



Impending Cap Club Holiday Party concerns Climate Scientists!!

Don't say I didn't warn you!

Very Soon, (**FRIDAY, 19 December 2014 starting at NOON**) is the Capitol Club event of the season: The AOC Cap Club Holiday Party!!

And You're invited! Your spouse or significant other, too!

Memorize that date! It's when Santa Claus will be redirecting Traffic on Army Navy Drive to the Capitol Club AOC Holiday Reception and PARTY. Yes, the Perrier will be flowing like water as the Cap Club will be celebrating another banner year and giving members and guests





(remember that word) a glimpse into the future. **And Climate Scientists will be fretting over the hot air being generated by the hyper-networking that always accompanies AOC Capitol Club events!! That's why you need to be there!**

Now for the details: Who, What, Where, When, Why!!

Who? Yeah, YOU, that's who! Oh yeah, bring **your spouse, or significant other**, too, if you can!

What? Holiday Reception with **complimentary hors d'oeuvres, wine, beer and soft drinks**

Where? **Army Navy Country Club** in ARLINGTON VA, just a short jog from the Pentagon

When? FRIDAY, 19 December 2014 starting at NOON



Why? Meet other EW and IO professionals with whom you can NETWORK, swap doll stories, tell jokes that only other engineers would laugh at, get your picture taken for the **Crow Call**.

What else? Bring your spouse, or significant other. Did I say that, already? (Let us know ahead of time, and you may even bring a potential AOC member.)

Now, you're probably saying to yourself, "Gee, I'd like to go to this, but what does it cost?" Well, bubby, the

answer is NADA, Zilch, Nihil. We'll even validate your parking! You may however voluntarily contribute to the Cap Club Scholarship Program, which funds scholarships like the one noted in the agenda.

Need more information? Easy peezy lemon squeezy! Just call the Capitol Club Flack and all questions will be answered and the truth shall be revealed to you.



Takeaway: Don't forget the date! See above for reminder. Get lost easily? Put this in your GPS and smoke it: 1700 Army Navy Drive Arlington, VA 22202 If you show up at the OTHER Army Navy country Club, you'll not only feel foolish, but you'll have to pay for your drinks and hors d'oeuvres. So use your GPS, set an





alarm in your Outlook calendar and join us for an afternoon of fun and fellowship.

Late breaking news: in order to facilitate even more networking, speakers will be limited



to 140 characters or less. Here's the preliminary Agenda:

12:00 Networking begins, BAR OPENS, Hors d'oeuvres appear out of thin air

- Welcome from AOC Capitol Club President Geoff Leighton (12:50-12:51)
 - Scholarship Award: Jim Taber (12:55-12:56)
 - Scholarship recipient Marc Lichtman (12:56-12:58)
 - Virginia Tech Director of Outreach (12:59-1:15)
 - Mike Dolim, AOC Executive Director, "State of the AOC" (1:15-1:35)
 - Local Chapter Awards Presentation (1:35-2:00)
 - Twin Chapter Charter Presentation (in which Geoff Leighton says nice words about Canada and the Canadian Chapter that we are assisting in their organizational efforts)
- Followed by Networking and Advanced Merry Making!



Did I mention that there will be complimentary beverages and hors d'oeuvres? Well, there will!

Put this date into your Outlook Calendar, Write it on your palm, and tell your assistant to block off any meetings: **FRIDAY, 19 December 2014 starting at NOON.**



A note about the Canadian AOC Chapter.



You may remember that we approached the Canadian Embassy with a plan to reactivate the local Ottawa AOC Chapter which had gone inactive for several years. In addition to our outreach to the Embassy, we initiated contact with our neighbors to the north by other means, including the Crow Call. Our efforts bore fruit, and several Canadian Crows contacted us and we facilitated their efforts to revify the chapter. We are hopeful that representatives of that chapter, and personnel from the Canadian Embassy will be able to join us on 19 December at the ANCC for a toast to the Canadian Chapter, and the



presentation of a parchment representing our mutual bonding and the Capitol Club's continued support for this worthwhile effort!

Want to know more? Read on!

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I couldn't have said it better myself! And there's free parking!

