



## Keynotes set Stage for 2019 CTMA Partners Meeting

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Fleet Readiness Center Southwest (FRCSW) was a perfect host location for the 2019 CTMA Partners Meeting. Not only were they celebrating their 100<sup>th</sup> anniversary, but their focus on aviation maintenance was the perfect backdrop to this year’s meeting theme of *CTMA—Enabling Maintenance for the Next 100 Years*. Over 150 people attended the two-day event from industry, academia, and government. The meeting included panel discussions, competitions, table top displays, networking opportunities, and informative and motivational keynote addresses.

Mr. Kenneth Watson, Deputy Assistant Secretary of Defense, Materiel Readiness, kicked off the meeting with inspiration about readiness outcomes.

Other keynote speakers were: Amy Cannello, Requirements and Capabilities Director for Commander, Fleet Readiness Center (COMFRC) and Steve Morani, Director of Logistics, Air Force Sustainment Center, Tinker Air Force Base. The opening remark session was emceed by Debbie Lilu, CTMA Program Director.

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### Atmospheric Plasma Solutions wins 2019 CTMA Technology Competition

The CTMA Technology Competition is a popular way to introduce the Department of Defense (DoD) to innovative maintenance and sustainment technologies and keep a pipeline of ideas flowing. The 2019 CTMA Technology Competition took place in conjunction with the CTMA Partners Meeting held at FRCSW. Over 40 companies submitted their innovative maintenance and sustainment technology abstracts with six finalists selected to present to a panel of judges during a “shark tank” presentation.

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## UPCOMING EVENTS

**JUNE 4-6**

**JCAMS: Joint Composite & Advanced Materials Sustainment Annual Meeting**

**JUNE 25-26**

**CSAT 2019**

**JUNE 25**

**JTEG Technology Forum: Additive Manufacturing (AM)**

**JUNE 26-27**

**IMS ManuVation 4.0 Workshop**

**JULY 24-26**

**NCMS Technology Showcase: Puget Sound Naval Shipyard & Intermediate Maintenance Facility**

More NCMS events at [www.ncms.org/events](http://www.ncms.org/events)

*(From page 1: Keynotes set Stage for 2019 CTMA Partners Meeting)*

Over and over again, we heard that it's not just one person's responsibility, but all of us working together. The goal is to speed up technology transition time, remove barriers, and raise the tolerance for risk. Outcome focused, it is time to look inward and ask, "What are we doing?" "How are we changing?" and "How are we working this process better, together?"

We were reminded that in many cases legacy equipment is all we have while we wait for new acquisitions to come online. Therefore, we must accelerate material availability and restore our systems across the board.

*Collaboration between the services is the key*

Last year the DoD spent \$78B in maintenance and sustainment activities. Another \$1.5B was spent in supply metrics. These metrics can drive efficiencies and effectiveness and inform a more proactive organic industrial base. Advanced technologies such as Artificial Intelligence, Robotics, Advanced Analytics, and Additive Manufacturing are collaborative bright spots for future maintenance and sustainment technologies.

But no one forgot the individual warfighter. The attendees were asked to not only improve productivity, but also the safety for maintenance artisans. Day in and day out they work in dangerous environments, performing repetitive actions. Protecting, supporting, and training the artisans is a top priority to ensure a pipeline of a proficient workforce. New apprenticeship programs are underway to provide advanced skillsets that will combine education with hands-on experience.

*Road to Readiness*

Last year, almost 470 aircraft, 3,661 engines/mods, and 39,965 depot components were repaired at Fleet Readiness Centers in 13 states and four countries. The Navy's aviation maintenance needs are great, and COMFRC is focused on investing in the workforce and infrastructure – both facilities and equipment.

"Our goal is to have the best-in-class repair facilities and processes to reduce turn-around time which is vital to achieving readiness," says keynote speaker Amy Cannello. "We are investing in our depots and working to reverse the decline they have seen because of constrained budgets and competing priorities. With Sustainment Vision 2020 (SV2020) we will also change the way we do business and prioritize based on greatest need."

