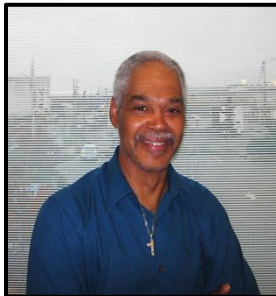




March 2016

### President's Message

By R. Michael Hale



The year seems to be moving fast. I feel like I just finished ringing in the New Year and the first quarter is coming to an end already. What this means is that we must be attentive to time and the things we do within it.

We just finished celebrating National Engineers Week last week, February 21<sup>st</sup> to 27<sup>th</sup>. I hope you took the opportunity to share with others all of the wonderful things we do as engineers to contribute to our world.

The Engineering Department of St. Martin's University hosted its annual Engineering Banquet on Friday, February 26, 2016. I hope you were able to be a part of it.

This month on March 10<sup>th</sup> we will be having our Annual Joint Section Meeting with the Society of American Military Engineers. It's been a few years since we held a joint meeting and I am excited about the opportunities it brings. I hope to see as many of you as possible. Make sure you make your reservations. You can find information about the time, location, and making reservations on page 2 of our newsletter.

We are also planning for some summer activities for our section, such as, an outing to a Tacoma Rainiers baseball game at Cheney Stadium; a

picnic; and maybe some other things that will provide us the opportunity to do things together.

The board has been considering ways to include our more wayward members outside of the Tacoma-Olympia metropolitan area (e.g., Aberdeen, Ocean Shores, etc.). We want hear from our members in these areas and those of you here to help us to be more inclusive of all of our members.

Again, I thank you for taking the time to read our Newsletter. Spring is on the way!

#### In This Issue

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- **Calendar of Upcoming Events**

*A survey monument marks the top of Mount Constitution, the highest point on Orcas Island at an elevation of about 2,410 feet above mean sea level. Photo credit to Alex Hannum at [alexhannumphotos@gmail.com](mailto:alexhannumphotos@gmail.com)*

## March 2016 Monthly Program

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### Planning for Radiological Emergencies

Annual Joint Section Meeting with the American Society of Military Engineers



Preparing for an emergency involving radiation is an ongoing task for the Washington State Department of Health and other agencies. Work in this area was originally oriented towards possible civilian and military accidents, but now the focus is directed more toward possible deliberate releases by terrorists. The topic this month will review lessons learned from a radiation incident in South America that provides a model for a deliberate radiation release in the United States. Dave Jansen, Director of the Office of Radiation Protection, will discuss the current state of readiness and possible scenarios that could occur in Washington or elsewhere in the US.

Mr. David Jansen is the Director of the Office of Radiation Protection for the Washington State Department of Health. David has over 30 years of public and private engineering and managerial experience. His work includes prison expansions, construction and operation of water and wastewater facilities, and cleanup of state and federal superfund sites. David has received state, national, and international recognition for his work on challenging engineering projects including the Hanford cleanup and the nation's first Leadership in Energy and Environmental Design (LEED) gold status prison campus.

David received his Bachelor's degree from the University of Florida and Master's degree from the University of Central Florida. He is a registered civil and environmental engineer in Oregon and Washington, and is an adjunct faculty member in the Saint Martin's University School of Engineering.

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<b>Speakers</b>	David B. Jansen, P.E., LEED AP Director of the Office of Radiation Protection Washington State Department of Health
<b>Date and Time</b>	March 10, 2016 at 11:30 am
<b>Location</b>	Eagles Pride Golf Course I-5 Exit 116, near Joint Base Lewis-McChord Tacoma, WA 98433 The golf course is not located on the base.
<b>Menu</b>	A hot lunch is served buffet-style for this event.
<b>Price</b>	The cost to RSVP is \$25 per person or \$15 per person for uniformed personnel. There is an additional \$5 charge at the door if you attend the event without an RSVP.
<b>Reservations</b>	To make a reservation, contact Kim Kaul at <a href="mailto:kkaul@ahbl.com">kkaul@ahbl.com</a> .

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## March 2016 Announcements

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We are pleased to report that 2016 took off in a big way for us! The holidays are over now, and it's time to get back in to the proverbial rhythm. We like to think that our rhythm is more like a live concert though. February is dedicated to engineering and we have opportunities for you to get involved in celebrating and promoting the profession through National Engineers Week and MESA day!

