Leadership and Life Lessons Learned

John M. Olson, PHD
Vice President, Sierra Nevada Space Systems

Presentation Synopsis:
Our February meeting will focus on John M. Olson’s personal journey through aeronautics, space, the military, industry, and the White House. John will be sharing unique experiences and knowledge learned through several diverse experiences and will provide simple, but valuable, ideas, and concepts that can be applied and leveraged in everyday life.

Speaker Bio:
Dr. Olson is the Vice President for Sierra Nevada Corporation’s Space Systems Group, based in Louisville, Colorado, where he is responsible for space exploration and advanced development, including the Dream Chaser program, a modern reusable lifting body space system for crew and cargo transport to low Earth orbit. His portfolio includes industry, international, interagency, and institutional/academia relationships and he also leads White House, Congressional, policy, and regulatory engagement as the head of the SNC Space Systems Government Affairs Office in the Washington DC area. Dr. Olson joined SNC in July of 2013. Dr. Olson is a member of National Academies’ National Research Council Air and Space Engineering Board. Dr. Olson also continues to serve as the Director of the Joint Reserve in the Office of the Assistant Secretary of Defense for Research and Engineering as an Air Force Reserve officer at the Pentagon. He has 26 years of government service in aerospace, technology, development and ops. Dr. Olson holds Bachelor’s degrees in Engineering Science and Mechanical Engineering from the U.S. Air Force Academy, a Master’s degree in Materials Science and Engineering from the University of Illinois, another M.S. degree in Aviation Systems, Avionics, and Human Factors from the University of Tennessee, and a Doctorate in Industrial and Systems Engineering from Auburn University. He is also a graduate the Harvard Senior Executive Fellows Program, the Defense Language Institute, Air War College, and is a graduate of Air Force Test Pilot School.
Highlights of the Previous Meeting

The speaker for the MSP-SAME post’s January Meeting was Terry Zien, a St Paul District Army Corps of Engineers Program Manager for Planning Assistance to States and Flood Plain Management Services, Flood Risk Management, and the Silver Jackets Coordinator for MN, WI, and co-coordinator for ND. Terry provided an overview of the Silver Jackets and some of the collaborative projects that have resulted from the concerted interagency coordination efforts. Terry highlighted that the mission of the Silver Jackets is to reduce risk to lives and properties. Since its inception in 2009, the cooperating agency list has grown to include The Corps of Engineers, MN Department of Homeland Security, Minnesota DNR, NRCS, USGS, National Weather Service, Board of Water and Soil Resources, Minnesota Department of Commerce and FEMA. The agency list continues to grow. The interagency relationships building through the Silver Jackets coordination helps to accelerate timelines for coordination, builds trust and credibility, and together the Silver Jackets leverage agency funding to forward various pilot projects. Terry gave examples of several Silver Jackets pilot projects.

- The St Paul Flood Inundation Mapping was the first project Terry highlighted. Pooling available resources between agencies, 25 inundation maps were generated from Hydraulic Model output, gaging data and high resolution lidar topography to represent flood extents for various flood elevations. The inundation maps are available on NOAA’s AHAPS website http://goo.gl/ksbK8V. The flood inundation maps help to inform St Paul Policy on development and improve flood warnings and evacuations. The USGS is extending similar inundation mapping efforts nationwide.

- A second pilot Terry described includes developing a process for locating undocumented levees as an addition to the national levee database. Some techniques included in the documented processes include GIS techniques using hill shading high resolution lidar, site visits, and through the use of “wavelets,” a mathematical approach using Matlab and GIS to detect geometry configurations to locate the presence of levees over large geographic areas.

Other Pilots: 1) Northeast Minnesota Flood of 2012 documentation: Interagency collaboration resulted in combined funding to acquire 250 high water marks over 5 counties. 2) Emergency Action Plan Guidebook: Development of a step-by-step guide for communities and tribes to develop an Emergency Action Plan. Includes fillable forms. See the St Paul District website for a copy. http://goo.gl/T6RrKp 3) FEMA’s State level Risk MAP Meetings - Agency presence to bring solutions to the table. Helps communicate to counties the a comprehensive suite of options 4) Souris (Mouse) River - Identified data gaps in hydro meteorological data. Held a charrette with Canadian and US Agencies to develop a prioritized list of gages for future funding. 5) Stream Gages - With combined agency coordination and funding, 7-10 new gages were funded in Minnesota. New NWS forecast points with local anticipation for operation and maintenance. 6) Pre-flood Information Packages 7) Red River of the North Basin Non-Structural Alternatives Guide 8) EAP and Non-structural Methods Workshops 9) Flood Plain Structures Inventories (Souris Basin, ND)

