

Certification to AS9100 Rev. C Opens New Opportunities for ENSCO Avionics

ENSCO Avionics, Inc. has achieved certification to the AS9100 Revision C Aerospace Standard for the following scope:

Provision of aviation, space and defense software solutions including requirements analysis, design and development, system integration, verification and validation, quality assurance and customer support.

This is a significant achievement that has resulted from the dedication and hard work of the ENSCO Avionics management and staff at all levels with the assistance of the Alliance for Manufacturing and Technology (AM&T).

Background:

ENSCO Avionics decided that it was necessary to expand its software development focus within the aerospace industry for continued business growth. Specifically, it decided to position itself as a development partner to major aerospace firms and to focus on global opportunities. It quickly recognized that in

order to gain further legitimacy and success in the highly competitive aerospace industry, it was necessary to achieve certification to the AS9100 Aerospace Standard. In order to facilitate the definition and documentation of a certifiable Quality Management System (QMS) and to do so in a timeframe required to satisfy existing customers and meet its business objectives, ENSCO Avionics requested the assistance of AM&T in May of 2009.

Solution:

ENSCO Avionics was already a recognized leading supplier of software services in conformance with RTCA's DO-178B air worthiness guidelines and had also begun an initiative to incorporate best practice project management principles defined by the Project Management Institute's (PMI) "Project Management Body of Knowledge (PMBOK)." Therefore, it was decided that the ENSCO Avionics goal must be to seamlessly integrate the requirements of AS9100 Rev C/ ISO 9001:2008, the guidelines of RTCA DO-178B and the principles of the PMBoK into a comprehensive QMS. This would provide the company

with a substantial competitive advantage in ensuring satisfaction of customer requirements on-time and within cost and in turn meet business goals of revenue, profit and employee development and morale.

In May of 2009, ENSCO Avionics and AM&T began what would become a two and a half year partnership taking full advantage of the synergy of the two organizations. The combination of ENSCO Avionics software systems and business area skills and AM&T's AS9100 quality process and certification process skills successfully culminated in the definition of ENSCO Avionics' QMS and its AS9100 Revision C certification.

This was AM&T's first involvement in a project to develop a software engineering QMS and included the following:

ENSCO Avionics management and key technical personnel participated in a detailed half-day AM&T briefing in which they were introduced to the requirements of the AS9100

continued on page 3



Alliance for Manufacturing & Technology

HOW WE HELP

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

AM&T is a not-for-profit economic development organization that receives significant financial support from the New York State Foundation for Science, Technology and Innovation (NYSTAR), and the National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP). AM&T is a NYSTAR® designated Regional Technology Development Center for the Southern Tier and is one of nearly 50 MEPs located across the country. AM&T works directly with regional companies to increase their competitiveness and profitability.

This publication is funded in whole or in part by NYSTAR. Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of NYSTAR.



MEP • MANUFACTURING EXTENSION PARTNERSHIP



Empire State Development
Division of Science, Technology & Innovation

More U.S. Companies Hurt by Imports May Now Qualify for Federal Help

Changes to the federal Trade Adjustment Assistance grant program may enable more companies to qualify for benefits.

According to the NY State Trade Adjustment Assistance Center (NYS TAAC), changes were signed into law recently by the President that:

- Extends the authorization of appropriations for TAA through December 31, 2013.
- Reincorporates the eligibility of service firms for assistance.
- Reincorporates the use of extended look-back periods for certification.

The NYS TAAC has helped over 1,200 New York firms recover from the effects of foreign competition and has provided more than \$53 million in assistance. These changes let the NYS TAAC continue aiding firms throughout the state.

Your company may be eligible for TAA benefits if your firm has experienced sales and employment declines due in part to imports. The new law includes look-back periods that can extend to 2008.

Benefits include funding improvement projects on a 75/25 percentage cost share up to \$30,000 or 50/50 cost share on projects up to \$150,000.

Projects can be in marketing, information technology, manufacturing/engineering and compliance areas like ISO Certification. Project assistance is delivered by independent industry specialists, consultants or other service providers.

For information about how AM&T can assist, contact:
Jim Cunningham
607-725-1225
jcunningham@amt-mep.org

Search is On for Suppliers That Enable Rail Equipment to be 100% US-made

The US Department of Transportation is working to re-establish a domestic supply base to support inter-modal transportation manufacturing in the United States. The objective of this effort is to have 100% of the supply chain in the USA.

