

## SIDNEY E. MARTIN, III, Ed.D., PE, PMP

### SUMMARY

Entrepreneur with experience in two electronic startups which became successful businesses. Provided leadership for teams that have place product in space, in military systems, at the bottom of oceans and in commercial product. A licensed professional electrical engineer with a Master Degree in Electrical Engineering. Consistent, dependable and is an individual that gets work done on time and within budget. Ed.D. in P20 and Community Leadership from Murray State University. Master Lean Six Sigma Black Belt certified and project management professional. Works well in an office, factory or field setting. Independent and experienced working domestically as well as in Asia, Europe, Africa, Central and South America. Over 30 years experience in Engineering, Manufacturing, Marketing, Quality Control, Sales, Customer Service. Extensive knowledge with high reliability production for products to various standards including MIL-PRF-38535/38534, ISO-9000, 14000 and 13485. Patent development utilizing thin film plastic coatings for electronics waterproofing applied under a vacuum.

### EXPERIENCE

**St. Petersburg College, Clearwater, FL      Full time      September 2021 to Present**

Program director for Engineering Technology. Responsible for all engineering, manufacturing, and building arts degree programs. Manage budgets, provide advising, maintain curriculum. Manage recruitment and retention.

**Murray State University, Murray, KY      Part Time      August 2020 to August 2021**  
**Full Time      August 2014 to December 2018**

Instructor for Introduction to Electrical Circuits, Motor Controls, Engineering Economy, Manufacturing Systems, Program Management, Industrial Operations. Support departmental efforts as required.

**Kettering University Online, Flint MI      Part Time      August 2018 to Present**

Contributing Faculty teaching Lean Production Systems and Advanced Power Electronics for Electrification of driver and driverless vehicles.

**Southeastern Louisiana University, Hammond, LA      January 2019 to June 2020**  
**Lecturer**

Instructor for Introduction to Engineering Technology, Introduction to Technology, Electrical Circuits, Motor Controls. Support departmental efforts as required.

**Kentucky Community and Technical College, Paducah, KY      January 2015 to June 2015**  
**Lecturer, Part Time**

Instructor for Introduction to Motor Controls, at Briggs and Stratton, performed industrial on site specialty teaching for Motor Controls.

**iMedia, South Dartmouth, MA      August 2013 to July 2014**  
**Managing Director**

Software and Hardware Architect. Implementing hardware and software solutions and tracking to completion. Technologies utilized include *Internet of Things*, small robots, program with C++, utilize *Big Data* concepts for data mining, analysis and visualization. Interface with customer, provide direction to engineers, coordinated design activities. Technical writer for supporting documents. Utilize open source applications whenever possible.

**Bristol Community College, Fall River, MA**  
**Adjunct Instructor**

**August 2013 to July 2014**

Classroom Engineering instructor teaching Electro-Machinery (Mechatronics) and Material Science. Courses include lab and classroom instruction. Supported ROV and Robotics STEM competitions.

**AFC CABLE, New Bedford, MA**  
**Engineering Manager**

**October 2011 to July 2013**

Designed new products and identified new business opportunities. Oversaw sustainable engineering of existing product lines and advanced new products to support the modular assembly of electrical systems. Developed new products to support the solar power generation industry resulting in ease of field assembly. Decreased backlog as part of a Kaizen team by 80% during a six-month project.

**NORTHEAST MARITIME INSTITUTE, Fairhaven, MA**  
**Director of Technology**

**June 2007 to October 2011**

Directed activities of the Institute and engineers to support maritime-related projects. Utilized skills developed in sales, marketing and engineering to find new business opportunities in Europe, North Africa and Asia.

Responsible for ISO-9000/2008 oversight and internal auditing.

- Developed various devices that are under patent consideration relating to power generation, electric automotive motor generation and hazardous environment coatings.
- Developed conformal coating process called Golden Shellback. Appeared on the Today Show with Matt Lauer. Process sold to ZAGG.com. Company is now HzO.
- Directed projects on sites located in the United States, Africa and Asia.
- Developed IT solutions for remote monitoring of train engines as part of a Department of Homeland Security grant.
- Developed process for protecting electronic devices exposed to moisture. Sold process and delivered to HzO in Salt Lake City, UT.

