



MACHINATORES VITAE

Engineer and Architect Newsletter

From the Chief Engineer Officer



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February 2011

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A New Year

I enjoy the beginning of a New Year because that is when I take a few moments to reflect on what has happened in the previous year and to evaluate what goals I want to try to accomplish in the New Year. For the Corps and the Engineer Category, 2010 was a very interesting year with many accomplishments and challenges. A few 2010 highlights include:

- Passage of the *Patient Protection and Affordable Care Act of 2010*; which updated our Commissioned Corps statutory authorities and will result in a more modern US Public Health Service (PHS) Commissioned Corps.
- Determination by the Assistant Secretary of Health that our current Commissioned Corps management structure (i.e., the three different Offices) should be consolidated for the most part under the Office of the Surgeon General.
- Passage of the *American Recovery and Reinvestment Act of 2009*; which resulted in approximately \$2.4 billion of additional construction money for the Indian Health Service, the Health Resources and Services Administration, and the National Institutes of Health that had to be obligated very quickly but have helped to address some significant program needs.

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- Passage of the *Post 9/11 Veterans Educational Assistance Improvements Act of 2010* that provides the authority for HHS to perhaps allow the transferability of Post 9/11 GI Bill educational benefits to immediate family members of PHS Commissioned Corps officers.
- Rollout of a new Commissioned Officer Effectiveness Report (COER).
- Rollout of the new Billet system for the Commissioned Corps.
- Convening of a Corps-wide Mentoring program review sponsored by the Mentoring Subcommittee, Engineer Professional Advisory Committee (EPAC).
- Revising how our category supports engineer applicants to the Commissioned Corps by the Recruitment Subcommittee, EPAC.
- Creation of the *Conducting Assessments for Public Health Infrastructure and Capacity Building International Humanitarian Assistance Missions* by the Deployment Preparedness Subcommittee; which is currently being field tested.

12th PHS Chief Engineer Goals

Reflect upon our past accomplishments as we prepare for our 100th Anniversary as a category;

Renew our efforts to recruit even more engineers and architects and advance the engineering and architectural sciences; and

Respond to the ever changing health needs of our country.

Looking Forward

Some of our 2010 accomplishments and challenges have a direct impact on our 2011 activities. As a result of the significant changes that have occurred by the 2010 Affordability Healthcare Act, we were put under a “hiring pause.” Now that the pause has been lifted, we need to ramp up our recruiting and engineer applicant support. Fortunately, the EPAC Recruitment Subcommittee’s efforts to revise how we support engineer applicants have been time well spent and I believe will result in a more efficient process for our new recruits.

Many of you have volunteered to participate on the Workgroups that will guide how the Commissioned Corps management will be organized under our Surgeon General. These Workgroups will need to complete their efforts in a very short time, but the resulting new management organization will provide more effective service to the Corps.

Although the passage of the *Post 9/11 Veterans Educational Assistance Improvements Act of 2010* is very much welcomed by all PHS Officers, there are still several executive actions that must still occur before PHS officers are able to apply for transferability of education benefits. First, as required in the law, the Secretary of Defense must certify that the Post 9/11 GI Bill transferability by PHS officers is in the national security interest of the United States. Then, the Secretary of Health and Human Services must determine which, if any, PHS officers will be authorized to use this key retention benefit. Hopefully, these actions will occur in a timely manner in 2011.

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We are still in the process of revising all of the engineering specific billets. If you are not currently involved with or have not yet finished selecting a new engineer specific billet, it is imperative that you not only begin the process but complete it in the very near future.

- Select the billet that fits the criteria that best describes the billet that you currently occupy (Note: the billet describes the position—not you).
- Tailor a standardized billet by adding position-specific components through the use of drop-down menus.
- Identify your supervisor (supervisors will identify reviewing officials).

If your current position does *not specifically* require engineering skills (e.g., the duties could be accomplished by one or more of the other PHS categories), then the position is multidiscipline and you should not develop an engineering billet for the position you currently occupy. Please reply to the e-mail and indicate that you will need to wait until the multidiscipline billets are developed. Multidiscipline billet development will occur in a few months.

In 2011, I fully expect that the EPAC Mentoring Subcommittee will be revising the Engineer Mentoring Program with a goal of assuring that all new engineers and architects will be provided a mentor shortly after their commissioning or acceptance as a Civil Service engineer or architect.

We continue to recognize the outstanding accomplishments of fellow engineers and architects. At our Engineer Week Awards Breakfast (February 24 at the Food and Drug Administration White Oak Facility), the PHS Engineer of the Year and the various Agency Engineers of the Year were recognized. The recipients of the following awards will be recognized in June at the USPHS Scientific & Training Symposium:

- PHS Engineering Literary Awards
- Commissioned Officers' Association John C. Villforth Leadership Award
- Ian K. Burgess Outstanding Your PHS Engineer Award
- Roger H. Lynch Outstanding Young PHS Engineer Award
- Society of American Military Engineers Hollis Medal
- Society of American Military Green Medal
- Society of American Military Cumming Plaque

These are only a few of the activities that we can look forward to in 2011. Many of them will be conducted by our Engineer Professional Advisory Committee (EPAC) and I encourage to you join an EPAC Subcommittee and bring forward your ideas.