- ***MESA Day 2016 at Pacific Lutheran University***

The Math, Engineering, and Science Achievement program hosts an annual day of science and engineering events for students in Tacoma at the Pacific Lutheran University. This is an all-day event on Tuesday, March 29, 2016. The day's competitions include kraft stick bridges, prosthetic arms, catapults, straw towers, and more! We need volunteers who will act as coordinators, judges for competitions, and general help for the event. Contact Michael Hale at (253) 591-5766 or [mhale@cityoftacoma.org](mailto:mhale@cityoftacoma.org) if you would like to volunteer!

- ***Professional Engineering Exam Study Sessions***

Our next generation of professional engineers is only a month away from the exam. And that means studying! We are pleased to announce that this March, our local engineering community is hosting not one, but two *free* focus study sessions! On March 16<sup>th</sup>, GeoEngineers is hosting a geotechnical study session at its Tacoma office. And on March 23<sup>rd</sup>, Frank Marescalco is hosting a water resources/environmental study session at the City of Tacoma's Center for Urban Waters. These are two high-quality study sessions provided to you at *no cost*! Check out the calendar of events and the attached flyer for details and registration information. See you there!

- ***Younger Members Group Resume and Interview Workshop***

The Younger Members Group will be holding a workshop focused on resume review and interviews. This workshop will be great for members making a shift in their careers and students entering the profession. The workshop will be an evening event held at St. Martin's University on March 30<sup>th</sup>. To RSVP, please contact Carlyn Harlow at [tacoma.olympia.ymg@gmail.com](mailto:tacoma.olympia.ymg@gmail.com) or respond to the Constant Contact invitation.

- ***Community Outreach: Speaking to Students***

Some of our members will be speaking to students at public high schools in April this year. The outreach group currently consists of four members and we will be planning locations and material over the coming weeks. If you are interested in speaking to high school students, this is a great opportunity to join a group of individuals doing exactly that. The anticipated time commitment is one to two evening planning sessions (1 to 2 hours each) and the actual speaking, about a half-day. If you'd like to join in on the fun, contact Frank Marescalco.

- ***Vacant Director Position***

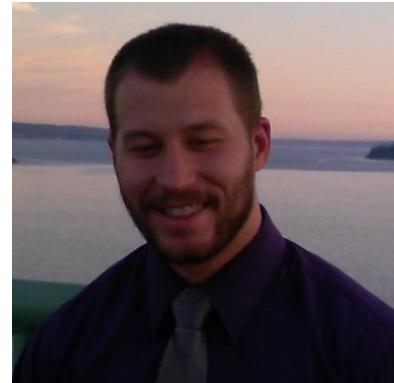
Our Section board has one vacant director position and we are seeking to fill that position. This is a great opportunity for members anywhere, but especially for members on the peninsula, the coast, or rural regions in between whose membership may not be represented geographically by our existing Tacoma-Olympia leadership team. If interested, submit your name to any board member!

## Spelling Counts

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*By Frank Marescalco*

Those of you who read my monthly article have probably noticed that I'm rather particular about my writing. I pay a lot of attention to grammar and spelling. I think good writing skills are important and that not enough engineers devote adequate time and effort to developing them. Social media exacerbates the problem by making it increasingly difficult to keep bad writing habits typified by those websites from influencing us in our professional lives.



As design professionals, we are valued for and hired on the basis of our technical expertise. In order to be successful as a civil engineer, it is necessary to pay attention to details. Arguably, some engineers are more detail-oriented than others – and there's nothing wrong with that. But to do a thorough job and avoid costly errors, you do have to care about details.

If I am looking for professional engineering services and I see on an engineer's resume or proposal that there are grammatical errors, misspellings, or incorrect uses of words, then it becomes clear to me very quickly that the individual is not detail-oriented when it comes to writing. If that individual can't be trusted with the simple task of using good writing skills and looking up a word's spelling, can I trust him or her with the task of designing a critical piece of infrastructure? What other details might be missed?

As a plan reviewer, I see a lot of engineering reports. I find particularly troubling the sheer number of reports that are littered with incomplete sentences and basic writing mistakes that should never have left the office. Sometimes it almost seems as though the engineer didn't think the report would even be read. It reflects poorly on the professional who prepared the document and calls in to question the validity of the engineering, even though it may have little to do with the actual engineering.

You never know where your writing may go, or who may see it. Even something as simple as an email or some handwritten notes can be brought to light and read by a large audience, often including individuals outside of the engineering profession. Litigation is a common example – if your writing is poorly prepared and requires undue dissection or explanation during testimony, it negatively affects your credibility. As professionals whose work frequently affects the public, it is actually quite likely that your work will come to a larger audience at some point in your career. If you regularly send emails to a public agency, for example, your emails are subject to public disclosure requests and anything you say is on the public record.