Repeat after me: AOC Capitol Club Holiday party. Army Navy Country Club (Arlington), 19 December 2014; AOC Capitol Club



Holiday party. Army Navy Country Club (Arlington), 19 December 2014; AOC Capitol Club Holiday party. Army Navy Country Club (Arlington), 19 December 2014; AOC Capitol Club Holiday party. Army Navy Country Club (Arlington), 19 December 2014. **NOON!**





November Luncheon- Mark Gibson on *Spectrum Sharing*

November 12 was the Capitol Club's November luncheon. We hosted a briefing by Mr. Mark Gibson, Senior Business Development Manager, Comsearch, Inc. on "Spectrum Sharing". He discussed AWS-3 spectrum auction and federal relocation, spectrum sharing, the activities of the CSMAC and their relevance to DOD spectrum operations. COMSEARCH performs spectrum monitoring and analysis, including location studies and spectrum auction support. One of their specialties is validating spectrum coverage at major airports in the U.S. National Airspace System.

With over 30 years of spectrum management experience, Mark is responsible for developing domestic and international business opportunities for Comsearch. In addition to leading Comsearch's technical and business development efforts for AWS, 700 MHz and TV White Space products and services, he has led efforts to address spectrum sharing between Federal government and commercial users. He is a co-chair of the Commerce Spectrum Management Advisory Committee, where he has also co-chaired working groups related to spectrum sharing and data exchange issues.

With spectrum demand, dependence and mobility increasing, spectrum resources are becoming more valuable. Mr. Gibson emphasized the criticality of managing and protecting it! That consists of identifying and mitigating threats to spectrum operations; identifying and mitigating RF interference as well as geolocating rogue and contraband transmissions



on a continuous basis. His presentation included a superb and totally comprehensive presentation on the upcoming Federal government auction of a portion of the frequency spectrum.

Capitol Club's own Troy "Bucket" Orwan, who has presented to the Capitol Club on spectrum management issues from DoD's perspective was in attendance and contributed to the discussion during the Q&A period. As "Bucket" noted, U.S. systems and waveforms are being designed and built for congested environments and not configured for "Combat or Conflicted" environments.

Schafer TMD on North Fairfax drive in Ballston was our host, and as usual they did a great job of making everyone feel at home. The lunch was great, the remodeled conference room was spacious and airy, and the audio-visual suite contributed to a great presentation followed by great

networking.

Dennis Fandrei wins AOC Tony Brees Award

If you weren't at the National AOC convention at the Marriott Wardman Park this year, you may have missed the ceremony that honored long time Capitol Club member Dennis Fandrei, who was awarded the **Tony Brees Lifetime Service Award**.



With more than four decades of dedicated and passionate service to the AOC and the entire EW domain, Mr. Dennis Fandrei is eminently deserving of this prestigious award. He is the consummate EW professional, having served a distinguished EW aviation career in the US Navy followed by a civilian corporate career dedicated to advancing and fielding the most effective and reliable EW countermeasures systems.

As Executive and Commanding Officer of VAQ-33, Dennis was responsible for over 700 officers and sailors and 27 aircraft while conducting fleet contingency operations and training in the A-3 series (A-3, A-4, EA-6B, EA-7, and EP-3) aircraft. Throughout his 30 year Navy career, Mr. Fandrei served all of it in tactical units

conducting ISR and EW missions in aircraft squadrons, shipboard carrier battle groups, and training squadrons throughout the world.

For the past 10 years, Mr. Fandrei has been the source of great initiative, total dedication, and unmatched effort in shaping and implementing the Capitol Chapter's award winning slate of programs, luncheons, and activities that have clearly set the standard for all chapters to emulate. Mr. Fandrei's tireless dedication and hard work enabled the Chapter to win the AOC's Large Chapter of the Year Award for four consecutive years. His efforts to plan and execute the 50th anniversary celebration of the EA-6 Prowler aircraft program set an unprecedented standard of excellence for the entire AOC to emulate. The chapter's annual Holiday gathering which benefits from his guiding hand has also set the standard of total excellence for the entire AOC.

In addition to Mr. Fandrei's illustrious Naval EW Aviation career and his unmatched and tireless contributions to several AOC chapters and boards of directors over the decades, he has contributed to the advancement of the EW domain through an outstanding and celebrated corporate career. As a senior corporate executive for several companies, he has a widely known history of success developing and managing complex EW capabilities for the US Navy, most especially with expertise in EO/IR sensors, net-centric applications, and maritime C4I.



I have it on good advice that Dennis will be at the Capitol Club Holiday Party at the Army Navy Country Club on December 19th. Stop on by and say hello to this outstanding gentleman and pillar of the AOC.