Thanks to our Future Cities Volunteer Judges

The state finals for the 2014-2015 Future Cities Competition was held on Saturday, January 17th at the University of Minnesota. Again this year, the Post sponsored one of the special awards, the focus of which was for the team that best addressed a focus on "Readiness for Natural and Manmade Disasters". The team that won the post’s award was Scott Highlands Middle School (Rosemount-Apple Valley - Eagan) for their city named “Shima”. Due to the number of judges we were able to provide, we were able to be a last minute fill-in and judge an additional special award, namely the “Best Land Surveying Practices” award, which is sponsored by NCEES. The team that won this award was St. Francis of Assisi School (Rochester) for their city named “New Tauranga”. The Post would like to thank the following Post members for assisting as judges for this special award: Daniel Fleck, Michelle Larson, Jane Flewellen, Jim Sentz, Tosin Agboola, Bonnie Greenleaf, Luke Schmidt, and Peter Allen. We would also like to thank other Post Members who help in other facets of this year’s FCC events, your efforts are very much appreciated. As everyone who has had the pleasure of watching or participating in this competition can attest, it is a real pleasure to see how great a job these middle school students do at presenting their designs to a daunting group of judges. They will truly make great planners, engineers, and managers in the future.


Pictured left: Peter Allen with Scott Highlands Students
High School Students Engineering Camps Announcement

SAME offers high school freshman, sophomores, and juniors the opportunity to attend a one week camp. They learn leadership, engineering and construction skills, and have fun with students from all over the world. The Minneapolis-Saint Paul Post would like to sponsor a high school student to attend either one of the following summer camp opportunities. The Post will pay the Registration Fee and 1/3 of the Airfare; the student’s family is responsible for the remainder of the airfare. High school students that are interested in this opportunity should:

1) Review the camp website(s) and the links to eligibility requirements and application forms so that all requirements are clearly understood, and
2) Contact Peter Allen peter.allen@stantec.com or 651-604-4801 to submit your name as being interested in this opportunity.

Students interested in applying for one of the camps should start by reviewing the information on the SAME Camp web page at http://samecamps.org/. The next step is to notify Peter Allen about your interest in being considered for this opportunity. From the qualified respondents, the Post will select one attendee and one alternate; the alternate may be able to attend if the primary selectee is unable to attend or if additional space becomes available at the camps. Once the Post has selected an attendee and an alternate, the selectees will be given additional instructions for submitting the required applications. Applications must be submitted to Peter Allen by February 27th, 2015.

Dates and locations for this year’s camps are: SAME / US Army Camp Vicksburg, Mississippi July 7-13, 2015

MSPE PE Exam Prep and SAME Credentialing Achievement Awards Program

The Minnesota Society of Professional Engineers (MSPE) is sponsoring PE exam courses. Registration is open for the MnSPE PE exam prep courses prior to the April 2015 PE exam. Choose from civil, electrical power or mechanical. Courses start early February and are available via live webinar to students anywhere. More information is available at: http://goo.gl/93tLRh

The SAME Young Member Council is continuing the Credentialing Achievement Awards Program (CAAP) to promote the professional development of SAME Young Members and NCO Members in support of the SAME Strategic Plan. The CAAP serves to fulfill an objective which is to provide financial support for professional development, education, and mentoring initiatives to benefit our SAME members.

SAME will support the cost by reimbursing Young and NCO Members for exam sitting or registration fees. The full program details and application are located on the here. 2015 Applications are due April 10 and October 9.

For questions regarding the program, please visit the SAME HQ Website or contact Hector M. Hernandez at 850-396-4934 or Hector.Hernandez@ch2m.com.

