



## Mid-Atlantic Chapter | Women In Defense

### Interview with Suzanne Milchling, Director, Program Integration, Edgewood Chemical Biological Center Aberdeen Proving Ground, MD by Sharon Jacobs

Q1: Mrs. Milchling, you were recently detailed on an assignment as the Acting Director, US Army Natick Soldier, Research, Development and Engineering Center (NSRDEC) which you began on March 29, 2015, along with your current position as the Director, Program Integration, Edgewood Chemical Biological Center. Essentially, you are dual-hatted in two critical leadership positions. Can you elaborate on your NSRDEC Acting Director role, it's duties and responsibilities?



A1: Both organizations are part of the Army's Research, Development and Engineering Command or RDECOM, the Army's technology leader and largest technology developer. RDECOM's mission is to ensure decisive capabilities for unified land operations to empower the Army, the joint warfighter and our nation now and through 2040.

I am actually not dual-hatted, but I am detailed from my current position at ECBC to serve as Acting Director for NSRDEC. I am responsible for the entire organization to include human resources, technological developments, and fostering strategic partnerships and collaborations with key customers, other government agencies, industry, and academia. NSRDEC is comprised of approximately 800 employees, and our mission is to deliver world class services with a human-centric focus. We consider

ourselves to be the "skin-out" services provider. (The U.S. Army Research Institute of Environmental Medicine, one of our important partners at the Natick Soldier Systems Center, does the "skin-in" work.) NSRDEC has five major directorates - Warfighter, Aerial Delivery, Combat Feeding, Expeditionary Basing and Collective Protection, and Soldier Systems Engineering Directorates. In addition, NSRDEC also has portfolio management process. Portfolio Management is where we look at the Human System Integration (HSI) as a service, individual and multiple threat protection, force projection and sustainment, and then just general portfolio management support and Soldier capability integration. So we are looking at the Soldier as a person trying to pull the technologies together as a system, rather than in the directorates, building widgets. This is a new organizational structure NSRDEC has been operating under for over a year or so.

Q2: What do you mean when you say "skin-out"?

A2: Skin-out refers to the Personal Protective Equipment like helmets, body armor, uniforms, boots, eye protection etc., as well as field feeding equipment, field and combat rations, and the DoD joint services food program that is responsible for all the food the services eat in the field. NSRDEC focuses on Soldier systems engineering architecture and leads the Soldier Domain through partnership and collaboration across Army, Department of Defense (DoD), and government organizations, industry, and academia to deliver advanced capabilities through S&T generation and application. We support the current fight while transforming to the future force with the Soldier as the decisive edge.

A big part of our mission is to empower, unburden, and protect Warfighters through basic science, technology generation, application, and transition, enabling rapid fielding of the right equipment, Soldier systems technology integration and transition, and the ability to solve field problems rapidly.

Through previous work with NASA, NSRDEC has developed a 'food-in-a-tube' program for the pilots of very specialized U.S. Air Force aircraft and also does expeditionary basing which gives us the capability to set up different-sized basecamps for Warfighters in any environment. NSRDEC is also responsible for the Army's air delivery systems to get Paratroopers and equipment safely and accurately to the ground, as well as getting supplies and equipment to the battlefield using helicopter sling-load capabilities. Additionally NSRDEC develops load-carriage systems enabling Soldiers to carry a wide variety of gear, and also provides the integration of other equipment with other acquisition organizations for Soldier system integration of those developments to ensure the interfaces are correct.

Q3: Are you referring to usability of new developments?

A3: Yes, but also, NSRDEC looks to see if Soldiers are being overloaded physically and mentally. Males and females have different body compositions. One example of our collaboration is the female body armor to ensure a Soldier has the right size, protection, and body dimensions. Another study ongoing in DoD seeks to better understand what physical strength a Soldier needs for a particular Military Occupational Specialty (MOS) to execute missions. This is more than simply meeting the male or female physical fitness test, but what is the true arm strength, leg strength, upper body strength etc... for each MOS. That would drive whether or not a Soldier is fit for the MOS. NSRDEC also looks at physical and cognitive performance optimization through training, equipment,

integration, environment and nutrition.

Q4: What are some challenges you may face in your new position and how do you intend to overcome them?

