United States Air Force

Testimony

Before the Senate Appropriations Subcommittee on Defense

Medical Programs

Statement of Major General Kimberly A. Siniscalchi, Assistant Air Force Surgeon General, Nursing Services

March 10, 2010

BIOGRAPHY

UNITED STATES AIR FORCE

MAJOR GENERAL KIMBERLY A. SINISCALCHI

Maj Gen Kimberly A. Siniscalchi is Assistant Air Force Surgeon General, Medical Force Development, and Assistant Air Force Surgeon General, Nursing Services, Office of the Surgeon General, Headquarters U.S. Air Force, Arlington, VA. As Assistant Air Force Surgeon General, Medical Force Development, she establishes new and appraises existing personnel policy and staffing requirements for 34,000 active duty officer and enlisted medical personnel. Her directorate is responsible for all medical force education and training. As Assistant Air Force Surgeon General, Nursing Services, she creates and evaluates nursing policies and programs for 19,000 active-duty, Guard and Reserve nursing personnel. She interacts with Air Staff, Joint Staff, other services and major commands to ensure the highest caliber of nursing care and personnel. General Siniscalchi received her commission in 1979 through the Reserve Officer Training Corps program at the University of Pittsburgh, PA. Her leadership experience includes commanding eight consecutive years at squadron and group levels, and serving Presidents George H. W. Bush and William J. Clinton as the Air Force nurse assigned to the White House Medical Unit. She also deployed as Commander of the 380th Expeditionary Medical Group.

EDUCATION

1979 Bachelor of Science degree in nursing, Duquesne University, Pittsburgh, PA
1979 Critical care internship, Allegheny General Hospital, Pittsburgh, PA
1980 Medical surgical internship, March AFB, CA
1983 Flight nurse training, School of Aerospace Medicine, Brooks AFB, TX
1984 Squadron Officer School, Maxwell AFB, AL
1985 Air Force Recruiting School, Lackland AFB, TX
1988 Master of Science degree in nursing (clinical nurse specialist), University of Nebraska Medical Center, Omaha, NE
1992 Air Command Staff College, by correspondence
1997 Air War College, Maxwell AFB, AL
1998 Medical Executive Skills Course, Bethesda Naval Hospital, MD
1998 Interagency Institute for Federal Health Care Executives, George Washington University, DC
2001 Group Commanders Course, Maxwell AFB, AL ter, Washington, DC

2004 TRAC 5000 Executive Leadership Program, Midwestern State University, Wichita Falls, TX
2007 Fundamentals of Systems Acquisition Management, Defense Acquisition University, Fort Belvoir, VA
2008 Senior Leader Orientation Course, Washington, DC
2008 USAF Senior Leadership Course, Center for Creative Leadership, Greensboro, NC
2008 Health Care CEO Course, the Wharton School, University of Pennsylvania, Philadelphia, PA

ASSIGNMENTS

1. August 1980 - January 1981, nurse intern, USAF Regional Hospital, March AFB, CA
2. January 1981 - October 1981, clinical nurse, Medical/Pediatric Unit, USAF Hospital, Langley AFB, VA
3. October 1981 - February 1982, charge nurse, Primary Care Services, Langley AFB, VA
4. February 1982 - August 1982, charge nurse, Internal Medicine/Emergency Department, Langley AFB, VA
5. August 1982 - October 1983, staff nurse, Surgical Unit, Offutt AFB, NE
6. October 1983 - May 1985, clinical nurse, Intensive Care Unit, Offutt AFB, NE
7. May 1985 - September 1986, Chief, Nurse Recruitment Branch, 3543rd Recruiting Squadron, Omaha, NE
8. September 1986 - June 1988, Chief, Health Professions Recruiting Branch, 3543rd Recruiting Squadron, Omaha, NE
9. June 1988 - July 1989, Clinical Nurse, Intensive Care Unit, Malcolm Grow Medical Center, Andrews AFB, MD
10. July 1989 - June 1990, assistant charge nurse, Intermediate Cardiac Care Unit, Malcolm Grow Medical Center, Andrews AFB, MD
11. June 1990 - August 1993, White House Nurse, Washington, D.C.
12. August 1993 - October 1994, Nurse Manager, Critical Care Services, 55th Medical Group, Offutt AFB, NE
13. October 1994 - January 1996, Chief, Medical Operations Flight, 55th Medical Group, Offutt AFB, NE
14. July 1996 - July 1997, student, Air War College, Maxwell AFB, AL
15. July 1997 - September 1997, Chief, Medical Readiness Logistics Branch, Air Force Medical Logistics Office, Fort Detrick, MD
16. September 1997 - July 1998, Chief, Medical Combat Support Operations, Air Force Medical Logistics Office, Fort Detrick, MD
17. July 1998 - June 2001, Commander, 11th Medical Operations Squadron; Chief Nurse, Bolling AFB, DC
18. June 2001 - July 2003, Commander, 17th Medical Group, Goodfellow AFB, TX
19. July 2003 - July 2006, Commander, 882nd Training Group, Sheppard AFB, TX
20. July 2006 - September 2008, Deputy Command Surgeon, Headquarters Air Force Materiel Command, Wright-Patterson AFB, OH (April 2007 - September 2007, Commander, 380th Expeditionary Medical Group, Southwest Asia)
21. September 2008 - present, Assistant Surgeon General, Medical Force Development, and Assistant Surgeon General, Nursing Services, Office of the Surgeon General, Headquarters U.S. Air Force, Arlington, VA