It is going to be another interesting year as we promote, protect and advance the health and safety of our Nation.

Machinatores Vitae!!
(Engineering for Life)



2011 EPAC Chair

CDR Peter Nachod, P.E.

Hello Engineers! I hope that 2011 is treating you well. Now that the New Year is in our rearview mirror, you are each back in your office with your nose to the grindstone working diligently away. We also have our first newsletter for 2011!



This year the Engineer Professional Advisory Committee (aka EPAC) will have 19 voting members; I would like to extend a personal welcome to our incoming 2011 class of members. They include Mr. David Caimbeul (CDC), LCDR Jill Hammond (FDA), CDR Ramsey Hawasly (IHS), CDR Steve Raynor (IHS) and LCDR Matthew Vojik (EPA). We have a new Vice Chair, CDR Ed Dieser. Congratulations CDR Dieser, I have full confidence that the EPAC will in excellent hands when you assume the Chair next year! I would also like to thank LT Atiq Chowdhury for stepping up wholeheartedly with great enthusiasm to be the Executive Secretary for the EPAC this year.

The EPAC has nine standing subcommittees; these subcommittees are really the engine that makes the EPAC what it is. The members of these subcommittees spend countless hours (in addition to their day jobs) on varying issues all in effort to move our category forward. I want to thank each and every one of you out there working behind the scenes. The 2011 Chairs (and Vice Chair) for each of these subcommittees are as follows:

- Rules – CDR Ed Dieser (CDC)
- Awards – LCDR Varsha Savalia (FDA)
- Career Development – LCDR Vivian Porter (IHS)
- Deployment Preparedness—CAPT David Apanian (EPA)
- Information – CAPT Eric Shih (OS)
- Mentoring – CDR Jim Simpson (FDA)
- Public Health Engineering Practices (PHEP) – LCDR Jennifer Proctor (NPS)
- Recruitment & Retention – LT Kimberly Love (FDA)
- USPHS Scientific & Training Symposium – CDR Ed Dieser (CDC); LT Kurt Kesteloot (Vice Chair, NPS)

I encourage you to become involved with one (or several) of these subcommittees. It's a great way to get connected with CC activities as well as develop relationships with officers from other OPDVs. Most of the committees meet monthly for one hour. If you are interested in getting involved and ready to "dip your toe into the EPAC waters" with one of the subcommittees, it's easy; all you have to do is contact the respective chair shown above.

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The 2011 event schedule has been posted to the USPHS Engineers website. The EPAC is scheduled to meet 8 times a year. These meetings are open for everyone to attend; either in person or via conference calls. Please contact me if you would like to attend (or call in) and I can give you the needed information.

A few weeks ago, I had the privilege to attend the Officer Basic Course (OBC) Class 40 Graduation Program. I have to say, it was an awesome event! The OBC Class 40 consisted of 48 officers including 6 engineers. I had the pleasure to have a chance to meet each of these engineers and talk to them for a little while. I remember when I came into the Corps nearly 20 years ago to my first duty station in Seattle, Washington. A lot has changed since then and the Corps has come a long, long way! Over the years, I have noticed that USPHS Engineer Officers are a hard working, committed, dedicated bunch of individuals rarely recognized for their accomplishments. Often, they perform their duties flawlessly in extreme high stress environments without reservation. Often, they do their job for the love of what they do, not for the paycheck. What I took away from my meeting with them was that that passion, dedication and drive is still there in our engineer Corps. LCDR Monson, LT Warner, LTJG Bandukwala, LTJG Blasy, LTJG Sims, and LTJG Sorum – each of you are the future of the engineer category; make this category what you want it to be. Take the foundation laid by your predecessors and build upon it. Seize those opportunities as they present themselves and make us proud!

On a final note, I want to say that if you ever have any ideas, concerns, issues or just plain want to talk about the engineer category and the EPAC, feel free to contact me. My door is always open and I will do my best to address whatever you might bring my way!

v/r
Peter



A New Way Forward: Changes to the PE Exam

LCDR Stephen T. Fields

It can be said that the greater the number of PHS Officers with a Professional Engineer (PE) Registration, the more esteemed the Engineer Category will be and the Corps will be perceived by society for ensuring safety and welfare. In most circles, one isn't considered an Engineer unless they have a PE Registration. A PE Registration is the credential that demonstrates to those unfamiliar with an individual engineer that they are considered competent. There are many career advantages to having a PE Registration.

