and logistics managers, under NGC subcontract;
- performed an independent investigation to determine existing or incipient Navy organic repair capabilities for Surface Mounted Devices, specifically Leadless Chip Carrier Integrated Circuits, used in the RPG, under NGC subcontract;
- performed an investigation to determine the source of, and obtain, IMRL data for an EA-6B Squadron on extended independent deployment, in support of Grumman Foreign Military Sales and Andrews AFB EA-6B studies, under NGC subcontract;
- performed an investigation of EA-6B ADVCAP Data Item Descriptions (DIDs) to determine currency, and to recommend replacements for cancelled DIDs and use of superseded or superseding DIDs, based on an assessment of level of effort impacts resulting from proposed CDRL changes, under NGC subcontract;
- performed the Operational Availability analysis for the Standard Attitude Heading Reference System (SAHRS) for the Milestone IIIC LRG Audit, under NGC subcontract;
- prepared ILSPs, OLSPs, and Maintenance Plans for numerous equipments, including TARPS, EP-3 ARIES DEEPWELL, EP-3 AEDAS, LAMPS, FORWARD PASS, ASPJ, ALE-41, ALQ-92, ALQ-86, ARR-84, ASN-139 CAINS II, TAC-3, and the USN-2 SAHRS, under contract to NSWC Crane, and NADC Warminster;
- provided assessments of ILSPs, OLSPs, Maintenance Plans, LSA and LORAs for NSWC Crane, for the EA-6B ICAP-2, AN/ALQ-149, AN/ARC-199, AN/APS-130, and TEAMS (TSQ-42) systems;
- served on the Logistics Requirements Generation Team (LRGT), and prepared the ILSDS/SOW, draft contract lines, and CDRLs for the EA-6B ICAP-2, ICAP-1 Mod, ADVCAP, CIU/Encoder, and the EA-6A RECAP procurements, under contract to NSWC Crane.;
- served on the Logistics Requirements Generation Team (LRGT), and prepared the ILSDS/SOW, draft contract lines, and CDRLs for the A-6F and the F-14D procurements, under contract to NSWC Crane;
- produced a wide range of MIL-STD-1388-1A Logistic Support Analysis documentation, such as Use Studies, Comparative Analyses, Alternate Support Concept Studies, Warranty Impact Analyses, Sequential Task Descriptions, and Life Cycle Cost Analyses for the EA-6B RPG, P-3C UPDATE IV, AMSS AIRCRAFT, CV HELO RADAR, INEWS, and the Shipboard Meteorological and Oceanographic Observing System;

- conducted an analysis of failure mode data, developed under NGC RPG WRA Analysis efforts, in accordance with LSA Task 301.2.4, to determine ambiguity group impact on predicted reliability and related performance parameters, and
- performed input of failure prediction data and calculation of degraded reliability and related performance values for RPG SRAs and sub-SRAs, using NGC-provided software tools and databases.

Production & Deployment/Operations & Support Phase Experience

Mr. Boerner has directed, managed, and performed government contract and prime contractor subcontract projects that:

- developed a comprehensive EA-6B ICAP III avionics Post Production Support Plan, program, and process to provide continuous logistic support throughout the weapon system life cycle, with particular emphasis on the identification and development of timely and cost-effective solutions for existing and incipient problems associated with Diminishing Manufacturing Sources and Material Support for obsolescent support resources;
- performed an assessment of EA-6B RPG depot level LSA requirements for NGC;
- performed independent investigations and prepared reports outlining the complete requirement for an EA-6B Post Production Support Plan, and identifying both "reduced scope" and "phased approach" alternatives to satisfy the requirement for NGC;
- developed Logistics Requirements and Funding Plans (LRFP) for the ASN-139 CAINS II, F-14D IRSTS, MK XV IFF, ATARS, ARR-84 and the USN-2 SAHRS, for NGC;
- conducted Level of Repair Analysis on the WRC-1 and WSC-3 radio families to assess the feasibility of implementing I-level repair, for SPAWARSSYSCOMHQ;
- conducted a review of the EA-6B CY-90 ILSP&M Statement of Work to identify latent MIL-STD 1388 LSA/LSAR requirements, for NGC;
- performed an independent assessment of existing and NAVAIR-proposed ECP and Companion ECP processing procedures, identifying streamlining opportunities, sources of current and potential problems, and recommended solutions, for NGC;
- performed an assessment of the CIU/Encoder Repairables Management Plan to verify its conformance with contract warranty, Integrated Support Plan structure, and documentation flow requirements, for NGC;
- performed an investigation of ICAP-2 Data Item Descriptions (DIDs) to determine currency, and to recommend replacements for canceled DIDs and use of superseded or superseding DIDs, based on an assessment of level of effort impacts resulting from proposed CDRL changes, for NGC;
- conducted numerous RISE, reliability, maintainability, and supportability assessments covering equipments and systems utilized on the EA-6B, KA-6D, and A-6 aircraft in the production/deployment phase, for NSWCCrane/NAVAIRSSYSCOM;