National Instruments and AOC Capitol Club – A winning Team!

A few weeks ago, Shelby Paccar of National Instruments kindly extended an invitation to the AOC Capitol Club to participate in NIDays 2014. She wanted to see if we'd be interested in having a booth at this unique event. Naturally we said, "YES!" Here's the story. National Instruments hosted a free, one-day, multi-track event on Tuesday, November 18, 2014 at the Ronald Reagan Center, that enabled EW professionals to learn firsthand about new trends and best practices. Several Crows, led by Bill Reed, Kevin Crouse and Bob Lindseth got up at 0-Dark-thirty to hie down to the Ronald Reagan Building and represent the Capitol Club at an event hosted by NI, a respected company that most electronic warriors recognize.

For attendees who registered and got there early (There were 500 of them, BTW!!), it was a great educational and networking opportunity.

This year's highlights included:

Two visionary keynotes focused on the "Internet of Things" and "Managing Big Data in the Analog World"

Aerospace defense and RF focused industry tracks

More than 30 technical sessions, hands-on workshops, and an exhibition floor showcasing multiple technology and integration providers (that's where we were!)

Demonstrations of new NI products, including LabVIEW 2014, the new CompactRIO controller, NI VirtualBench, and NI InsightCM™ Enterprise



So, how did it go?

We publicized the event to our membership and invited AOC members to bring guests to this well planned educational event. Reliable witnesses say that our booth was always busy. The national AOC provided copies of JED, the Journal of Electronic Defense for all attendees. They also provided membership brochures to educate newbies on the benefits of membership in the premier EW and IO organization: AOC.



Capitol Club Academic Scholarship Awarded to Hokie!



This year we had three strong candidates for the Capitol Club Academic Scholarship but one stood out as he was both a graduate student and a member of the AOC. Marc Lichtman was recommended by Virginia Tech's Dr. Kira Gantt (Education Program Manager) to receive this year's Capitol Club award.

Marc earned a Masters in Electrical Engineering at Virginia Tech and is currently a PhD candidate in Electrical Engineering. He anticipates graduating in the fall of 2015. His field of study is Robust Satellite Communications under Hostile Interference.

Marc is currently a graduate research assistant working on a classified program at the Virginia Tech Hume Center for National Security and Technology working under the direction of a US Government Intelligence Community sponsor. His research interest supports his goal of finishing his PhD and performing research in areas that support DOD's missions. Marc is an AOC member and student member of the Institute for Electrical and Electronics Engineers (IEEE).

Marc has authored ten professional journal and conference publications during 2013-2014. He has also enjoyed notable achievements and been the recipient of numerous awards. These include:

- Research featured in an *MIT Technology Review* article
- *XCaliber Award* for the "Origins of Innovation" class project
- Winner of the *WICAT* Board Meeting Student Poster Contest
- Intelligence Community Center for Academic Excellence (IC-CAE) Scholarship
- Virginia Tech College of Engineering Fellowship
- Pamplin Leader Scholarship
- Bernard Silverman Scholarship
- Winner of the LabVIEW Invitational Programming Contest

After graduation, Marc hopes to work full time for the Air Force Research Laboratory. He is from Vienna, Virginia and we hope he will be able to join us at our Holiday Party at the ANCC on December 19th. For more information about the AOC Capitol Club Scholarship Award Program, please see aoccapitolclub.com/awards.php.



Special thanks to Scholarship Chair Jim Taber for reaching out to Virginia Tech and other institutions of higher learning to find such great candidates for the AOC Capitol Club Scholarship.



Terma Supports the AOC Capitol Club Educational Fund



On August 25th 2014, Terma's Director of Command, Control and Sensors, Matt Erpelding, presented a gift of \$250 to Geoff Leighton, President of the Association of Old Crows (AOC), in support of the Capitol Club Educational Fund.

The Capitol Club AOC Chapter uses the educational fund to provide Scholarship Awards to universities in the greater Washington D.C. area that provide engineering programs to prepare students for potential careers in Electronic Defense and Electronic Warfare. A scholarship of \$2500 is awarded annually to a student who best represents the ideals of the AOC.

For more information on the Capitol Club, its leadership and activities, please visit www.aoccapitolclub.com. For more information about the AOC Capitol Club Scholarship Award Program, please see aoccapitolclub.com/awards.php.