The DOT is partnering with the national network of NIST MEP Centers such as AM&T to connect rail industry Original Equipment Manufacturers (OEMs) with a broader domestic supply base that includes both traditional and non-traditional rail suppliers.

We want to connect Southern Tier companies with the large car builders and OEMs that build railcars and locomotives. If you are interested in learning more about becoming a Rail Industry supplier, contact Jim Cunningham at 607-725-1225 or jcunningham@amt-mep.org.

ENSCO Achieves Certification to AS9100 Rev. C

continued from page 1

Standard and how those requirements might impact the company's operations.

- The ENSCO Avionics AS9100 Management Representative and AM&T's lead AS9100 consultant identified each of ENSCO's processes and evaluated them in terms of their ability to meet the combined requirements of the AS9100 Standard, DO-178B and the PMBoK.
- ENSCO Avionics and AM&T jointly developed a quality policy manual that addressed each clause of the AS9100 Standard and identified how each of ENSCO's processes met the requirements.
- With AM&T's support, a series of operating procedures that documented each of the ENSCO Avionics internal processes was developed, verified with internal users and implemented.
- Once the documented system was implemented, AM&T, with ENSCO Avionics assistance, began performing internal audits intended to ensure that the implemented system was functioning in agreement with the requirements of the defined QMS.

The original intent of this joint QMS development effort was to achieve certification to Revision C of the AS9100 Standard. All of the documentation was developed and implemented with that objective in mind. However, when ENSCO Avionics made its initial application for certification, it was informed

that a new certification auditing standard (AS9101D), which had been written to guide registrars in their Revision C auditing activities, had not been approved for use and would not be ready within the ENSCO Avionics required timeframe. ENSCO Avionics had no choice but to modify its system to comply with the previous Revision B version of the standard and its audit checklist. This unexpected delay required several modifications to the documented QMS. Shortly after completion of this effort, the modified QMS was subjected to the registrar's Revision B conformance audit and received Revision B certification on November 14, 2010. Subsequently, the revised AS9101D (for AS9100 Revision C) audit checklist was approved and the ENSCO Avionics Revision C QMS was audited and certified on December 16, 2011.

Results:

ENSCO Avionics, whose partnership with AM&T resulted in the successful definition, implementation and certification of its QMS, has increased its competitiveness in the aerospace sector and has begun to produce additional revenue opportunities. The ENSCO Avionics management team has described specific benefits resulting from their certification as follows:

- "It is already a significant business enabler – ENSCO Avionics legitimacy in the eyes of potential customers has been enhanced; two new customers are already on board."
- "A major aerospace firm has designated ENSCO Avionics as a preferred software supplier."

- "We've experienced increased customer confidence in ENSCO Avionics quality assurance processes / practices."
- "Since we began capturing QMS quality metrics, we have seen consistently high levels of customer satisfaction."
- "Our implemented system provides for early identification of project and customer issues and risks requiring mitigation."
- "Our QMS has instilled consistency and stability into processes at both management and staff levels resulting in on-time deliveries to meet customer requirements."
- "With our AS9100C designation, we are seeing new business opportunities that we might not have been able to bid in the past."

ENSCO Avionics characterizes its partnership with AM&T as follows: "AM&T's assistance has been invaluable. Without it, we would not have achieved AS9100 certification as early as we have. Their exceptional knowledge, ultimate professionalism and positive working relationship have contributed significantly to the success of this project. This significant joint accomplishment ideally positions both organizations to respond to future, expansive aerospace opportunities."

For information about how AM&T can assist with AS9100 contact Jim Cunningham
607-725-1225
jcunningham@amt-mep.org

Considerations for Successful Strategic Planning

- Build a strong planning team. Involve key staff to provide input and ensure their buy-in.
- Find the right style of plan for you. There is no one-size-fits-all.
- Unless you are an expert at Strategic Planning, bring in an independent facilitator to guide your team through the process.
- Put your plan in writing. Without exception.
- Define your desired future state in measurable terms and determine what it will take to get there within your targeted timeframe.
- What gets measured, gets done. All goals and actions must be measurable and include responsibilities and timeframes for completion.
- Performance management is critical to success. Review your plan and all metrics on a regular basis and take corrective actions as required to stay on track.
- Formally renew your Strategic Plan on an annual basis or more often during periods of rapid growth or change.

