



**Lessons Learned:
A Protege's Perspective
Dr. Nancy Crews
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Specifics on Agreement

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- **Mentor-Protégé 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

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Custom Power Supplies



PDU's & Panels



IPMDS Family



Embedded Power Assy



Towable Solar Farm & Mobile Charging Systems

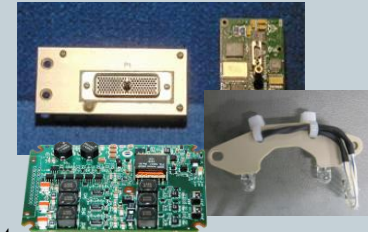


- Mature and robust small business (WOSB and SDB) located in Tampa Bay, Florida's 10th Congressional District. Dr. Nancy Crews, President/Founder
- Located in modern 49K sq ft Development & Manufacturing Center. Integrated design to MIL qualification capabilities
- Registered ISO 9001:2008 / AS9100:2004 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
- Focus: Integrated Power Supplies, Power Management and Distribution, Remote Ground Sensors, Embedded Sensors, and Test and Support Equipment
- 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

Sensor Products



F-16, F-35, EA-18G Components



Hardware for Primes



Custom ATE or GSE



Why did CME participate in the M-P Program?

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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



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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



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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

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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.



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

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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

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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

Contact Information

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