



ACM

Aerospace Components
Manufacturers

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ACM UPDATE

April 30, 2009

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The ACM Update & Calendar (and previous issues) are also available for viewing on the ACM website.

ACM ANNUAL President's MEETING

Wednesday, May 6th

8:15am – 10:30am

CERC, Rocky Hill

*Presidents, General Managers, Team Leaders and
Business Development Team Members are invited!*

Meet and Network with your Peers

The formal business of the Annual Meeting is
election of Directors to ACM's Board;
each attending firm receives one vote.

Nominations, including self-nominations, are welcome!

Randy Plis presents the *President's Annual Review*
Team Leaders present their *Reports*

“Preparing for the Next Economic Upturn -- What to do to be more Efficient during this Downturn”

John Kornegay introduces and moderates presentations on:

'Bank Refinancing during the Downturn' by Gary Greenberg

'Electronic Archiving of Retained Data' by Randy Plis

'Web Based Interface of Supplier Status Information' by Tom Beach

'How to Protect your Experienced and Skilled Workforce',

a roundtable discussion moderated by Paul Murphy

Business Development

- The Business Development met on on April 21st and finalized planning for the May 27th Tradeshow. Al Samuel reported on registration: to date, 43 members have reserved tables and the following Customer's have responded on their plan to attend – P&W, UTC, Sikorsky Aircraft, UTC Power, General Electric Aviation, Rolls-Royce, IAE, & Mitsubishi Heavy. In addition, invitations were reported from Team members going to P&W Canada, Curtis-Wright, Turbomecca and Dresser Rand. Members were requested to continue to to extend invitations to Customer's and follow-up with those already approached. It was noted during discussion the keynote speaker, Allan Swan, had a new position at Rolls-Royce; Mr. Swan is now Vice President, Supply Chain Planning and Control. Al Samuel also reminded members of their need to complete their display setup prior to the 9:00am opening and to properly staff their tables during the morning "Future Workforce Opportunities" Fair; please be sure to have personnel and company materials suitable to discuss career opportunities with visiting high schools students, teachers and parents.

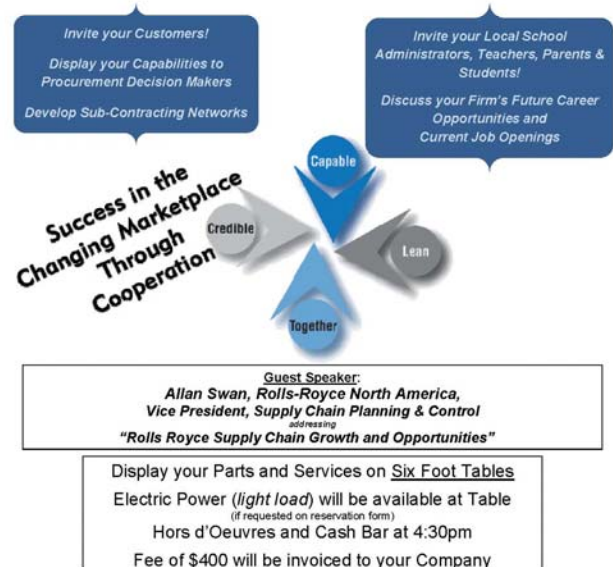
Team members held an open discussion regarding the current state of the aerospace industry.

-Almost all attendees indicated receiving production schedule pushback's, but no outright order cancellations. It was noted OEM customers were beginning to pull back production work currently being subcontracted. In general, comments indicated "business is currently flat and backlog was decreasing". Many attendees commented on a very high volume of requests for quotations, questioning the 'reality' of many of these quote packages

The June 2009 Paris International Airshow was addressed and members planning to attend were requested to report back to the Team at its next meeting following the Show.

- The Business Development Team will hold its next meeting on Tuesday, June 23rd at 8:15am at CERC, Rocky Hill.

You are Cordially Invited to Participate in the
ACM Aerospace Components Manufacturers
Future WorkForce Opportunities Fair
2009 Trade Show &
Wednesday, May 27, 2009
Hartford/Windsor Airport MARRIOTT Hotel
I-91 Exit 38 - Day Hill Road
9:00am-7:00pm



Progressive Manufacturing

- The Progressive Manufacturing Team met on April 23rd at Aero Gear, Windsor. The topic of this meeting, "What do Six Sigma and SPC have in Common?" and how this relates to the use of electronic gage interfaces was presented by Robert Fruit of Mitutoyo.