**SYNQOR INC., Boxborough, MA**

**April 2004 to March 2007**

**Director of Hi Rel Components**

Provided engineering support for the development of a new military product line from sales to manufacturing. Directed the companies customer interface. Developed internal documentation for Hi Rel Operations.

Supported development of Suppliers onsite in Asia. Visited customers to support Sales.

- ISO-9000 management representative - oversaw process implementation.
- Internal consultant providing lunch and learns and internal seminars on specific topics with Sales, Marketing and Operations.

**INTERNATIONAL RECTIFIER, Leominster, MA**

**May 2001 to November 2004**

**Director of Customer Service and Inside Sales**

Responsible for major account and business development (\$40 million) to include quoting, account management, and customer interface. Performed bi-directional technical information transfer. Managed customer contacts, and resolution of issues.

- Served as interim Director of Marketing for the Hi Rel Business Unit for six months. Responsible for onsite fabrication of fixturing.
- ITAR in-house expert.

**Director of Operations**

Directed the move and successful start up of a \$40 million manufacturing facility from El Segundo, CA to Leominster, MA. Responsible for all aspects of operations during this time period; planned, moved, setup and shipped product within six-week time period.

- Managed domestic and international contract manufacturing concerns.
- Responsible for onsite machine shop and prototype facilities.

- Set up contract manufacturing at sites in S. Korea, Taiwan and Malaysia to produce commercial and Mil-PRF-19500 components.
- Reduced product costs by 40% and implemented manufacturing in Asia for new products, which reached the marketplace at a competitive price to allow market share growth.
- Achieved Mil-PRF-19500 class S (Space Level) certification for relocated manufacturing line in six weeks. Manufactured product used on Mars Lander and various satellites.
- Manufactured contract assembled devices for companies to ISO-13485 standards
- Provided process engineering support for vacuum-based soldering and deposition systems.

**DATEL INC, Mansfield MA**

**November 1982 – April 2000**

### **Director of Manufacturing and Technical Operations**

Responsible for manufacturing and design engineering activities excluding new product design. Served as ISO-9000 representative. Directed all activities for manufacturing. Improved overall yield in thin film resistor and capacitor manufacturing from 2% to 98%. Spent 9 out of 12 months in one year in China setting up manufacturing. Total time in Asia supporting manufacturing exceeds two years.

### **EDUCATION**

B.S. in Electrical Engineering, University of Massachusetts, North Dartmouth MA

M.S. in Electrical Engineering University of Massachusetts, North Dartmouth MA

PhD studies, Semiconductor Manufacturing, Electrical Engineering Brown University, Providence, RI

Ed.D. P20 Education and Community Leadership, Murray State University, Murray, KY

### **PROFESSIONAL LICENSE**

Registered Professional Engineer, Massachusetts License #35108 Specialty is Manufacturing

### **CERTIFICATIONS**

Master Lean Six Sigma Black and Green Belt Certifications (2016)

Lean Manufacturing (120-hour class), Kaizen, Current and Future State Mapping, First Aid, CPR

Numerous certifications under ISO documentation including internal auditor.

Home Inspector: State of Massachusetts

### **OTHER INTERESTS**

Speaker at numerous business events, conferences and graduations on various topics. Invited Speaker at the 2009 University of Massachusetts Dartmouth graduation.

- Fairhaven, MA Finance Committee, member seven years. Oversaw Town of Fairhaven budget of nearly \$50 million.
- Clerk of SHARE Foundation, Inc. (<http://www.share.umassd.edu/>) Chairman of the Board of Directors. SHARE provides services to severely handicapped individuals to allow them to communicate. SHARE supporter since 1981.
- First Robotics and
- IEEE Senior Member, member since 1979. Providence Section Chair 2013/2014. Have delivered various papers to the IEEE
- Athletic Coach – Primary focus is developing the “mental game” of Olympic rifle shooting athletes and those heading to military careers.
- NRA – Life member

### **PUBLICATIONS:**

**In process:**

An untitled paper on the state of community colleges and STEM in the Commonwealth of KY. Coauthor with Dr. Randy Wilson.