If you're ready to develop your strategic plan, contact Jim Cunningham at 607-725-1225 jcunningham@amt-mep.org

Three Easy Steps to a Great Twenty-Minute Presentation

Although twenty minutes is a perfect amount of time for a presentation, it takes work to make it effective. You need to draft a narrative, carefully edit and refine the content, and develop compelling visuals. Let me take you through a 3-step process that will help you create your next pitch or presentation when you're given a relatively short amount of time.

1. Develop sound bites.

Before you even open PowerPoint (or Apple Keynote) craft the key messages that you want your audience to remember. During our presentations at LeWeb, artists with a firm called Livesketching.com were creating one-page visual representations of the presentations. Looking at the one they created from my talk as well as some of the others, I noticed that the sketch artists were listening for key phrases as well as lists. Bill Gross, the CEO of technology incubator Idealab, delivered a presentation with 12 entrepreneurial lessons from the last twenty years. The sketch artists highlighted each of the key lessons (all of the sketches can be seen at <http://www.slideshare.net/LeWeb/leweb2011>). Lists are catchy and make the content easier to absorb. People like lists. Use them.

2. Storyboard the content.

Speaking of sketch artists, it helps to think like an

artist when preparing a presentation. Before you open PowerPoint, head to a white board or take out a good old-fashioned pen and paper and start sketching. Think about how you will visualize each of the key points and supporting messages. What pictures will you use? Are there abstract images that will reinforce your content? Remember that people process information more effectively when the content is delivered as words and pictures rather than words alone.

3. Practice the presentation.

Nobody expects you to read extensively from notes for a 20 or 25-minute presentation. In fact they expect that you have the content down cold. I'm glad I did. When I went on stage I could see my slides in the monitor in front of me, but not my presenter notes. As it turns out I didn't need them because I had practiced the presentation many times out loud. Most people save their practice time until the night before a presentation and it shows.

A 20-minute presentation is ideal for new product launches, investor pitches, employee updates, sales meetings, etc. Take the opportunity to craft, design and deliver a presentation your audience will remember.

~ Carmine Gallo

"In the business world, the rearview mirror is always clearer than the windshield."
Warren Buffett

Up to \$9,600 in Federal Tax Credits Now Available to Companies That Hire Veterans

NEW Tax Credit for Hiring Veterans

On December 21, 2011, President Obama signed into law the VOW to Hire Heroes Act of 2011. This Act expands the veterans who qualify under the Work Opportunity Tax Credit. It also extends tax credits up to \$9,600 to businesses that hire vets.

What is a Work Opportunity Tax Credit (WOTC)?

The WOTC encourages businesses to hire people from

certain groups. Businesses that hire veterans who qualify under the VOW to Hire Heroes Act can receive a federal tax credit up to:

- \$9,600 for hiring veterans with service-connected disabilities who have been looking for a job for more than six months
- \$5,600 for hiring veterans who have been looking for a job for more than six months
- \$2,400 for hiring veterans who have been unemployed from one to six months

How to Apply for Credit

To use the expanded WOTC credits offered under the VOW to Hire Heroes Act, a job seeker and business both must fill out a Pre-Screening Notice (IRS Form 8850) on or before the hire date. To find the forms, look for "Work Opportunity Tax Credit" in the "Businesses" section of www.labor.ny.gov.

The Department of Labor must receive the completed and signed Pre-Screening Notice within 28 days of the first date of work.

Cornell Center for Materials Research 2012 Symposium: Learn about new methods for probing structural, physical and chemical properties of materials.
May 22, 2012 www.ccmr.cornell.edu/symposium

CCMR Facilities 101 Workshop: Learn how your company can use Cornell's capabilities in materials analysis, processing, and problem-solving.
April 5, 2012 www.ccmr.cornell.edu/industry/facilities101

Learning to Thrive While Your Competitors Flounder

In this era of uncertainty, with the fear of Chinese and Indian economies eclipsing the U.S., of Europe doing too little too late, what we need is some perspective. We need to lift our gaze from in front of our feet and look up, and think about the long term.

I got a precious opportunity to do just that last week at an investor conference hosted by a man who Forbes says is worth about \$1.5 billion, who runs a series of funds valued at over \$15 billion. I won't give you his name because I have not yet formally interviewed him and would like to, but he laid out a formula for the few of us willing to look for opportunity in trouble. He has a long record. His formula must work. So it's worth something.

