A Better Cyber Culture in Six Steps

By LT Ryan Haag, USN
For Issue #3, May 2014
Last Updated: Thursday May 08, 2014 01:18

Ingraining continuous professional development in our cyber warfare operators ensures excellence in future operations. A culture of professional development is easier to build in a controlled environment, such as onboard a warship, where outside distractions are scarce. As most cyber jobs will be on shore duty, there are many distracters that threaten to destroy the camaraderie and warfare focus our other warfare disciplines enjoy. A robust cyber culture promotes continual education, strengthens good habits and builds expert operators.

Traditional classroom education and training methods that work for other warfare areas fall short in cyber. We know what we want SWOs, Aviators and Submariners to do, but the rapidly changing nature of cyber gives us only a murky vision of a good operator. Additionally, with a constant budget crisis that routinely eliminates training dollars, we must have an inexpensive distributed method of continual education. I recommend the following methods:

1. Expanded distance education through masters certificates from Naval Postgraduate School.

NPS has created an outstanding system of masters-level certificates that require three to four masters classes and are available completely via distance education. These certificates give a unique subspecialty code for officers that complete the course of instruction. However, none of these subspecialty codes are currently used for billets. Coding desirable billets with these subspecialty codes rewards officers that take initiative to attend this course of instruction. Expanding the number of certificate offerings and requiring these classes for desirable billets will raise the overall level of knowledge of our operators without significant additional expenditure.

2. A website with Rich Site Summary (RSS) feeds of cyber related topics.

RSS readers make it easy to quickly sift through massive amount of information on a variety of subjects. Most of the cyber operators I know already subscribe to various feeds and follow websites such as Slashdot.org. There is no standard across the enterprise, and thus no enterprise-wide way of sharing the best sources of information. A summary of feeds on a CYBERCOM maintained website could easily fix this.
3. Expand local cyber and STEM community outreach efforts.

Although selection boards consider work performance for about 75% of the total grade towards a promotion, community involvement is still a fair chunk of the overall grade. Cryptologic Sailors are not often interested in many of the traditional outreach events, but they routinely attend STEM and cyber related community events that play to their strengths. Expanding these efforts near our cyber centers of excellence gives cyber Sailors a better shot at overall promotion, as well as foster focus on cyber both at work and after work.

4. Mandatory annual attendance of an online significant cyber training event.

Linguist Sailors must attend one month of training every year called a significant language event. This is typically conducted locally and serves to maintain the high language skill level required for their job. Cyber operators require the same level of effort to maintain their highly perishable skill set. Conducting these training events online on JWICS or NSA-Net would permit a large number of attendees at very low cost.

5. Expanded mentorship opportunities between military and civilian operators.

With the high demand in the civilian sector (both government and non-government) for cyber-related skills, there is often an adversarial relationship between military and civilian organizations. This does not foster excellence and does not recognize the reality that all military members at some point hang up their uniform and work elsewhere. Distance mentorship between military and civilian operators can help alleviate this. A protected portal on both the classified and unclassified networks can foster these mentoring relationships.

6. Classified blogging

It’s hard to talk in depth about cyber without getting into classified information. Intelink on both JWICS and SIPR has a built-in blog capability that is woefully underutilized. Cyber leadership should be regularly blogging here to improve communication across the enterprise, as well as encouraging younger leaders to blog their ideas.

A culture of continual cyber development does not need to cost much, but it must recognize that, unlike other warfare areas, our cyber operators are not stuck on a warship where they are isolated from the world around them. They spend their workday defending our nation and then go home to the distractions that we all face on shore duty. Deploying tools and methods to help them continually develop their talents, both on the job and off, will go a long way to ensuring our future cyber security.

LT Ryan Haag is an Information Warfare Officer. He has driven submarines, planned Tomahawk missile missions, flown in the EP-3E as a Special Evaluator, run the training department at a major NIOC and worked as an aide to a British Commodore. He is currently transferring to the staff of commander, U.S. Pacific Fleet.
Material contained herein is made available for the purpose of peer review and discussion, and does not necessarily reflect the views of the Department of the Navy or the Department of Defense.