It isn't just important to make sure that your basic writing skills are in order. Because our profession is so technical and detail-oriented, our writing needs to be very clear and very correct. I think it is fair to say that the majority of our written communication is not even intended for other engineers – it is intended for non-technical audiences. In those instances, it can be quite challenging to preserve the technicality and correctness of a statement while not overly complicating the matter. That is where brevity and word choice really count.

I used to teach a college physics class and I deducted points for lab reports that were poorly written. The students groaned in dismay, but eventually they learned that proper English was important even in science. Many of those students thanked me by the end of the semester and asked if I taught the second semester.

Pay attention to your writing. If you don't know the spelling, look it up. If you don't know about the proper use of your word, look it up! That information is more accessible than it ever has been before thanks to the internet. Spelling does count! Grammar counts! You are a professional, so write like one!

## Volunteering Opportunities

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The Tacoma-Olympia section of ASCE needs all of its members to make our section all that it can be! We currently have positions to serve on committees, get involved with our Younger Members Group, and help coordinate events or give presentations. We also have volunteer opportunities for community-minded individuals. Here are some open volunteer positions we have available now. Our volunteer opportunities are always changing, so remember to check back next month if you can't join anything this month! Contact any of your board members if you are interested in serving.

### Committees and Section Positions

**Membership Steward;** *Approx. time commitment: 0 to 2 days per month.* This standing position with the Section is responsible for increasing member recruitment, retention, and participation. The position may include occasionally being a lead for events, interpreting survey/feedback information from members, and attending board meetings.

**Government Relations Committee Chair;** *Approx. time commitment: 0 to 2 days per month.* The Government Relations Committee is a standing committee within the Section. The chair position is responsible for recruiting co-chair members for the committee and contributing to committee initiatives and activities. The committee may write articles for our newsletter, mobilize members to action for important legislative events or bills, and coordinate with our state lobbyist.

**Project and Engineer Awards Committee Chair;** *Approx. time commitment: 0 to 2 days per month.* The Outstanding Projects and Leaders (OPAL) Awards Committee is responsible for organizing the Section's annual awards program in April. The committee campaigns for and accepts nominations for awards in various categories (set by the committee) and chooses winners for the awards. The program also recognizes our life members at the ceremony. The committee may also be tasked with providing contributions to the Section's newsletter pertaining to outstanding projects and engineers in the community.

**Historical Committee Chair;** *Approx. time commitment: 1 to 2 days per month.* The Historical Committee is a standing committee concerned with local civil engineering history. This committee position is an excellent fit for history buffs. The responsibilities include researching and dedicating historic works of civil engineering within our geographic area of coverage. The committee is also tasked with producing a quarterly newsletter article about a local work of civil engineering and what makes it historically significant.

**Younger Members Group Chair/Co-Chair;** *Approx. time commitment: 2 to 4 days per month.* The Section's Younger Members Group is an active and exciting part of our presence here in the South Sound. The group's leadership organizes events for our younger members such as social outings, workshops, career training, and outreach. The YMG leadership team may also occasionally be tasked with providing reports to the board and producing articles for the newsletter.

### Community Outreach

#### MESA Day 2016 at Pacific Lutheran University

**Tuesday, March 29, 2016;** *Approx. time commitment: 8 hours.* The Math, Engineering, and Science Achievement program hosts an annual day of science and engineering events for students in Tacoma at the Pacific Lutheran University. This is an all-day event on Tuesday, March 29, 2016. The day's competitions include kraft stick bridges, prosthetic arms, catapults, straw towers, and more! We need volunteers who will act as coordinators, judges for competitions, and general help for the event.

**Bates Technical College Engineering Club Mentor**

**Ongoing; Approx. time commitment: 4 hours per month.** The Engineering Club at Bates Technical College is seeking an ASCE member who would attend meetings and provide a mentorship role to the students in the club. The club meets one evening per month.

**Math and Science Tutor**

**Ongoing; Approx. time commitment: varies.** Our Section members help local students with math and science tutoring through programs in our schools and colleges. If you have a knack for helping young people with their technical studies, our Section needs your help! You can volunteer for positions that are local and work within your time limitations.

**Professional Engineer Exam Study Leader**

**Ongoing; Approx. time commitment: 4 hours per month.** If you are interested in helping younger members pass the professional engineering exam, leading a study session is a great way to help out. You can do this individually or as a firm. We have local members who already provide examinees with help studying for the exam who can help you get involved or even develop a technical session of your own.