The proposition of changing the PE exam to a closed notes exam is causing new conversation among engineers. With the onslaught of recent mischievous exam takers, the National Council of Examiners for Engineering and Surveying (NCEES) is seriously deciding whether it will prescribe that books and other legal resources can no longer be brought into PE exams.

I had the distinct pleasure to interview Mr. Arthur Schwartz, legal counselor of the National Society of Professional Engineers (NSPE), and discuss this pending matter. The interview was insightful. I asked him four major questions related to this issue. His responses are provided below each question.

Q: What impacts do you see this potential development having as far as encouraging younger engineers to take the PE Exam?

A: I don't believe this change will have any significant impact on either encouraging or discouraging individuals to take the PE examination. As with all professional licensure examinations, licensure applicants understand that there are "rules of the road" that exist and that are to be followed in order to maintain security, protect the integrity of the process. So long as the rules are being applied uniformly, I see no impact.

Q: What is NSPE's viewpoint toward this potential development?

A: NSPE believes that protecting the security of the engineering licensure process is a critical issue. In recent years, there have been a number of documented instances of individuals attempting to breach the security of the process, so NSPE is supportive of NCEES and its efforts to protect the integrity of the process.

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**Q: What is NSPE's viewpoint toward computer-based testing?**

A: NSPE has no official position on computer-based testing (CBT), but NSPE recognizes that there is a trend toward CBT and NSPE is supportive of groups like NCEES and state licensure boards exploring new and innovative methods to determine an individual's qualifications for practice.

Q: What is your opinion of the PE license given the sudden increase of certifications like the Project Management Professional (PMP) and Six Sigma Black Belt licenses?

A: NSPE supports engineers becoming licensed as a Professional Engineer and that individuals are encouraged to pursue post-licensure certification as appropriate. However, NSPE does not support making a specific private certification a prerequisite for engineering practice.

As NCEES develops its recommendation on transitioning to CBT, there is sure to be more dialogue on both sides of this issue. To read more on this topic, please visit the NSPE website:

<http://newsmanager.commpartners.com/nspeupdt/issues/2010-02-24.html>

**“The human race has only one really effective weapon
and this is laughter.”**

~Mark Twain



Five surgeons were taking a coffee break and were discussing patients.

The first said, "I think accountants are the easiest to operate on. You open them up and everything inside is numbered."

The second said, "I think librarians are the easiest to operate on. You open them up and everything inside is in alphabetical order."

The third said, "I like to operate on electricians. You open them up and everything inside is color-coded."

The fourth one said, "I like to operate on lawyers. They're heartless, spineless, gutless, and their heads and their butts are interchangeable."

Fifth surgeon said, "I like Engineers...they always understand when you have a few parts left over at the end..."



EPAC's Information Subcommittee

The Information Subcommittee is responsible for supporting EPAC initiatives by providing communications and Information Technology services.

The Information Subcommittee activities include:

- EPAC Newsletter: publish a tri-annual online newsletter that has articles of interest to public health engineers.
- Website Content Management (Posting): update the www.usphsengineers.org website with the latest EPAC news and information.
- EPAC Community Portal: an HHS-approved secure collaboration website for sharing documents and projects.
- Quarterly Data Reporting: report civilian HHS Engineer contact information to the Career Development Subcommittee.
- CPO's Blog: update the www.usphsengineers.org website with an area for the Chief Engineer, USPHS to post his thoughts/comments and other news. The committee is also looking at redesigning the website to make it more user-friendly.
- Social Media: create and maintain a presence on social media networks. At present, we are looking at using Facebook and LinkedIn.
- Move website to a new hosting facility: move the www.usphsengineers.org website to a different (less expensive) hosting provider.

The Information Subcommittee has several Working Groups who perform the work in each activity. The Working Groups are:

1. Content Management: Responsible for web content management and website move activities. This workgroup performs most of the technical programming work on the website. The workgroup rotates the website update (posting) responsibilities between its members on a monthly basis. The group email address is: postings@usphsengineers.org.
2. Newsletter: Responsible for publishing the EPAC newsletter. The Working Group also gathers, writes, and assembles articles for the newsletter. At present, the Working Group is producing the Newsletter tri-annually.
3. Engineer's Blog: Responsible for most of the content and design of the Chief Engineer's (proposed) web pages on the www.usphsengineers.org website.

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4. Social Media: Responsible for all activities related to our (proposed) social media sites.
5. HHS Portal: Responsible for the EPAC Community Portal activity.

At present, all of the Working Groups need more volunteers to move forward with the Information Subcommittee's initiatives. We especially need motivated individuals to serve as Working Group leads for the Social Media and HHS Portal Working Groups.

Please note that you do not need technical expertise to join one of our Working Groups – just energy and a willingness to learn and lead!