I asked him how he identifies

companies that will thrive during the slow-growth era we are operating in. Here is what he said:

1. **Vision:** He looks for leaders who have a compelling long-term vision and inspire people to pursue it.
2. **Belief:** These leaders believe so much in their companies that they are bullish, and see opportunities for growth.
3. **Capital:** These companies have the cash to invest when their competitors must cut back, so they can seize opportunities others cannot.
4. **Advantage:** They have a capacity or own something that is too expensive for competitors to duplicate. They own an historic building, for example, or have built a recognized brand that competitors feel costs too much to be worth building themselves.

I love that the first thing on his list was his interest in betting on leaders with a vision. The implications for investors are clear. For entrepreneurs they are equally compelling. To be one of the few who thrive, to sail ahead of your competition over the next five to 10 years, you want to remember "VBCA"--vision, belief, capital, advantage. You want to create an inspiring vision that you can believe in passionately, find or create the capital capacity to invest in this vision (take an inventory of your full assets and you may be surprised to find that you have an asset you are not thinking about now), and focus on building something that arms you with a competitive advantage (something competitors will choose not to copy).

~ Kaihan Krippendorff



Alliance for Manufacturing & Technology

Benefits of Becoming an AM&T Associate

- Four free hours of consulting services
- Your company's profile will be featured in the "Associates' Corner" of our monthly newsletter, which is distributed throughout eight counties: Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tompkins, and Tioga. Also, the newsletter is featured on our website giving your company worldwide exposure
- Discounted fees at AM&T sponsored seminars & workshops
- A free Performance Benchmark and Transformation Planner (\$2,500 value)
- A link to your company's website from ours
- Assistance with Technology Transfer, Funding Sources, Venture Capital Investment, Networking, Research & Development Programs, etc

Call Jim Cunningham at 607-725-1225 to ask about becoming an associate.

More information at www.amt-mep.org

Associates' Corner

CORNING

Corning Incorporated is the world leader in specialty glass and ceramics. They create and make keystone components that enable high-technology systems for consumer electronics, mobile emissions control, telecommunications, and life sciences. Success is driven by their sustained investment in R&D, more than 150 years of materials science and process engineering knowledge, and a distinctive, collaborative culture. Corning works closely with their customers to solve complex problems that others can't, or won't, solve. Time and again, their breakthrough, life-changing innovations have proven that, if it is possible, Corning will make it real.

Driven by imagination, a passion for science, and an unwavering belief that they can solve the toughest problems, Corning never stops asking: "What is possible?" Corning has been developing and commercializing revolutionary innovations since 1851. Thomas Edison came to Corning in 1879 to create the glass bulb for his incandescent lamp. In 1947 Corning helped make televisions affordable for millions with their mass-manufacturing processes for cathode ray tube (CRT) television glass.

In more recent years, Corning developed the high-technology glass used in active matrix liquid crystal displays (LCDs); ceramic substrates and filters to remove harmful emissions

from diesel- and gasoline-engine exhaust; and the first commercially viable, low-loss optical fiber for use in telecommunications systems. Corning's ingenuity has been recognized with many prestigious awards, including four National Medals of Technology.

Today, Corning is a global leader in five vital business segments: Display Technologies, Environmental Technologies, Telecommunications, Life Sciences, and Specialty Materials. They are focused on putting their scientific and problem-solving capabilities to work to enable their customers' success. Corning has a proven track record of being first to market with cost-effective innovations and ongoing product improvements.

Quality, Integrity, Performance, Leadership, Innovation, Independence, and "The Individual": these are Corning's Values that have endured throughout Corning's history and are the moral and ethical compass that guides everything they do. As a global citizen, Corning lives their Values through meaningful acts of social responsibility, supporting community development and, along with their employees, helping to improve the quality of life in the communities they call home.

For more information, visit www.corning.com.

Associates' Corner

R•WIREworks, Inc.

R•WIREworks is a 38 year old point-of-purchase manufacturing company located in Elmira, NY. Their magazine, newspaper, CD, gift card, and roofing displays can be found in convenience stores, supermarkets, drug chains and home centers throughout the United States and Canada. Most recently they branched out into subcontract and job shop work to keep their new CNC wire forming, mesh welding, and robotic MIG welders more productive.

The company was founded as Peggy-Back Racks by Sydney L. Rubin and Norman Rubin as an offshoot to their newspaper and magazine distribution

company, Elmira News Company, founded in the 1920s by their father Harry Rubin. In 1974, marking a change in leadership, Ned Rubin re-named the company to R•WIREworks, Inc. They're proud that their management team's average tenure is over 30 years.