**Volunteer Coordinator**

**Ongoing; Approx. time commitment: 1 to 2 days per month.** This standing position is responsible for coordinating all of our volunteering opportunities so that members get the best possible options for participation. Responsibilities include finding and reporting on volunteering opportunities in our region and maintaining an updated list of opportunities. This person would also serve as the point of contact for members interested in participating in events or assigned positions.

**Section Programming**

**Programming Coordinator; Approx. time commitment: 1 to 2 days per month.** This position is a standing position with the Section responsible for coordinating programming for the Section. The primary duty of this position is to secure speakers for upcoming programs.

**Program Speakers; Approx. time commitment: 2 days per event.** Our section is always looking for individuals willing to speak to the Section at our monthly programs. Topics pertaining to engineering are always welcome, but our Section has hosted speakers who have given presentations about a range of other topics as well. Speakers are provided with a meal and a small personal item as thanks for their willingness to contribute.

## Recent Events

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In case you haven't noticed, there's a lot going on! Check out our members' reports on recent events below.

### ***Structural Engineers Association of Washington Trade Show***

*By Samuel Owens*

I had the chance to attend my first Structural Engineers of Washington (SEAW) event since relocating to the state of Washington from Nevada in mid-September of 2015. This trade show was for the southwest chapter of SEAW. The event was held at the Emerald Queen Casino Ballroom and Conference Center in Fife on the evening of February 17th, 2016.

At a booth for MiTek, I learned that moment frame systems in California are becoming more popular due to seismic regulations. The American Institute of Steel Construction had a booth at the event. RISA Technologies was at the event distributing demonstration packages of their structural engineering software. DeWalt had a booth with drills and bits for use in concrete, and they gave one of their drivers away in a raffle at the event.

I also had the opportunity to attend a technical session discussing concrete reinforcement. Staff from the Concrete Reinforcing Steel Institute hosted the technical session, led by Mr. Gregory Halsted, P.E., the Institute's Northwest Regional Manager. I learned about important precautions to take when installing rebar in the field and picked up some tips on fabrication and assembling cages. As an interesting fact, staff mentioned that Cascade Rolling Mills can make steel reinforcing up to 100 ksi in strength! And any bar #6 size and below can be trucked to the field in big rolls, eliminating some of the need for splicing in the field.


### ***Younger Member's Group Trivia Night***

Our younger members met in Tacoma at the Harmon Tap Room in February to put their trivia skills to the test. Reports from the team indicate that no prizes were won, but much fun-having was achieved. If you missed out, we hope to see you next time! With your help, we *will* win!

## Calendar of Upcoming Events

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### March 2016

<b>1</b>	ASCE Tacoma-Olympia Board Meeting – 6:30 PM Location TBD – Olympia, WA
<b>9</b>	Managing Stormwater in Washington – All-day conference Greater Tacoma Convention and Trade Center 1500 Broadway, Tacoma, WA 98402 Visit <a href="http://www.stormwaterconf.com/wa16/">http://www.stormwaterconf.com/wa16/</a> for more information and to register
<b>10</b>	Annual Joint Section Meeting with the Society of American Military Engineers Lunch Meeting – 11:30 am to 1:00 pm Eagles Pride Golf Course I-5 Exit 116, Joint Base Lewis-McChord, Tacoma, WA 98433 Register through Kim Kaul at <a href="mailto:kkaul@ahbl.com">kkaul@ahbl.com</a>
<b>16</b>	Geotechnical Engineering PE Exam Study Session (FREE) – 5:00 PM There will be pizza!  GeoEngineers Tacoma Office 1101 South Fawcett Avenue, Suite 200, Tacoma, WA 98402 RSVP to <a href="mailto:sbraicks@geoengineers.com">sbraicks@geoengineers.com</a> by March 9 <sup>th</sup> to join
<b>23</b>	Water Resources and Environmental PE Exam Study Session (ALSO FREE) – 5:00 PM City of Tacoma Center for Urban Waters 326 East 'D' Street, Tacoma, WA 98421 RSVP to Frank Marescalco or respond to the Constant Contact invitation by March 16 <sup>th</sup>
<b>29</b>	MESA Day – All-day event Pacific Lutheran University We need volunteers! Contact Michael Hale at (253) 591-5766 or <a href="mailto:mhale@cityoftacoma.org">mhale@cityoftacoma.org</a>
<b>30</b>	Younger Member's Group Resume and Interview Workshop – 6:30 PM St. Martin's University Campus – Location TBD RSVP to <a href="mailto:tacoma.olympia.ymg@gmail.com">tacoma.olympia.ymg@gmail.com</a> or respond to the Constant Contact invitation.