Mr. Fruit's discussed the similarities of Six Sigma and SPC (Statistical Process Control) as both have the underlying goals of increasing customer satisfaction along with increasing company profits; both

require senior management's support and proper teamwork to be successful. He suggested a modern Process Management System would greatly assist in meeting these goals.

Mr. Fruit discussed the "Process Management System" from the viewpoint of incorporating the ability of modern electronic gages to directly communicate and prepare SPC information in real-time and immediately provide a variety of reports useful to both the shop operator and company management. Mr. Fruit displayed screenshots of Mitutoyo's "MeasurLink Process Analyzer", their software package for capturing gage data directly into an SPC system. He suggested locating LCD screens centrally in shop floor workstations to allow operators and shop supervision real-time and continual access to process data. He also stressed the use of wireless gaging which, along with matched electronic multiplexers, serve as the best means of real time data entry. With proper accessories, CMM systems and other inspection tools may also be directly linked (either by wire or wirelessly) into the data collection system.



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Mr. Fruit's entire presentation is available on the ACM website library; please go to Member Login, Progressive Manufacturing and [Mitutoyo SPC Presentation to Lean Team 4-23-09.pdf](#).

- The next meeting of the Progressive Manufacturing Team will take place on Thursday, May 19th at 8:00am at Habco Inc., Glastonbury. This meeting features "Habco's Lean Journey" and will be led by Habco's Paul Murphy and Brian Montanari. Brian now leads Habco's business development strategy and lean initiatives. ACM members may recognize Brian from his prior positions at The Wiremold Company and HID Global, a CT Shingo Prize Recipient, and Lean Depot LLC, his consulting business. His lean implementations have received international recognition, being widely documented through publications and training videos.

How is Modern SPC like Six Sigma

- ◆ It must have top management support
 - Collecting SPC information is not cost free
 - Immediate responding to Assignable Causes can interfere with continuous manufacturing
- ◆ It requires team-work
- ◆ Increase customer satisfaction
- ◆ Protect company profits
 - Limit company risk

Classic SPC

- ◆ Hand write down measurement data
- ◆ When time permits get out a calculator and calculate X-Bar, and R values
- ◆ Calculate X-Double Bar and R-Bar
- ◆ Hand plot collected data on SPC chart
- ◆ Decide if yesterday's (last week's, last month's!) process is performing up to standards
 - Too late to control process
 - Too late to reduce risk
 - Too late for customer satisfaction

This is not your Father's SPC!

- ◆ Modern SPC systems are different
- ◆ Electronic Gages communicate directly with computers
 - No more hand written data
 - Giant reduction in time operators spend doing SPC
- ◆ Computers prepare SPC information in real-time
 - You / your operators can evaluate SPC status at time of measurement / manufacturing
- ◆ Modern SPC should be your Process Management System

Process Management System

- Real-Time data capture and analysis
- Supply data analysis at point of data collection
- Operator instructions for effective Process Management
- Software alerts and instructions that support these activities
 - Operator guided to correct procedure

● **SAVE THIS DATE -- Wednesday, June 17th !!!**

ACM will present **"Robotics for the Contract Manufacturer"**, the fourth in a series of half day technology workshops held at the RE Morris Company, 910 Day Hill Road, Windsor. This workshop will include a description of the essential technical and economic considerations in making choices about robotics, followed by four equipment manufacturers describing their particular capabilities *relevant to job shop operations*. There will be time to view some of the equipment and ask questions about its operation, maintenance and costs.

A notice will be sent to all ACM members in the coming weeks requesting registration; *there will be no cost for ACM members*.

ACM wishes to thank Connstep, and specifically Jack Crane who plans and manages our Technology Workshop events, and the RE Morris Co for again, generously hosting at their facility.

**A Message from Jim Womack of the Lean Enterprise Institute
commenting on
"Re-purpose Before You Re-structure"**

One of my favorite questions when meeting with senior leaders of enterprises is, "What is your organization's purpose?" The typical and immediate response is, "To make money and grow." "But," I respond, "this answer has nothing to do with your customers, who provide the money your organization needs to profit and grow." I then repeat my question, but elaborate, "What does your organization do to solve customer problems better than competitors so that customers old and new will pay good money for your services and goods and buy more over time?"

In recent years a fashionable alternative to "make money and grow sales" was that organizational purpose was to steadily grow shareholder value. But now the king of shareholder value, General Electric's retired chairman Jack Welch, has acknowledged – thank goodness – that this is a result, not a strategy for achieving this result. Now that investors as well as customers are on strike during the great financial crisis, the whole management world is being forced to rethink purpose from the standpoint of the customer.

Confusion about purpose is particularly painful to watch in the collapse of General Motors because this organization was so brilliant for so long in clearly defining its purpose. On June 9, 1921, GM's great leader Alfred Sloan produced a simple memorandum on the topic of "Product Policy" that defined General Motors' purpose for generations to come.

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Consolidated Purchasing

● ACM's Purchasing Team met on April 9th at Aerodyne Alloys, South Windsor. In its roundtable discussion, procurement related issues and the market for raw material procurement was discussed in detail. Nickel has maintained its recent \$3-\$4/lb pricing (where a year ago it was 3 to 4 times this amount) and high inventories of stock were reported. Titanium alloys were reported to have lowered demand, likely due to production schedule push outs; cobalt alloys were also indicated likely to remain stable in pricing through the end of this year.

Following the meeting, Team members were invited to tour the Aerodyne Alloys facility.

● Suppliers having Agreements with ACM are:

	<u>Supplier:</u>	<u>Key Contact:</u>	<u>Telephone:</u>
Shop Supplies, Abrasives, Cutting Tools, etc	Turtle & Hughes	Mike Kelly Dave Howard	203-497-1529 203-497-1555
Raw Materials: Nickel, Cobalt, Titanium – Sheet, Plate & Bar Stock	Aerodyne Alloys	Kirk Smallidge	860-508-1271

● The next meeting of the Consolidated Purchasing Team will take place on Tuesday, May 12th at 8:00am at Kamatics Corp, Bloomfield.

Workforce Development

- The WorkForce Development Team met on April 16th and, similar to the Business Development Team, finished planning actions for the May 27th “Future WorkForce Opportunities” Fair (taking place between 9:00am and 12:00 noon).

Over time, everyone in the ACM community has expressed concern about the aging of our workforce and how best to approach this issue; this Fair offers our members a special opportunity to speak with students, teachers, counselors and parents about future career opportunities and the requirements and expectations each firm has for entry level employees.

Please be reminded to make available proper staffing and handout materials at your display table that best represents your company to these visitors. Member’s setup of display tables begins at 8:00am and must be completed before the 9:00am opening. Al Samuel reported to the Team that attendance, based on school’s already confirming their plans, appears very good.

The Team next met with CPEP’s (CT Pre-Engineering Program) CEO Bruce Dixon who offered an overview of his organization and its programs. CPEP is a Bloomfield based non-profit that works with underrepresented middle and high school students to explore and prepare them for careers in engineering, technology and science. CPEP’s programs, held during after school hours and on weekends, involve students in hands-on activities that stimulate their technical interests as they learn to work together in a collaborative ‘teamed’ environment.

CPEP Benefits

Parents:

“CPEP has been a big inspiration to my child. I’ve never seen him more enthusiastic. His sisters can’t wait for their turn.”

“CPEP has helped stimulate my son and he is thinking more and more of how he can continue in such programs and the program has played a lot in his decision of what he wants to do.”

“This is my 3^d child going through the program. I think it’s a great program and really piques their interest and challenges them.”

CPEP Benefits

Students:

- An increase of 70% of students who would consider STEM careers (pre-post survey)
- Team Building and Cooperative learning
- Diversity training – diversity of thought process, ideas, and culture
- Project management – creating timelines and managing their project work
- Conflict resolution – working in teams provide a good forum to learn how to compromise and negotiate constructively.

CPEP Benefits

Partners:

- Potential employee base
- Multiplier Impact – the students will positively infect their families, communities and ultimately the entire country.
- Provide opportunities for employees to mentor or volunteer (employee morale, employee retention, employee satisfaction).

Mr. Dixon is seeking the support of ACM firms in becoming involved with CPEP’s programs and/or willing to invite student groups on into their plants for tours and to speak at school functions. For additional information, please contact CPEP at (860) 769-5281 or www.cpep.org. Bruce’s presentation is available on the ACM website library; go to Member Login, Workforce Development and [CPEP Presentation 4-16-09.pdf](#).

- The next meeting of the WorkForce Development Team will take place on Tuesday, June 16th at 8:00am at Delta Industries, East Granby.

News from ACM Members

Please forward significant company news and announcements to Allen Samuel at alsamuel@acm-ct.org for posting on the ACM website and publication in the UPDATE.