The current sustainment model is the Naval Sustainment System, which implements industry best practices to recover-readiness, increases mission capability, and sustains a model that will allow the Navy to more effectively project power. This takes place at the intersection of SV2020, industry best practices, and other Naval Aviation Enterprise initiatives. To get there they ensure we are capable of fighting today's and tomorrow's fight, enable combat capable aircraft and aircrew now and into the future, and optimize all resources through an integrated, "Globally-Managed Sustainment Environment."

"We can achieve this vision by using our enablers: hiring, training and maintaining a proficient workforce; improving infrastructure, applying digital transformation, and improving our processes and supply chain," says Cannello.

*(from page 1: Atmospheric Plasma Solutions wins 2019 CTMA Technology Competition)*

Each finalist had 10 minutes to present their technologies with an additional five minutes for questions from the panel of judges.

The Atmospheric Plasma Coating Removal presentation not only impressed the judges but will also be awarded \$50,000 in funding and will participate in a one-year project.

“Readiness and sustainment fit with my company’s mission,” says Glenn Astolfi, President, Atmospheric Plasma Solutions. “I’ve seen maintenance artisans in the shipyard actually spitting grit and rubbing their arms in discomfort. Our technology will improve the quality of their lives and helps with productivity of ship sustainment. I was thrilled and proud to have the opportunity to tell Atmospheric Plasma Solution’s story. Our founder and Chief Technology Officer Peter Yancey’s technology solutions cover so many maintenance touchpoints such as safety, environmental, productivity, and value.”

The six finalists and their technologies were:

Atmospheric Plasma Solutions, Inc. – Atmospheric Plasma Coating Removal; BotFactory, Inc. – BotFactor: Desktop Electronics Printing & Assembly; Hexagon Manufacturing Intelligence – Hexagon Composite Inspection System; MELD Manufacturing Corporation – MELD: A Novel Solid-State Technology for Sustainment; PTC – Vuforia Augmented Reality; United States Marine Corps – T-Glass.



## The FRCSW Catapult Competition: Where the Rubber Meets the...Tire

Chris Root, co-host at the 2019 CTMA Partners Meeting, leads the Advanced Technology and Innovation Team at the Fleet Readiness Center Southwest (FRCSW). As part of encouraging innovative thinking across the facility, he began the Catapult Competition. The second Catapult Competition took place during this year’s CTMA Partners Meeting with the audience participating as judges. Six finalists had to make the most of their five-minute allotment to convince the audience of the benefits of their idea followed by another five minutes in which the audience asked questions before grading each presentation on a score card. The winner receives seed funding and project support to further the proposal and transition strategy.

This year, Edgar Armenta, Materials Engineer, Aircraft Tires, FRCSW, took home the prize for his presentation of inserting a rubber compound into tires of permanently or semi-permanently static aircraft. “We have many aircraft sitting stagnant for long periods of time even when transferred to the Davis-Monthan Air Force Base, otherwise known as the “Bone Yard.” The tires degrade and when they have to be moved can be dangerous,” says Armenta.

His innovative idea of filling those tires with a rubber compound that won’t deflate got the judges’ attention. It’s a simple idea that was well-presented. “I had mixed feelings about how I did,” says Armenta. “Some of the other presentations were more complex and mine was so simple. But I knew there was a need for this. I’m looking forward to attending the next Catapult Competition and telling the competitors that my project is done. I’m glad that I work at a place that encourages us to think innovatively.”

## Experts Discuss Critical Issues

The 2019 CTMA Partners Meeting was chocked full of information, much of it coming from five different panel discussions. These panels were comprised of experts in the field who have a deep understanding cross-section of knowledge pertaining to that subject.

The panel topics and Subject Matter Experts were:

1. **Successful Sustainment Technology Lifecycle: *Challenges to the Sustainment Enterprise***
  - a. Steve Morani, Air Force Sustainment Center, Moderator
  - b. Bill Kobren, DAU
  - c. Joe Sparks, COMFRC
  - d. Chris Blackwell, Lt. Col, USAF
  - e. Ken Anderson, Universal Synaptics
2. **F-18 Readiness Journey: *Relying on an Old But Trusted Weapons System***
  - a. Chris Root, FRCSW, Moderator
  - b. Thomas Jarvis, FRCSW
  - c. David Heinauer, FRCSW
  - d. Rick Taylor, CAPT. Retired
  - e. CDR Chris Roesner, FRCSW
  - f. Capt. Grant "Flash" Gorton, OPNAV
3. **Commercial Maintenance, Repair, Overhaul: *It's Time to Think Outside the Box***
  - a. Chris Saldana, Georgia Tech, Moderator
  - b. John Semmens, Lockheed Martin
  - c. Daniel Braley, Boeing Global Services
  - d. Frank Zahiri, AFMC
4. **Advancing the Industrial Base: *Delivering the Navy the Nation Needs***
  - a. Gabe Draguicevich, FRCSW, Moderator
  - b. Janice Bryant, NAVSEA
  - c. Amy S. Cannello, COMFRC
  - d. Steve Dale, Letterkenny Army Depot
  - e. Frank Zahiri, AFMC
5. **Condition Based Maintenance Plus (CBM+): *Accelerating Implementation Across the DoD***
  - a. Greg Kilchenstein, ODASD MR, Moderator
  - b. Jeremy Estes, Air Force Lifecycle Management Center
  - c. Jason Duncan, Tank-Automotive and Armaments Command
  - d. Nick Smith, NAVAIR
  - e. LTC Faith Chamberlain, Joint Artificial Intelligence Center
  - f. Samir Mehta, GE Aviation Digital

The mission of the CTMA Program is to ensure a consistent pipeline of innovative technologies to assist with warfighter readiness. Updates from these panels are a crucial aspect of continuing to facilitate that goal.

## Flag Accompanies Warrior all over the World

In 2006, when Michael Miller, Director of Business Development for Universal Synaptics, was about to be deployed to Iraq, he bought an American flag. He carried that flag with him on 70 successful Army combat missions. He now carries the flag wherever he travels and during significant life events. The flag has since been taken to over 14 countries, flown over the U.S. Capitol, been to nearly every U.S. State, and to historic sites including The Great Wall of China, Machu Picchu, Angkor Wat, the Hanging Gardens of Babylon, and many others.

"I carry this flag whenever I travel. We're inseparable," says Miller. "It's been with me for every stage of my life since I was 20. I plan to pass it down to my future children."

On May 7-9, 2019 Miller carried the same Stars and Stripes to the Fleet Readiness Center Southwest to attend the CTMA Partners Meeting (see photo on page 1). This flag started as a solemn reminder to a warfighter on his way to war. At the CTMA Partners Meeting, it served to remind everyone present of our purpose in the maintenance and sustainment community – keeping the warfighter combat ready.

## Shipyard Staff Learn about New Technologies

The CTMA Partners Meeting took on a new twist by being paired for the first time with an NCMS Technology Showcase. Exhibitors displayed technologies from reverse engineering, confined space monitoring, wiring, measuring, magnets, and many more. During session breaks, meals, and networking opportunities, meeting attendees visited to learn more about the technologies and how they might assist with their maintenance and sustainment needs.

The NCMS Technology Showcase took place following the CTMA Partners Meeting. Exhibitors moved their technologies and demonstrations to a Fleet Readiness Center Southwest shop space where maintenance and sustainment personnel from all over the base could take time out of their busy schedules to learn more about each technology.

NCMS is pleased to be supporting the U.S. Navy's efforts towards modernizing their shipyards.



- Aptima, Inc.
- Aspen Hybrid Technology Solutions
- Atlas Copco Tools & Assembly *Technology Showcase only*
- Atmospheric Plasma Solutions
- Barfield, Inc.
- Bechtel National/Navatek
- CS Unitec-*Partners Meeting only*
- DIT-MCO International
- Eclipse International
- Elevate Systems
- Hexagon Manufacturing Intelligence
- Hydratight Enerpac-*Technology Showcase only*

- Impacto Protective Products Inc. *Technology Showcase only*
- Karagozian & Case-*Partners Meeting only*
- Leica Geosystems
- Maglogix
- PPG Industries, Inc. -*Partners Meeting only*
- PTC
- Reliabotics LLC-*Technology Showcase only*
- ReverseEngineering.com
- Siemens
- Solavitek Engineering Inc.

- Spectro Scientific, an AMETEK company
- SurClean, Inc.
- Synergy Software Design, LLC
- Temple Allen Industries
- Thermal Wave Imaging
- Universal Synaptics