Their continuous improvement process has taken them from cellular manufacturing to realizing that it's all about technology. Whether it's robotic welding, work cells, or on-line order forms for their customers' sales force, the answer is speed to market.

They differentiate themselves from competition by providing

seamless partnerships with their customers. They provide graphic presentations that feature their customers' products in their displays for their retailers. They use technology for on-line order forms, customer acknowledgement, shipper numbers, and invoicing. Their customers' favorite on-line service is their tracker report, which shows them when an order was placed, shipped and received, as well as on-hand quantities.

All of their products, programs, and services can be viewed on their website at www.rwireworks.com. If you have wire fabricating needs, contact them at 800-550-4009.

Around the Southern Tier

Jan 24	Economic Forecast ~ Greater Binghamton Chamber ~ 607-772-8860
Jan 25	Women-Owned Business Roundtable ~ SBDC in Binghamton ~ 607-777-4024
Jan 26	Business After Business ~ Chemung County Chamber ~ 607-734-5137
Feb 1	Creating an Employee Handbook ~ Tompkins County Chamber ~ 607-273-7080
Feb 2	Annual Dinner ~ Tioga County Chamber ~ 607-687-2020
Feb 7	2012 Economic Summit ~ Tompkins County Chamber ~ 607-273-7080
Feb 8	Business After Hours ~ Tompkins County Chamber ~ 607-273-7080
Feb 9	SBC Network Luncheon ~ Greater Binghamton Chamber ~ 607-772-8860
Feb 9	2012 Economic Forum ~ Chemung Chamber ~ 607-734-5137
Feb 23	Networking at Noon ~ Tompkins County Chamber ~ 607-273-7080
Mar 6	Social Media Marketing ~ Tompkins County Chamber ~ 607-273-7080
Mar TBD	Lean Training - Topic: TBD ~ Location: TBD ~ 607-774-0022 ext 308

Please add mailbot@amt-mep.org to your address book or safe list to receive AM&T e-News. To subscribe to electronic or paper versions of our newsletter or to update your mailing address visit: www.amt-mep.org then select News and Events from the menu.

Return Service Requested

**AM&T
DIRECTORY**

www.amt-mep.org

Tel: 607-774-0022
Fax: 607-774-0026

Jim Cunningham x311

Business Developer /
Principal Consultant
jcunningham@amt-mep.org
mobile: 607-725-1225

Robert F. Edwards x307

I.T. Administrator /
Webmaster
redwards@amt-mep.org

Ed Gaetano x304

Executive Director
egaetano@amt-mep.org
mobile: 607-760-3864

Lloyd Johnson x312

Principal Consultant
ljohnson@amt-mep.org
mobile: 607-227-6229

Bob Mann x305

Principal Consultant
rmann@amt-mep.org
mobile: 607-725-8226

Michael Meador x314

Principal Consultant
mmeador@amt-mep.org
mobile: 607-342-3208

Carol Miller x316

Principal Consultant
cmiller@amt-mep.org
mobile: 607-237-8031

Kathy M. Peacock x308

Finance Administrator /
Notary Public
kpeacock@amt-mep.org

HELPING MANUFACTURERS PLAN, PERFORM, PROFIT & GROW

We are a team of experienced, skilled consultants and trainers dedicated to helping manufacturers in the Southern Tier of NY plan, perform, profit & grow. Our goal is to have manufacturers remain, grow and prosper in the Southern Tier.

AM&T uses a comprehensive, overall business approach to create significant and long-lasting business improvements. Our experience is that individual improvement methodologies will provide some measurable benefits on their own, but it is the combination of them across the whole value chain that will lead to dramatic gains.

WE CAN HELP YOU:

- Assess your current state
- Articulate and define the desired future state
- Train your workforce in improvement methodologies
- Implement process improvements across the whole value chain
- Identify new opportunities
- Achieve and sustain growth and breakaway results

AM&T DELIVERS:

A third-party survey for 2005-2011 found:

- 2,956 jobs created or retained
- \$608 million in increased or retained sales
- \$17.1 million in cost savings
- 137:1 return on investment
- \$818 million total impact
- 4.7 out of 5.0 Customer Satisfaction

OUR SKILLS:

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

Our integrated, comprehensive approach, applied to the whole value chain, can make a difference. We are "hands-on", roll-up-your-sleeves people and we're passionate about manufacturing.

Call Jim Cunningham at 607-725-1225 to ask how we can help.