About Terma

Terma North America, Inc. is a wholly owned subsidiary of Terma A/S, a leading provider of customized mission solutions in Command & Control, Radar, and Surveillance Systems. Terma North America was established as the primary contact to North American customers for all Terma business areas. Headquartered in Arlington in the Washington, D.C. area, Terma has 57 employees operating in Georgia, Texas, and Virginia.

Appreciation

Two years ago, newly elected AOC National President COL (US Army, Ret.) Laurie Moe Buckhout invited Brigadier General Harold (Harry) J Greene, Program Executive Officer, Intelligence, Electronic Warfare and Sensors (PEO-IEW&S), US Army to speak to the Capitol Club. BG Greene graciously accepted and spoke to the club members on a topic that was getting hot due to the recent debt limit deal, "Our Army in Transition--Impact on Army IEWS programs." General Greene identified the numerous programs he was responsible for and discussed the challenges & opportunities facing PEO-IEW&S.

His talk was well received, and we've reprinted the Crow Call article on the following pages.

On August 5th 2014, BG Greene was killed by an Afghan soldier in an insider attack near Kabul. More than a dozen troops were wounded in the shooting, including a German brigadier general, a senior Afghan commander and nine U.S. troops.

He was buried at Arlington National Cemetery with full military honors. U.S. Army Chief of Staff Gen. Ray Odierno presented the flag that had covered Gen. Greene's casket to his widow, Susan Myers, a retired Army colonel.

The entire AOC family, including the Capitol Club is deeply saddened by this tragedy.

Gen Greene, while he was assigned to Afghanistan, was the deputy commanding general for the Combined Security Transition Command, involved in preparations for the withdrawal of coalition troops at the end of the year.

Prior to his deployment to Afghanistan, General Greene led the Research, Development and Engineering Command, or RDECOM, at APG from 2009 to 2011. He was then program executive officer for Intelligence, Electronic Warfare and Sensors from 2011 to 2012

Brigadier General Greene Biography

Brigadier General Greene was assigned as the Program Executive Officer for Intelligence, Electronic Warfare and Sensors on 26 May 2011. In this position, he led the organization responsible for research, development, acquisition, and life cycle management of the Army intelligence, electronic warfare and sensor systems with an annual portfolio of \$4.3 billion.

The general was a native of upstate New York. He received his commission as an engineer officer following his graduation from the Rensselaer Polytechnic Institute in 1980. Brigadier

General Greene held a Ph. D. from the University of Southern California in Materials Science as well as masters degrees in engineering from both Rensselaer and Southern California. He also held a Masters of Strategic Studies degree from the U.S. Army War College and is a registered Professional Engineer in the Commonwealth of Virginia.

Before his assignment at PEO IEW&S, Brigadier General Greene was assigned as the U.S. Army Research, Development and Engineering Command (RDECOM) Deputy Commanding General and Senior Commander of the Soldiers System Center, Natick, MA.

(From the AOC Capitol Club Crow Call, Summer 2011)

August 2011 Luncheon- Summer Program with BG Harry Greene kicks off Exciting year for the AOC Cap Club

For a crowd of about 50 Capitol club members, Wednesday, August 3rd was a luncheon to remember!

Brigadier General Harold (Harry) J Greene, Program Executive Officer, Intelligence, Electronic Warfare and Sensors (PEO-IEW&S), US Army, Aberdeen Proving Grounds MD spoke to the gathered AOC members on "Our Army in Transition--Impact on Army IEWS programs."



General Greene had been invited to address the Cap Club by COL (US Army, Ret) Laurie Moe Buckhout (Incoming AOC National President) and Barry Fell (Cap Club Program Chair). He had accepted the invitation prior to the final Debt Limit deal, which held the nation captive for weeks. As we all know, the final deal was achieved with dramatic reductions coming at the expense of the Defense Department. General Greene shared observations with the Capitol Club relevant to the impact that these new

realities will have on DoD going forward.

One of the slides BG Greene spoke to identified the wide range of programs that he has under his tutelage. Some of these programs have a long history of requirements definition, development and fielding/sustainment, while others represent a quickly deployed response to an acute battlefield requirement. One of the challenges he faces is how to manage this portfolio going forward in light of the budgets the pentagon must live with over the next several years.

He said he is calling on his program managers to be innovative and flexible in their approach to the execution of their programs, citing one example of sharing





support resources and costs where practicable. He also challenged the contractors to be innovative in finding cost savings wherever possible to squeeze the maximum benefit from every dollar spent.