An untitled paper reporting the state of activity of international students and advising. Coauthor with Jake Hildebrant.

2008 IEEE Conference on Technologies for Homeland Security. Overview of the Operation for the Proposed Locomotive Worker Identification with Cameras. 2008, Page(s):351 – 352

2008 UMass Dartmouth, I can hear it now. As retrieved from <https://issuu.com/umdpublishments/docs/umass-dartmouth-fall-08-magazine>

**Other topics:**

When “Mind Over Matter” Really Matters in Shooting. Civilian Marksmanship Program. On The Mark as retrieved from [http://thecmp.org/wp-content/uploads/OTM\\_Winter\\_2012.pdf](http://thecmp.org/wp-content/uploads/OTM_Winter_2012.pdf)

Wrote a monthly dog training series for in the AKC Magazine German Shorthaired Pointers. The articles focused on field training sporting dogs and these articles were well received by the sporting dog community.

**Grants:**

KSEF Kentucky Commercialization Fund. \$75,000 Primary Investigator

Homeland Security Grant, Port of Houston. Primary Investigator while at Northeast Maritime Institute, 2009. \$1,200,000 to install video tracking and engineer certification in 27 engines operating in a 280 square mile area within the port of Houston.

**Presentations:**

Performed various lunch and learns on the latest Digital to Analog converter, Analog to Digital Converters, Amplifiers, and Digital Panel Meters. 1986-2010

IEEE guest speaker at the Providence Section of the IEEE. Spoke about DC building distribution plans, Tesla vs. Edison, New methods in manufacturing tracking systems.

**Research:****Advanced Power Electronics**

Subject Matter Expert in advanced power electronics used in electrification of electric and autonomous vehicles. Recently taught industry professionals for the major auto manufacturers leading edge concepts of battery and motor design.

**HZO**

Research in waterproofing and splashproofing commercial devices resulted in the founding of HZO. This company was bootstrapped in 2009 using technology I created. HZO’s award winning intellectual property provides customers with increased confidence in their market positions and competitive advantages by improving the operational effectiveness of manufacturing, capital efficiency, ROI, time to market, brand loyalty, and overall product portfolio value. As our technology continues to advance, picking up accolades along the way to a better product and solution is both a great honor, and a powerful motivator. The company employs 101 people worldwide with the headquarters in Draper, UT. There are international manufacturing and business offices in Korea, Japan, Taiwan and China.

**SHARE Foundation**

1982 founding board member of the SHARE Foundation at UMass Dartmouth. Current member of board of directors. Served for 10 years as the Chairman of the Board, served many years as the Vice Chairman of the Board. Founded in 1981, the Society for Human Advancement through Rehabilitation Engineering (SHARE) Foundation, Inc., is a non-profit foundation that supports the University of Massachusetts Dartmouth Center for Rehabilitation Engineering. The Center's engineers develop, build and provide computer-enhanced adaptive equipment for children and adults with disabilities. The SHARE Foundation's mission is to empower physically challenged, non-speaking children and adults to express their basic wants and needs, communicate with others, control their immediate environments and achieve the greatest practical level of independence. SHARE succeeds in its mission by directing resources that enable the design, adaptation and fabrication of high technology equipment tailored specifically to the unique abilities of every individual who seeks help. SHARE provides the revenue necessary to ensure that the Center's clients are provided with the highest quality of service available. The Board of Directors and friends of the SHARE Foundation also have well-defined visions for the Center's expansion plans. In 1982, the Center served three clients. By 1990, it had served 800 and by 2000, it had provided services for nearly 2,000 people. It is the Center's goal to substantially increase the number of clients it serves each year and to improve the efficiency and effectiveness of its work. As more and more people with disabilities learn about SHARE, the organization expects to grow not only in numbers, but also in quality. To date, the foundation has served nearly 10,000 clients. This research could be readily expanded to Murray State University.