Lessons Learned:
A Protege’s Perspective
Dr. Nancy Crews
December 2011

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Specifics on Agreement

• Mentor-Protege Agreement
  ▪ U.S. Navy Office of Small Business Programs

• Mentor
  ▪ Northrop Grumman Electronic Systems, Linthicum, MD
  ▪ Program Manager: John Brown

• Sponsor
  ▪ Ground/Air Task Oriented Radar (G/ATOR) Program, U.S. Marine Corps, PM G/ATOR under PEO Land Systems
  ▪ USMC M-P Manager: Dave Dawson
  ▪ G/ATOR Prime Contractor: NGES
  ▪ US Navy M-P Manager: Ms. Oreta Stinson

• Minority Institution
  ▪ Florida International University, Miami, FL
  ▪ Technical Lead: Dr. Kinsey Jones
CME Overview

- Mature and robust small business (WOSB and SDB) located in Tampa Bay, Florida’s 10th Congressional District. Dr. Nancy Crews, President/Founder
- Located in modern 49K sq ft Development & Manufacturing Center. Integrated design to MIL qualification capabilities
- Registered ISO 9001:2008 / AS9100:2004 by NSF. A Supplier Excellence Alliance (SEA) participant. ITAR experienced
- Develop organic products and products for others. Excel in build-to-spec work for turnkey design, test, and production deliveries
- Proven electronics and electromechanical fabrication and assembly operations. Skilled in build to specification projects
- Customers include all military services, prime and lower tier contractors, and other industries. A supplier to military, Lockheed Martin, Northrop Grumman, General Dynamics, and others
- Successful SBIR/STTR R&D participant since 1998. 15 Phase I and 9 Phase II projects with 7 Phase III transitions to date
Why did CME participate in the M-P Program?

BUSINESS STRATEGY

• Develop a long term strategic relationship with prime contractor
• Win new business to grow company revenue and jobs
• Grow DoD awareness of CME and its capabilities and core competencies
• Increase probability of win by developing a CME “past performance” profile and standing within prime contractor’s supply chain to increase opportunities on their programs of record

TECHNOLOGY STRATEGY

• Broaden CME’s power supply product lines, especially in emerging phased array sensors and airborne/avionics subsystems
• Enhance CME supplier capabilities (technology, design and business tools, equipment, market and domain knowledge)
Program Scope

Business Assistance

• ERP Implementation

Technical Assistance

• Enhance CME’s Power Supply, Design and Manufacturing Capability (EA-18G, G/ATOR, AMDR programs)
• Improve Risk Management, and Power Supply Design and Simulation/Modeling Tools
• Technology Transfer (Power Supply topology collaboration, Planar Magnetics design training and tool, EMI Screening Lab concept technical review)

Material Acquisition Support

• Acquire NGC surplus equipment to enhance CME Capabilities
Success Factors

Business Assistance

- Current NGES PM brings strong knowledge, extensive network, and savvy skills to the program
- Increased upper management awareness and support of M-P Program at NGES
- ERP provides CME better cost control and management of larger value contracts – DELTEK Costpoint PO

Technical Assistance

- Enhanced power supply design and topology knowledge, design tools, and stronger requirements verification and qualification/test capabilities
- Design capabilities and confidence of CME Power Supply design team has grown significantly
- Opportunities for long term relationship on NGES programs (USMC G/ATOR, Navy EA-18G, Navy AMDR)
Success Factors

Material Acquisition Assistance

- Surplus equipment transfer from NGES brings added capabilities
  - Electronic Test Equipment
  - Thermotron Chambers
  - EMI Absorbent Material
  - Furniture

Sponsor Assistance

- Strong support and engagement by Navy Small Business Program office
- Active involvement of G/ATOR Marine Corp Program Management in Mentor-Protege Agreement.
Success Detractors

Business Assistance

• 3 Program Managers for Mentor in first 18 months
• Minimal awareness and understanding of M-P program at NGES supply chain or programs; including subcontracting authority or other tools to use
• Integration into NGES Supply Chain missing
• No subcontracts awarded to protege to help offset high costs of protégé’s investment in all aspects of agreement

Technical Assistance

• Technical community continuously misunderstood their role in program – initially not supportive
• Misaligned Technical Objectives between NGES, CME and FIU
Lessons Learned – Recommendations

Business

• Be a current supplier to the prime contractor before entering a M-P agreement
• Ensure a strong, commitment by Mentor (top management and supply chain) and Protege before initiating an agreement
• Mentor should select a savvy-skilled program manager who has impact authority, and a strong network within prime’s programs, technical community, and supply chain management
• Protégé needs to be prepared to make a significant investment ($ and resources)
Lessons Learned – Recommendations

Technical

• Bring technical community into writing the M-P proposal so they understand and buy into the program, technology transfer, etc.

• Integrate technical community – Mentor and University into kickoff meeting so everyone understands roles and responsibilities

Overall

• Use constant pressure applied relentlessly to make program a success
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