SAME Educational Grant for Math and Sciences Grades K-12

The Society of American Military Engineers (SAME) is offering educational grants for up to $3,000.00 for elementary and secondary schools for the upcoming 2014-2015 school year for schools in the thirteen-county metro area. One fundamental goal of SAME is… To promote an understanding of, and appreciation for, the engineering related disciplines and to help the young people in our communities be better prepared to become our future engineers… The Minneapolis - St Paul Chapter of SAME is requesting applications from schools and classroom teachers who are committed in supporting the math and sciences that support future engineering-related career opportunities. We are encouraging all grade levels to participate.

Applications for these grants will be reviewed on the following criteria:

- Creativity and quality of proposed project
- Demonstrated demand or need for the project

Support of the Minnesota or Wisconsin math and/or science academic standards

The deadline for the educational grant is April 3, 2015. At the completion of the 2015-2016 academic year members of SAME would like to learn from the students on what they learned as a result of the grant. Elementary and secondary teachers / schools that are promoting the math and sciences in the thirteen county metro areas are encouraged to apply. For more information, please go to http://www.samemsp.org/grants/grants.htm. For a listing of the historical grants awarded go to http://www.samemsp.org/grants/Summary_Awarded_Educational_Grants_2009-2014.pdf

Small Business Corner

On January 20th, the City of Saint Paul (City) hosted the 2015 Procurement Fair. The event was well attended and well received. The City had representatives from each department presenting on upcoming work for 2015 and have many projects in the queue for 2015. In addition, the department representatives were available after the presentations for networking. Several others presented on topics including navigating the City's supplier portal stpaulbids@ci.stpaul.mn.us, Vendor Outreach Program and CERT Program. A copy of the presentations are available on the City’s website at http://www.stpaul.gov/DocumentCenter/View/76864.
February 2015

January Lunch Winners

And the winners are…

Joseph J. Waln—Barr Engineering
Lindsey Roberts McKenzie—SEH Engineering

Congratulations Joseph and Lindsey!

Habitat for Humanity

Thank you to all the great volunteers at our February 7th H4H event! Sign up for the March 7th event by emailing Rebekah Hudson.

Volunteers Needed for Explore Engineering

The Minneapolis-St Paul Post of the Society of American Military Engineers (SAME) is sponsoring a Science, Technology, Engineering, and Mathematics (STEM) themed event that will take place at Willow Lane Elementary School in White Bear Lake, MN. The event, called Explore Engineering, will include a gymnasium full of hands-on STEM activities plus demonstrations from two local robotics groups. Volunteers from the Post are sought to help make this a fun and exciting learning experience for the students and their families. If you would like to help with this event, please contact Rachel Pichelmann at 651-490-2000 or rpichelmann@sehinc.com.

Date: Thursday, April 9, 2015  Time: 6-8 PM (Volunteers are asked to arrive at 5:30 PM) Location: Willow Lane Elementary, 4855 Bloom Ave, White Bear Lake, MN

SAME Post Scholarship Applications Now Available

The Scholarship Application Forms are now available on the Grants & Scholarships page of the website, as well as via the links below. The form can be downloaded as either a MS Word file or as a fillable PDF form. There will again be three $1,500 scholarships available. The deadline for submitting scholarship applications is Friday, April 3rd, 2015.

Two scholarships are planned to be awarded in what is called Category I, which is for high school seniors and Post-secondary students who are children, grandchildren, or siblings, of members of the Minneapolis-Saint Paul Post. Sponsoring members must be a SAME Minneapolis-Saint Paul Post member for the current year and have been a member of the Post for a minimum of at least one year prior to the current year. Applicants must be registered as full-time post-secondary students in the fall of the year of selection.

One scholarship is planned to be awarded in what is called Category II, which is for all Student Members of the SAME Minneapolis-Saint Paul Post who will be registered as full-time post-secondary students in the fall of the year of selection. Applicants under this category must be registered through SAME as a Student Member; student memberships are free for full-time undergraduates at an accredited college or university, or high school students. This scholarship will be a multi-year (4-yr max) renewable scholarship. The scholarship in this category will be awarded to a student in an engineering, science, or technology-related field.

A committee of Post members evaluates the applications. All applications are kept confidential, and only the winners are announced. For additional information, please contact Paul Dierking at paul.dierking@hdrinc.com or 763.591.5473. Scholarship Application Packages can be downloaded from the Post's website at:

http://www.same-msp.org/PDF/Scholarship_Applnst_2015.docx or
http://www.same-msp.org/PDF/Scholarship_AppForm_2015.pdf

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