A4: I am detailed for only 120 days. My greatest challenge is getting there to learn the people and the projects. I am the only SES there, so I have been making trips to DC for meetings because of the mission. So, I need to get on the ground and meet the people and absorb the information and put in the right context. I have grown up in Chem-Bio, so it is a matter of taking what I have learned in Chem-Bio, and seeing how it relates to the Soldier side of things. The past two Directors were from Army Research Laboratory (ARL) who have more of a human systems understanding and I am gaining all that.

Q5: You mentioned that there were two past Acting Directors. When did NSRDEC have a Director and what are the future plans?

A5: The last permanent Director, Dr. Jack Obusek, retired in March 2014. RDECOM is currently in the process of interviewing and selecting a new permanent Director.

Q6: You are a significant contributor to the Women In Defense Mid-Atlantic Chapter by giving your advice, time, and sharing your experiences. How will you continue to mentor those rising future female leaders in your new position?

A6: NSRDEC has some developmental assignments and a Women In Science and Engineering (WISE) program. NSRDEC has a Leadership Development Program called Total Leadership with internally certified instructors that have been conducting the program since 2010. The program is mentoring based and uses mentoring trios to work through a full spectrum of leadership issues. The results are meaningful for work, family, community, and self (mind, body, and spirit), and how to balance these critical domains. What people gain from Total Leadership is how to perform better according to the standards of the most important people in your life, feel better in all domains, and have greater harmony among the domains because you have more resources at your disposal to fit the parts of your life together. I will continue to support RDECOM with SHARP (Sexual Harassment/Assault Response and Prevention) and Science, Technology, Engineering and Math (STEM) initiatives, and be a final judge or national judge for the e-CYBERMISSION competition.

Q7: Are there opportunities to continue collaboration with RDECOM, JPEO CBD, and CECOM commands in your new assignment?

A7: Yes, as we work to learn more about Soldier as a System and work on Soldier system engineering or Soldier system architecture and the human dimension, where we want to make sure that as new equipment comes on line, we are not maxing a Soldier out. If we can put a Soldier in collective protection for 24 or 48 hours, what is his state at the end? We need to assess those type of things, before we invest in an enhanced collective protection, let's figure out if he is a couch potato after 18 hours or not. But the system is not there yet, if we had a modeling system or a modeling opportunity we could do some theoretical work first and I am trying to work that as we enhance the Soldier systems human dimensions and that is a big TRADOC focused initiative.

Q8: Are there any Small Business opportunities with NSRDEC?

A8: NSRDEC actively participates in the U.S. Army Small Business Innovation

Research (SBIR) Program and the Small Business Technology Transfer (STTR) Program. Both these programs allow small, high-tech U.S. businesses and academia the opportunity to provide innovative research and development solutions in response to critical Army needs. NSRDEC is allocated approximately 6-8 topics per year in which small businesses submit Phase I and subsequent Phase II proposals against during open solicitation. NSRDEC is highly successful in this program and to date has had over \$211M in SBIR technology transition contract awards.

Q9: You are known as a charismatic leader with an ability to get the job done by working with multi-disciplinary skill sets on a team. How do you pull your team together?

A9: Look at people and see how they work with others, not necessary at their degree or education, but how you contribute as a team player.

Q10: What advice would you offer to other professional women about career development?

A10: Don't be afraid of the detail assignments. Be open to it and there is light at the end of the tunnel.

Q11: There is a lot of talk about women having it "all", you can't have it all or you can have it all. What is your opinion on the subject of women having it all?

A11: It depends on what you want. You have to set realistic expectations. If you think you are going to be the Rock Star and have your kids love you all the time, then figure out how to make it happen. But don't think you will be at every play or sporting event, if your job is out of town.

Q12: What do you do when you have downtime for yourself?

A12: The first thing I packed was my sewing machine. I am an avid sewer and do quilting in Massachusetts on downtime. When I am home in Maryland, I work on my 80-acre farm feeding the animals, collecting eggs, helping with the baby piglets and calves and doing my other chores.

Q13: Is there anything you would like to share on your next detail assignment?

A13: This is a nice challenge and will allow me to see another side of RDECOM. I look forward to the collaboration with other organizations.

- End of Interview -

Participating in the interview also was Donna Cannella, Executive Assistant to the Director, Program Integration, Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD