



**ACM**

Aerospace Components  
Manufacturers

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**ACM UPDATE**

**March 31, 2015**

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**Aerospace Components Manufacturers, Inc.**

The World's *Aerospace Alley!*

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The ACM Update & Calendar (& previous issues) are also available on the website in the **About ACM** menu

**SAVE THESE DATES!!**

**Annual President's Meeting**

**Tuesday, May 19<sup>th</sup>**

**New England Air Museum (Windsor Locks, CT)**

**Guest Speaker: Doug Folsom, GE Aviation**

**(General Manager of Hooksett, N.H. facility)**

**2:30pm – 6:30pm**

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**“Future WorkForce Opportunities” Fair &  
TRADESHOW**

**Thursday, October 22<sup>nd</sup>**

**Hartford-Windsor Marriott Hotel, Windsor**

**Business Development**

- The Business Development Team met on Wednesday, March 11<sup>th</sup> at CERC in Rocky Hill. Michael Scotto of Alpha Q, Team Co-Leader led the meeting and, after welcoming attendees, introduced two of ACM's newest member firms, Addaero Mfg and TW Metals. Richard Merlino, President of Addaero (New Britain), described his startup firm as being a specialist in electron-beam melting additive manufacturing; today, much of their work is developmental however the firm looks forward to becoming a production aerospace parts manufacturer. Bill Belina of TW Metals discussed TW's broad distribution capabilities; located in Agawam, MA, Bill is the Connecticut Account Manager. Bobby Mann of Sterling Engineering introduced himself as Sterling's new Business Development Manager and reported the firm has become a wholly owned subsidiary of Air Industries.

With the growth of ACM's membership and the outstanding attendance at Business Development Team meetings, a larger meeting facility is required. Al Samuel advised the Team that future monthly meetings will be relocated to *The Lyceum Conference Center* at 227 Lawrence Street in downtown Hartford. CERC (Rocky Hill) has been the home of the ACM Business Development Team since 2001 and ACM thanks their outstanding staff for their hospitality and support. Al briefed Team members on The Lyceum facility and its parking arrangements; maps showing access from I-84 and

I-91 will be attached to future email meeting notices and are also available on the ACM website; go to **Members Only, Business Development** and download [The Lyceum Hartford - DRIVING DIRECTIONS.pdf](#). The following will be the schedule for the remainder of 2015's Business Development Team meetings at The Lyceum, please mark your calendars:

Tuesday, April 14th, 8:15am  
Tuesday, June 23rd, 8:15am  
Thursday, August 20th, 8:15am  
Thursday, September 17th, 8:15am  
Thursday, November 19th, 8:15am  
Wednesday, December 15th, 8:15am

Please Mark Your  
Calendars!!

Members discussed recent and upcoming industry meetings:

- US DOC Trade Mission to the UK, Ireland & Netherlands led by Congressman Joe Courtney, Feb 15-20<sup>th</sup>: this trip included ACM firms ACMT, Flanagan Industries, Jonal Labs and PCX. Feedback indicated the European OEMs are concerned about capacity within their 'local' supply chain, with one member indicating "*they can buy in Europe, but can't get it delivered*". Based on this, members reported European OEM's are seeking sources of supply in the U.S.
- Heli Expo, Orlando, FL, March 2-5<sup>th</sup>: WGI reported having attended this Show commenting on how it was well attended by OEM's and MRO firms.
- AHS Dinner Mtg, Middleton, MA, March 24<sup>th</sup>: this monthly dinner meeting is being sponsored by Advance Welding. These meetings offer an outstanding networking opportunity with the "engineering decision makers" from GE Lynn.
- Lockheed Martin F135 Suppliers Conference, Washington, DC, March 24-25<sup>th</sup>: this is an invitation only meeting, with GKN, AAA, AMKT and Jonal indicating their plan to participate.
- Sikorsky Aircraft Top Supplier Conference, West Palm Beach, FL, March 25-27<sup>th</sup>: an invitation only meeting.
- Quad A (Army Aviation Association of America), Nashville, March 29-31<sup>st</sup>
- Aero-Mart, Montreal, March 30- April 2<sup>nd</sup>: this is a B-to-B format meeting; Jonal Labs advised of their plan to participate.
- MRO Americas 2015, Miami Beach, April 14-16<sup>th</sup>
- UTAS Top Supplier Conference, Hartford, April 29<sup>th</sup>: an invitation only meeting.
- AHS (American Helicopter Society) Annual Forum, Virginia Beach, VA, May 5-7<sup>th</sup>
- Paris Airshow, June 15-21<sup>st</sup>: Air Industries (Sterling, AMK, EurPac), Aero Gear, ACMT, EDAC, GKN Jonal and Bodycote indicated their plan to attend.
- US DOC International Trade Summit, Mystic, CT, Nov 8-10<sup>th</sup>

Next, the Team reviewed the following specific business opportunities:

- Pratt & Whitney, Berwick, ME, is reported to be releasing two additional work packages for quotation as this P&W facility diverts internal work on legacy engine parts to their supply chain, allowing them to increase their internal capacity to manufacture Geared Turbofan components.
- GE Aviation negotiations for production work packages are taking place in Evendale, OH, this and next week.
- Rolls Royce: informal feedback indicated near term slowdowns are occurring in earlier presumed production schedules.
- Bombardier CSeries: aircraft conducted its first flight, yet Qatar Airways withdrew from program; production quantities will likely be effected. The entire program, according to news reports, may be at risk with speculation Bombardier is looking to sell the program.

The Team's roundtable discussion was informative, highly candid and therefore, details have from this summary have been omitted. Members discussed their view of the industry with a general consensus that business volume has been flat but steady during the initial two months of this year, with activity now beginning to increase. Members advised of discussions with OEM's and their expressed concern regarding quality and on-time delivery; this suggests an opportunity for suppliers

to leverage their good performance to retain pricing and adequate margins. European OEM's also appear to be rethinking prior cost models and are now looking at "*the total cost of product acquisition*" rather than piece-price alone, in dealing with suppliers.

--ACMT (formerly known as Adchem) reported on their new facility in West Palm Beach, FL, which the firm has established to do both fabrication and development work.

--AMK Technical Services advised of receiving their P&W vendor code.

--ATI East Hartford Operations has a new general manager, Rick Cleary.

- The next meeting of the Business Development Team will take place on Thursday, April 14, 2015 at 8:15am at The Lyceum (227 Lawrence Street) in Hartford.

## TheStreet

### Why Alcoa Is Trading Tinfoil and Siding for Airplanes and Spaceships

By: Lou Whiteman

March 16, 2015

NEW YORK (The Deal) -- Alcoa, maybe the best-known name in the aluminum business, is betting that its future will be brighter if it were more well known for aerospace. It's an expensive gamble, which highlights the difficult choices the company has before it.

Last week, New York-based Alcoa said it has agreed to buy RTI International Metals for \$1.5 billion, adding the Pittsburgh-based maker of titanium and related specialty components just a year after spending \$2.85 billion to buy aerospace-focused Firth Rixson.

Less noticed but equally important, Alcoa also said it was putting 500,000 metric tons of smelting capacity and 2.8 million metric tons of refining capacity on review for possible curtailment or divestiture. That move, a response to global declines in the price of the material, could affect 14% of Alcoa's global smelting capacity and 16% of its total refining capacity. Already 19% of Alcoa smelting capacity worldwide is idle.

The moves, taken together, show that Alcoa is "dead serious about transitioning the portfolio," says Sterne, Agee analyst Josh W. Sullivan.

With good reason. Aluminum trades at \$1,817 per tonne on the London Metal Exchange, down from \$2,055 per tonne as recently as November and well off 2011 highs of \$2,678. Analysts warn the metal could have further to fall, citing weakness in Asia and lethargic economies throughout Europe.

Alcoa, to its credit, has long been searching for ways to stay ahead of a feared glut in demand for aluminum. The company last decade attempted to help consolidate the market by launching an unsuccessful hostile \$33 billion offer for rival Alcan Inc. The push downstream is an attempt to diversify the business and make it less reliant on metal pricing: Alumina now makes up just 20% of Alcoa's after tax operating income.

But the shift is a costly one, and not without risk. The RTI deal -- which offered holders of the target a nearly 50% stock premium -- is priced at 13 times trailing Ebitda (earnings before interest, taxes, depreciation and amortization), well above rival Precision Castparts' (PCP) 10.8 multiple. Alcoa, by comparison, currently trades at an enterprise value of 6.8 times trailing Ebitda, which provides a sense of what Alcoa CEO Klaus Kleinfeld is trying to accomplish.

Alcoa counters that it expects RTI to grow rapidly in the years to come. And if consolidating RTI with its other aerospace holdings allows it to become more of a vertical one-stop shop that manufacturers prefer to deal with over niche contractors, then the combination might open up new opportunities that were not available to either one as a standalone.

Still worrisome is that Alcoa is paying up to buy into the middle, if not late, stage of the commercial aerospace up cycle, and could be hit hard should demand for new, more fuel-efficient jets wane. That's a fear that so far has not materialized even as oil prices have sunk, but Alcoa investors need to be careful that the company is not trading exposure to one cycle for exposure to another.

SOURCE: [TheStreet.com](http://TheStreet.com)



## **FAA Production Certificate Awarded to Produce GE Honda's HF120 Engines in North Carolina**

March 17, 2015

GE Honda Aero Engines (GHAE) today announced that the turbofan engine production facility in Burlington, N.C., Honda Aero, Inc. (HAI), has been issued a PART 21 production certificate from the U.S. Federal Aviation Administration (FAA). This is a milestone that will provide a steady supply of the HF120 engine that will power HondaJet and other GHAE customers' aircraft.

"This is a significant milestone that will enable GE Honda to continue to build momentum for the HF120 turbofan engine program" said GHAE President Steve Shaknaitis. "With our primary production site now fully certified, we can focus on maximizing our production capabilities to anticipate all customer demands."

Initial production of the HF120 engines took place at GE's Lynn facility in Massachusetts. At the end of 2014, HAI started assembly of the HF120 under GHAE's TC with FAA oversight. With this program milestone, the HAI Burlington facility can now produce engines under the HAI Production Certificate. In addition to engine assembly, the Burlington plant features a test cell, repair and overhaul functions and parts warehousing.

GHAE continues progress toward entry into service for its HF120 turbofan engine in 2015 on Honda Aircraft Company's HondaJet. GHAE's Maintenance Repair & Overhaul (MRO) facility will also be located at HAI in Burlington, NC and the company has developed a strong network of Authorized Service Providers (ASPs) to prepare its support for customers in the U.S., Canada, Mexico, and Europe.

### **About GE Honda Aero Engines**

GE and Honda formed a 50/50 joint venture in 2004, called GE Honda Aero Engines, based in Cincinnati, Ohio. The joint company integrates the resources of GE Aviation & Honda Aero, Inc., a Honda subsidiary established to manage its aviation engine business.

### **About the HF120 Turbofan Engine**

Rated at 2,095 pounds of thrust, the HF120 engine sets new standards of performance in fuel efficiency, durability, and low noise and emissions. HF120 technologies include:

- A wide-chord, compound, swept front fan blisk, along with composite outlet guide vanes.
- A high-temperature titanium impeller in the compressor for maximum engine pressure ratio and stall-free performance.
- A compact reverse-flow configuration combustor and single-stage air-blast fuel nozzles.
- Advanced materials in the high-pressure (HP) turbine as well as a two-stage low-pressure (LP) turbine and a counter rotating HP and LP spool shaft system.

For additional information about GE Honda, please visit [www.gehonda.com](http://www.gehonda.com). For questions on GE Honda Aero Engines' business, please contact Mel Solomon at 513- 552-7857.

SOURCE: Honda



## **Bombardier CEO suggests new CSeries delay possible**

By: Stephen Trimble, Washington, DC

March 27, 2015

Bombardier's new chief executive appeared to disclose a new delay for first delivery of the CS100 at a press conference on 27 March, but a company spokeswoman says there has been no change.

In comments reported by the Bloomberg news service, Bombardier CEO Alain Bellemare says that first delivery is scheduled in 2016, while certification is scheduled for the "end" of this year. That timeline conflicts with repeated previous Bombardier statements, including by Bellemare, that type cert and entry into service remain "on track" for the second half of 2015, a window that begins in July.

—Continued on Page 6—



## Progressive Manufacturing

- The Progressive Manufacturing Team will host a meeting on **Thursday, April 16<sup>th</sup> at 8:00am** at the **CBIA Conference Center, 350 Church Street in Hartford**. Registration to date has been outstanding, yet seats remain available; an RSVP to [alsamuel@acm-ct.org](mailto:alsamuel@acm-ct.org) is required!

**This special meeting is for Presidents, General Managers** and their staff, and of course, members of the Progressive Manufacturing Team; this is offered at NO COST to ACM members.



**Edward Miller, President of Strategy Development Services, LLC address**  
***Strategy Development & Execution using Hoshin Kanri***  
**(Policy Deployment)**

Mr. Miller will discuss a powerful Leadership process to drive the key metrics and implement the company strategy by aligning the leadership team and the entire organization on the most important “Must-Do, Can’t-Fail” priorities. **It brings Lean thinking and behaviors to Leadership practices that are critical to grow and achieve your strategic objectives.** We will discuss handling conflicting priorities, driving a balanced set of key metrics and de-selecting less important priorities to focus the organization on a few things to get more done instead of doing a lot of things where nothing is getting done.

Besides the key metrics and how to deploy them, **the focus of this talk is on framing the company strategy into something that is actionable and deploying it across the organization.** Emphasis will be on leadership team behaviors to drive accountability and focus with a sense of urgency.

This presentation will also show how adopting Policy Deployment as a leadership system can engage and bring together all members of the senior leadership team in the company’s Lean transformation as well as elevating Lean as a strategy.

The **Takeaway** from this presentation will provide business leaders with considerations on how to engage the senior leadership in Lean transformation driving growths and leading performance. It also offers a process for alignment and building a high performing leadership team. Additionally, leaders should come away with a better appreciation (overview understanding) of the advantages of committing to an enterprise wide Policy / Strategy Deployment process and what’s involved in making such a commitment.

Parking is available at a surface lot directly adjacent to 350 Church Street; entry prior to 9:00am has a \$6.00 max charge.

- The Progressive Manufacturing Team will also meet on May 12<sup>th</sup> at 8:00am at Birken Manufacturing in Bloomfield. This meeting will feature a presentation by Fuss & O’Neill Manufacturing Solutions’ John Kravontka who will discuss Total Preventative Maintenance.

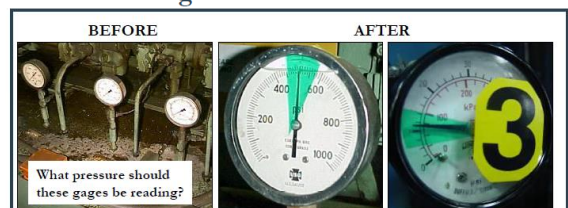
- ACM member John Kravontka, President, Fuss & O’Neill Manufacturing Solutions (Manchester), offers a ‘single point lesson’ (*right*) as a best practice to foster the spreading of ideas leading to improve safety, quality, lead times and profit. John may be reached at [JKravontka@Fando.com](mailto:JKravontka@Fando.com) or 800-286-2469x5699.



**FUSS & O’NEILL**  
Manufacturing Solutions, LLC  
“Enhancing Productivity”

Single Point Lesson Series – SPL No. 3

### Proper Marking & Reading of Gages



Maintenance to check the operation of the Gage, clean & determine the proper pressure range & install green see-through tape - available from: Strategic Work Systems, Inc. @ [www.swspitcrew.com](http://www.swspitcrew.com)

The Operator, seeing the proper hydraulic pressures (Visuals), can predict the onset of possible problems & allow for planned downtime (Maintenance making repairs when the problem is small/inexpensive). This will also help to develop ownership at the equipment level to keep the process constant from day to day. Gage marking is one of many visuals we can use to get the equipment to “talk” to us.

## Workforce Development

- The WorkForce Development Team met at Har-Conn Chrome (West Hartford) on Tuesday, March 3<sup>rd</sup>. The Team addressed a number of workforce and human resources related matters including the use of student interns, how to access sources of interns and the use of on-line job boards. The Team also discussed the “Future WorkForce Opportunities” Fair which will take place, this year, on Thursday, October 22<sup>nd</sup>.

Courses currently in progress, or planned for the “Fall – 2015 semester” are as follows:

Course	Date (Start)	No. of Days	Date (End)	Host Company	Participants	Provider Company	No. of Attendees
GD&T	9/23/2014	10	12/2/2014	AMK Technical Services	AMK Technical Services	Asnuntuck CC	8
					ATI East Hartford Opns		4
					Mallory Industries		1
First Line Supervisor's Training	10/9/2014	12	1/8/2015	Senior Aero Connecticut	Senior Aero CT	Quality Leadership Network	5
					AGC Inc.		3
					Service Steel Aerospace		1
					PTI Industries		1
					PCX Aerostructures		2
					Har-Conn Chrome		3
					ATI East Hartford Opns		1
BluePrint Reading	2/12/2015	10	4/16/2015	Alpha Q	Alpha Q	Asnuntuck CC	10
					Flanagan Industries		1
					AeroCision LLC		2
					Lynn Welding		2
GD&T	2/17/2015	10	4/21/2015	Kamatics	Kamatics	Asnuntuck CC	17
GD&T	2/18/2015	10	4/22/2015	Kamatics	Kamatics	Asnuntuck CC	17
GD&T	2/19/2015	10	4/23/2015	Kamatics	Kamatics	Asnuntuck CC	17
First Line Supervisor's Training	9/24/2015	12	12/17/2015	Har-Conn Chrome		Quality Leadership Network	

Please advise the ACM Office of your needs and suggestions for training courses to begin in the Fall.

- The WorkForce Development Team will hold its next meeting on Thursday, April 23<sup>rd</sup> at 8:00am at Mallory Industries in Farmington.

### **Bombardier CEO suggests new CSeries delay possible**

—Continued from Page 4—

By using the term “delivery” in the press conference, Bellemare appeared to refer to a distinct milestone that often occurs quickly after type certification and weeks or months before entry into service. The delivery event is also significant for the manufacturer’s shareholders, as it represents a milestone usually tied to a customer payment.

Bombardier spokeswoman Isabelle Gauthier confirms that Bellemare made the remarks at the Montreal press conference, but maintains that the company’s internal schedule has not changed. That means type certification and entry into service remain internally scheduled for the second half of 2015, she says. The entry into service milestone could be delayed to 2016 based on the customer’s readiness to operate the aircraft, she says, but that has not been confirmed. Asked to clarify the internal schedule for the first delivery milestone based on Bellemare’s recent comments, Gauthier replied that Bombardier is only discussing the timeline for type certification and entry into service.

The first CS100 aircraft entered flight testing in September 2013. Four more CS100 test vehicles and the first CS300 test vehicle have since joined the certification campaign, accumulating more than 1,100h through the end of February.

The flight testing has continued after being disrupted for 100 days last year due to an engine malfunction that required a minor redesign of an oil system. Shortly after flight testing resumed last September, Bombardier activated the normal mode flight envelope protections in the fly-by-wire system for the first time.

Bombardier has confirmed orders for 243 CSeries aircraft, with about three-fourths of the sales claimed by the larger CS300 variant. Lufthansa’s Swiss Intl Air Lines became the launch customer for the CS100 in 2008, but Bombardier has not identified which airline will become the first operator.

SOURCE:



## Consolidated Purchasing

- The Purchasing Team filled the conference room at Sirois Tool Co. in Berlin on Tuesday, March 17<sup>th</sup>. Alan Ortner, President of Sirois Tool, briefed the Team on his firm's diversified manufacturing capability. In addition to building aerospace specialty tooling and inspection gages, Sirois' niche is manufacturing components in small lot sizes. Ortner indicated Sirois will frequently back up other ACM firms by offering offload manufacturing services in small lots sizes that others find to be impractical. This 50-year old firm has approx. 50 employees providing machining capabilities spanning manual and CNC milling, turning, grinding and EDM. Kirk Smallidge, Aerodyne Alloys, led the Team on a round-table discussion regarding their perspective of the current aerospace business level and related procurement issues. Regarding raw materials, members reported that current pricing levels were stable however lead time and delivery commitments are at risk. Mills were reported to be unable to keep up with demand even though they are not operating their full capacity; problems with the workforce at the mills and quality related issues appear to be driving the delinquency. This was the first time that material distributors reported being out of stock in specific alloys and sizes. Following the briefing and discussion, Alan Ortner and Andre Nadeau led Team members on a tour of Sirois' production floor. For more information regarding Sirois Tool's capabilities, please go to [www.siroistool.com](http://www.siroistool.com) or call 860)828-5327.
- The Purchasing Team will hold its next meeting on Tuesday, April 21<sup>st</sup> at 8:00am at Peerless Tool Co. in Enfield. As has been the Team's practice, this will be an informational meeting to present another of our member firm's manufacturing and/or processing capabilities. Please take this opportunity to attend, participate and learn about Peerless Tool.

## News from ACM Members

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