AdChem Manufacturing Technologies, Inc. announces purchase of TechAtlantic Aerospace, LLC, Berlin CT.

AdChem Manufacturing Technologies, Inc. (ACMT) announced on Thursday April 9th it purchased TechAtlantic Aerospace, LLC located in Berlin CT.

TechAtlantic Aerospace (TAA) manufactures composites, rubber molded products, rubber to metal bonding, and compression molded components for the compressor section of Honeywell and other jet engines. This acquisition allows AdChem Manufacturing Technologies to expand their core competencies into compression molded composites and increase their aerospace customer base. Their employees are a welcome addition to the ACMT team.

ACMT is currently moving the entire TAA facility into their ISO9000, AS9100 and NADCAP certified manufacturing location at 369 Progress Drive, Manchester CT.

ACMT occupies 30,000 SF in the Manchester Industrial Park and is a complete sheet metal fabrication division which includes capabilities in titanium hot forming, laser and waterjet cutting, NADCAP approved welding, CNC break press forming and CNC machining. Most recently, we are proud to have included an in-house "Green certificated" capability of a no environmental discharge acid clean line and paint spray booths. Our non-metallic division has both silicone and non-silicone clean rooms with NADCAP accreditation, scanning CMM for airfoil inspection and manufacture.

For additional information, please contact AdChem Manufacturing Technologies, Michael Polo, President at 860-645-0592.

"Re-purpose Before You Re-structure"

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Sloan stated that General Motors would provide a carefully configured range of products for "every purse and purpose", from used Chevrolets at the lower end of the market (with dealer financing on these traded-in vehicles) to a "fully loaded" Cadillac at the top end. This simple memo rationalized GM's chaotic product line-up so its vehicles would not overlap in the market. Instead, they would each have a clearly defined place in a status hierarchy and would always be more refined, a bit "classier" with a higher price, than competitor products in each market segment.

This memo about market policy was much more than the now familiar market segmentation and value proposition for each segment. Sloan did something much more important by defining GM's central purpose as creating an aspirational escalator for every customer through the life cycle, from the used Chevrolet as their first purchase to the fancy Cadillac as their last (often concluding with a Cadillac hearse on the way to the cemetery!) And it worked brilliantly. General Motors was probably never as efficient in production as Ford and it was rarely a technology leader. But it provided a clear product pathway on the customer's life journey. Customers embraced this purpose and opened their wallets to pay higher prices for more refined products within each market segment. Within a few years of Sloan's memo GM had become the largest and most successful corporation in the world and in the history of the world.

Moving forward to the present moment, it is saddening to read the viability plan GM recently proposed to the US Automotive Task Force. With the exception of the plug hybrid Volt (an unproven technology for an unproven market to be produced at tiny volume in the early years), the plan is entirely about "restructuring" and shrinking, about what General Motors isn't. It isn't Saab or Hummer or Saturn. It won't have nearly as large a dealer network. It isn't a manufacturer with a significant North American footprint outside of Michigan and Ohio. Etc.

The natural instinct of senior managers in any crisis is to restructure and downsize. But the question is always, "Restructure and downsize toward what?" No customer cares about a company's structure. No customer cares about downsizing. Customers only care about a company solving their problems along life's path.

So here's my advice to new GM CEO Fritz Henderson or whoever may follow after him. Before you restructure, restate GM's purpose. Today no one knows. Do it in a simple memo. Indeed, do it in a single-page A3 format. Sloan needed three pages in 1921, so practice continuous improvement to get down to one! And remember that no amount of restructuring without a clear and compelling purpose will save this stricken giant (or any other failing enterprise.)

Best regards,
James P. Womack, Founder and Chairman
Lean Enterprise Institute

P.S. Toyota has gotten off lighter than GM in the current crisis, but it faces the same confusion about purpose. Until the mid-1990s the clear purpose of Toyota was to be the best organization in the world at providing refined, durable "value" products in all market segments with few delivered defects to customers. The assumption was that growth would naturally follow, and it did. But then the purpose seems to have shifted to becoming the biggest auto company as rapidly as possible by adding capacity everywhere, a purpose that no customer cares about. At the same time competitors, led by Hyundai, have closed the gap on Toyota's original purpose and everyone is doing hybrids where Toyota initially took the lead. An A3 on re-purposing Toyota is surely what new president Akio Toyoda needs as well. My fear is that he will only focus on cost reduction and restructuring.