### April 2016

<b>15</b>	Spring 2016 Professional Engineer Exam Pacific Science Center 200 2 <sup>nd</sup> Avenue North, Seattle, WA 98109
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## Job Opportunity

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### Job Title: Senior Engineer – Cascade Earth Sciences

Spokane, WA

#### Why Valmont?

Welcome to Valmont, where a world of opportunity awaits. When you join our team, you become part of a passionate group dedicated to changing lives and conserving resources around the globe. We want problem solvers who roll up their sleeves to foster progress and innovation for all people. At Valmont, we provide infrastructure, irrigation, tubing, and coatings to the world. We strengthen cities. We nourish croplands. We design, manufacture and coat. Our products and services make a difference. Join us, and BUILD YOUR WORLD.

#### How you will contribute

Valmont is currently seeking a highly motivated and talented individual for a Senior Engineer position with Cascade Earth Sciences in its Spokane office. Cascade Earth Sciences is a subsidiary of Valley Irrigation, the world's largest manufacturer of mechanized irrigation systems. Cascade Earth Sciences specializes in topics related to water, environmental issues, and agriculture and has been providing consulting services, design, and turnkey solutions to our customers since 1976. Our customers primarily consist of larger agricultural producers, food and beverage processors, federal agencies, municipalities, mine operators, timber and wood processors, manufacturers, and private land owners. Our interdisciplinary staff is comprised of agricultural, environmental, civil, and chemical engineers; agronomists and soil scientists; geologists and hydrogeologists; and technical and business specialists. We provide solutions to challenges relating to water, agriculture, and environmental sustainability that meet our motto: conserving resources, improving life.

Cascade Earth Sciences is looking for a highly-driven individual who will evaluate and design water and wastewater treatment systems for both mechanical and land-based reuse and conveyance systems with a focus on process design, pretreatment, and equipment selection. Additionally, you will...

- Develop and assist others in developing engineering services within the regional area; provide local project management; and prepare technical designs, specifications, reports, and construction cost estimates
- Direct and manage drafting resources for plan sheet and specification development and improvement for the engineering group
- Mentor junior engineering staff
- Identify and develop project leads
- Assist in preparation of written scopes of work and cost proposals for new projects

#### What it takes

##### *Required Qualifications*

- A Bachelor's degree in Civil Engineering
- 8 years of relevant work experience
- Licensed Professional Engineer in the State of Washington, or the ability to obtain license within 3 months
- Ability to perform field activities (e.g., stoop, lift up to 40 pounds from floor to waist high, walk, etc.)
- Ability to travel and be away from home 5 percent of the time
- A valid U.S. driver's license

*(Continued on next page)*

Highly qualified candidates will also possess:

- Consulting experience with industrial and municipal clients designing water and wastewater treatment systems
- Master's Degree in Civil, Environmental, or Chemical engineering
- Licensed Professional Engineer in other western US states
- Strong oral and excellent written communication skills
- Ability to clearly communicate technical information to colleagues, clients, and regulators
- Ability to work well in a team environment
- Ability to organize and manage multiple, simultaneous priorities
- Strong leadership, problem solving, and planning skills
- Ability to work independently
- Ability to mentor, motivate, direct, and develop other engineers
- Working experience and understanding of AutoCAD Civil 3D
- Passion and integrity with the drive to excel and deliver exceptional results

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, gender identity, sexual orientation, national origin, disability, or protected veteran status.

To apply for this position, please visit the careers page at <http://www.valmont.com>. You may search for the Senior Engineer position by using job code 150000I4. From there, you can submit an application for employment, which is the required first step in our hiring process.

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## Membership Information

National membership rates may be found at <http://www.asce.org/membership>.

Section membership rates

- Individual: \$25 per year
- Life member: Free

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## Advertising Rates

Did you know you can purchase advertising space to promote your business, sponsor the section, and spread the word about job opportunities? Our newsletter is distributed to a growing membership base with about 500 viewers each month. We offer space in our newsletter at the following monthly rates:

- 1/4 page: \$25
- 1/2 page: \$50
- Full page: \$100

If you are interested in purchasing space in our newsletter, contact our treasurer Jessie Chen at (253) 310-6046 or [Jessie.asce@hotmail.com](mailto:Jessie.asce@hotmail.com)

Looking for a previous issue of the newsletter? The Tacoma-Olympia section of ASCE participates in ASCE's Higher Logic online community. You can access your account, and all of our past newsletters and online resources, at <http://collaborate.asce.org/ewrinstitute/home>.

## Branch Contact Information

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