If you are interested in participating in one of our Working Groups, contact the Information Subcommittee Chair, CAPT Eric Shih at: Eric.Shih@hhs.gov.

Engineer Placement Assistance Program

Remember when you applied to the Corps?

Remember those people who helped you through the process? ...

The EPAC Recruitment and Retention Subcommittee is currently developing a new placement assistance program aimed to make that process just a little easier for new applicants. The Engineer Placement Assistance Program (EPAP) will provide advice and guidance to potential PHS engineering applicants. Selected liaisons will serve as mentors and advocates for these applicants. The EPAP intends to help guide applicants through the application process, help prepare applicants for job interviews, and help refer position announcements to applicants.

Current PHS engineer officers will be able to apply to become an EPAP liaison and develop their leadership and officership skills. A pilot group is expected to begin February 2011 with the goal of an official release date come April 2011.

If you are interested in getting involved with the development of the EPAP or would like to find out more information, please contact:

LCDR Jeremy Nickels, EPAP Lead Administrator

Jeremy_Nickels@nps.gov

LT Kimberly Love, EPAC R&R Subcommittee Chair

kimberly.love@fda.hhs.gov



New Engineer Officers

The EPAC would like to acknowledge the following engineer officers who were commissioned between January and August 2010. This was the last group brought into the Corps before the “hiring pause” was instituted. Now that it’s been lifted, we look forward to the next crop of new engineers!

The EPAC welcomes each of you and hopes you will enjoy a long and prosperous career in the PHS. To those who are new to the Corps, and even those who have been around for a while, please take some time to review the Welcome Package posted on the Engineers’ website, <http://www.usphsengineers.org/careerdevelopment/EPAC%20Welcome%20Package.pdf>. It contains a prioritized list of tasks new officers should focus their efforts on within the first 30/60/90/120 days after being Called to Active Duty. The Welcome Package is a one-stop shopping tool for information on everything from uniforms to promotion to military benefits.

Rank	Last	First	OPDIV	Location
LTJG	Bandukwala	Abbas	FDA	Silver Spring, MD
LTJG	Blasy	Michael	IHS	Rhineland, WI
LTJG	Devera	Benigno	FDA	San Pedro, CA
LCDR	Fraser	William	IHS	Anchorage, AK
LT	Hrdlicka	Jason	IHS	Sisseton, SD
LT	Janda	Michel	FDA	Silver Spring, MD
LT	Knudsen	Westen	IHS	Billings, MT
LT	Kohnhorst	Nathan	IHS	Rhineland, WI
LCDR	Lester	Gregory	NIH	Bethesda, MD
LTJG	Moore	Russell	NPS	Atlanta, GA
LT	Rosbury	Tamara	FDA	Stoneham, MA
LT	Schneider	Jason	IHS	Bremerton, WA
LTJG	Shilhanek	Michael	IHS	Aberdeen, SD
LTJG	Sims	Joshua	IHS	Winterhaven, CA
LTJG	Sorum	Travis	IHS	Redding, CA
LT	Virani	Jitendra	FDA	Silver Spring, MD
LT	Warner	Ty	IHS	Rhineland, WI
LT	Woster	Tristan	IHS	Sioux City, IA
LTJG	Yambot	Marcus	FDA	Ontario, CA



Dear Readers,

The *Machinatores Vitae* newsletter is a publication of the EPAC, but we need help in bringing you the stories you want to read. Please consider submitting an article for an upcoming issue or let us know when you or a colleague have reached a milestone, been recognized for an accomplishment, or have an experience to share. If you are an accomplished writer, send something along that is already polished. If you don't feel like a Hemingway or Dickinson, just send enough detail so the writing team can take hold of it and build the story for you.

The writing staff can only see a bit of the big world that is public health engineering. There are numerous accomplishments even within our readership that remain unknown except in the relatively small circles around you. If you have not presented at a national meeting, the likelihood is that no one outside of your agency, or possibly even Office, ever heard about your pet project that you nearly exhausted yourself completing. Here is your chance to shine!

All ideas are welcomed. Remember that we do not have to solely focus on work going on within the PHS. Let us know if you hear of new technologies or applications, or just find an interesting story from the outside world. The rule of thumb is that if you as an engineer are interested in it, then others will be too!

Send your thoughts, suggestions, or a brief synopsis of a proposed article to the newsletter editors at epac@usphsengineers.org.

Thank you,

CAPT James Ludington
CDR Jen Mosser
CDR Peter Nachod

The *Machinatores Vitae* is published three times a year and posted on the USPHS Engineer Professional Advisory Committee website. The next issue of the newsletter will be published in July 2011. The deadline for submitting articles is June 15, 2011.

If you have suggestions or comments about the newsletter, or would like to submit an article, please contact the editors at epac@usphsengineers.org.

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