- prepared the RISE reports for NAVAIR for the EA-6B/A-6E platform. These reports identified the equipments and systems affecting aircraft mission capability, and identified actions required to enhance operational readiness, for NSWC Crane/NAVAIRSYSCOM;
- developed a methodology to increase EA-6B platform Mission Capability (MC) to the CNO Readiness Goal in support of NAVAIR PMA-234;
- prepared CPM Network Requirements justification for the A-6F acquisition, provided the LSA Critical Path flow chart and input data for JTIDS, and developed CPM network program planning and analyses for the EA-6B Block 91 program, for NGC;
- prepared a Life Cycle Cost Analysis for the J-52 Engine that compared the cost benefits of implementing R&M changes by attrition over the engine life cycle versus forced retrofit, for NAVAIRSYSCOM;
- prepared the ILS portions of the Approval for Limited/Full Production (ALP/AFP) request for the AN/APS-130, and the EA-6B ICAP-2 programs, in response to tasking by NSWC Crane and PMA-234;
- researched and documented the Logistics Review Group Audit requirements for the EA-6B ICAP-2 NAVAIR/NAVMAT Milestone III production (AFP) decision, assembled the audit documentation package, tracked open actions through closeout, and prepared the ILS certification request for ICAP-2, for NSWC Crane and PMA-234;
- developed a list of Factory Test Equipment for the ALQ-99, to facilitate its transition to NSWC Crane in support of the December 1980 Depot Activation date, for NSWC Crane and PMA-234;
- developed an ILS Control Network, for NSWC's EA-6B ALQ-99F production program, which provided visibility to the APML of all CDRL and hardware deliverable requirements under contract, in accordance with the NAVAIR Logistic System Process Specification requirements for the production phase, for NSWC Crane and PMA-234; and,
- prepared a study plan for the identification of remote site EA-6B I-Level maintenance requirements in support of the USAF EW Mission, for NGC.

Mr. Boerner also has extensive experience directing, managing, and performing projects involving the tailoring of logistics and management tasks and requirements for ACAT I through ACAT IV programs in all phases of the system life cycle for major as well as minor programs, as described below:

LSA Management and Tailoring

- For the A-6F engine, airframe, radar, and GFE avionics procurements, which consisted of both off-the-shelf (the majority) and new design equipment (airframe and integration items), he directed the tailoring of the logistics requirements and the procurement packages to avoid duplication of effort in the production of complete LSA, Maintenance Planning, LOR, and ILS documentation, where existing Government-owned documentation, with revisions, was sufficient for program planning and LRG Audit purposes. The design impact procedure of the LSA, along with its associated costs,

were deleted for existing systems, since no opportunity to influence design presented itself.

- The EA-6B ADVCAP/RPG procurement was the first EA-6 procurement to invoke MIL-STD-1388-1A as a requirement in its entirety. Due to the nature of the procurements (with Grumman responsible for the air vehicle, avionic system integration, overall ILS management through interim support, inclusion of RPG information into an ADVCAP ILSP, and the production of interim and final maintenance plans, and the RPG vendor responsible for major portions of the LSA, including design impact), Mr. Boerner directed the tailoring of the applicable requirements of LSA into two procurement packages. Together, the two packages (Grumman/RPG Vendor) provided total Navy ILS coverage sufficient to support a Milestone III ILS Certification.
- The EA-6B CIU/Encoder procurement was the first EA-6 procurement package prepared under the mandatory hardware warranty rules imposed by Public Law 98-212. In addition to tailoring the LSA process to reflect program startup during FSD, Mr. Boerner provided technical insight, expertise, and recommendations regarding the definition of warranty coverage required by the Navy for the CIU/E, which first deployed in 1986 in ICAP-2 aircraft, and was to be phased out with ADVCAP production. Mr. Boerner's recommendation regarding the warranty period was accepted, thus avoiding a costly protracted phase-in of two depots (commercial and Navy), and two ILS programs for an unstable equipment design. Due to the 5-year warranty period for the CIU/E, and a projected design freeze in year 3, He directed the tailoring of the LSA effort to provide design impact prior to design freeze, and to provide deliverable hardware, software, and documentation required for organic support after the modification of the CIU/E to its final production configuration. In addition, due to the anticipated limited life of the new CIU/E, Mr. Boerner recommended the Navy conduct a LCC Tradeoff Study after design freeze, comparing the cost of contractor support for life-of-type versus the cost to establish and maintain organic support.

An inventory of skills for Mr. Boerner follows:

SKILLS INVENTORY - Michael C. Boerner

Mr. Boerner possesses a wide range of experience with, and application of, analytical, administrative, and programmatic software tools applicable to the program director function. This experience comprises the following personal and software skills. As might be expected in a lean business environment, the depth of this experience is directly related to prior program needs.

Personnel Skills	# of years	Last Used
Program Planning	20+	2010
Program Mgmt	20+	2010
Program Assessment	20+	2010
Project Planning	20+	2010
Project Mgmt	20+	2010
Project Assessment	20+	2010
Client Liaison	20+	2010
Management, Proposal	20+	2009
Management, Financial	20+	2009
Sales/Marketing	20+	2010
Cost Analysis	20+	2009
Contract Cost Reporting	20+	2006
Risk Analysis	15+	2004
Project Financial Mgmt	20+	2006
Availability Analysis	20+	2010
Readiness Analysis	20+	2010
Maint Mgmt Systems	20+	2010
Product Support Analysis	20+	2010
Logistic Support	20+	2005
Data Base Management	20+	2008

Software Skills	# of years	Last Used
MS Office Products	20+	2010
MS Project 2003	7+	2010
MS Access	1+	2008
CASA Life Cycle Cost	20+	2004
Powerlog LMI S/W	20+	2005