MAJOR AWARDS AND DECORATIONS

Legion of Merit with oak leaf cluster
Defense Meritorious Service Medal
Meritorious Service Medal with three oak leaf clusters
Air Force Commendation Medal with two oak leaf clusters
Joint Meritorious Unit Award with two oak leaf clusters
Meritorious Unit Award
Air Force Outstanding Unit Award with four oak leaf clusters
National Defense Service Medal with bronze star
Global War on Terrorism Expeditionary Medal
Global War on Terrorism Service Medal
Air Force Expeditionary Service Ribbon with Gold Border

OTHER ACHIEVEMENTS

1987 Outstanding Young Women of America
1988 Outstanding Masters Graduate, University of Nebraska Medical Center Graduate College of Nursing
2008 Distinguished Alumni, College of Nursing, University of Nebraska Medical Center, Omaha

PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS
American Nurses Association
American College of Healthcare Executives
Association of Military Surgeons of United States
Air Force Nurses Association
Federal Nurses Association
Federal Health Care Executive Institute
Sigma Theta Tau International Honor Society of Nursing

PROFESSIONAL CERTIFICATIONS
National Certification in Nursing Administration, American Nurses Association

EFFECTIVE DATES OF PROMOTION
Second Lieutenant Jan. 20, 1979
First Lieutenant Jan. 23, 1981
Captain Jan. 23, 1983
Major Feb. 1, 1990
Lieutenant Colonel Mar. 1, 1996
Colonel Sept. 1, 2001
Major General Dec. 3, 2008

(Current as of February 2010)

The Total Nursing Force (TNF) is comprised of our officer and enlisted nursing personnel including the Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) components. It is a pleasure to lead and serve alongside my senior advisors, Brigadier General Catherine Lutz of the ANG and Colonel Anne Manly of the AFRC. Together, we command a total force team delivering evidence-based, patient-centered care and support to meet Global Operations. Our nursing service personnel confront the challenges of increasing commitments and deployments with distinction and professionalism. They support the top priorities of the Secretary and the Chief of Staff of the Air Force to: 1) Continue to Strengthen the Air Force Nuclear Enterprise, 2) Partner with the Joint and Coalition Team to Win Today's Fight, 3) Develop and Care for Airmen and their Families, 4) Modernize our Aging Air & Space Inventories, Organizations & Training, and 5) Recapture Acquisition Excellence. This testimony will reflect how Air Force Nurses, lead, partner, and care every time and everywhere.

Expeditionary Nursing

Operational capability, the foundation and moral fiber of Air Force nursing, is instrumental in driving remarkable achievements. Air Force nurses and medical technicians at Craig Joint Theater Hospital (CJTH) at Bagram Airfield, Afghanistan provided outstanding nursing care for the highest number of casualties in OEF. CJTH is the only total U.S. staffed Level III military treatment facility in Afghanistan, and offers the most advanced medical capability in the country. CJTH nurses functioned as preceptors for nine Afghan nurses embedded as part of an Afghan Trauma Mentorship program. The Afghan nurses worked side-by-side with Air Force nurses and medical technicians, gaining valuable clinical

experience, which they are excited to share with their co-workers to create positive change for the Afghan health care system for years to come.

The summer and fall of 2009 at CJTH is summarized through excerpts written by Dr. Zeriold, the "trauma czar", of his time in Afghanistan. "A conflict that had become known as 'The Forgotten War' was suddenly remembered as we entered the Afghan theater. We found a hospital and system in existence for several years that had seen a moderate number of patients. We brought only ourselves; it was a team from all over the United States from all branches of the military. No extra equipment, no new technology, no more medications, gear, or personnel. We were the standard deployment team for this theater. However, the pattern of this war changed. Over the next six months, we took care of more than 1,000 trauma admissions and countless medical admissions. The acuity was very high, and injuries were horrendous. A new pattern of war trauma had emerged for this hospital, a pattern that rivals and even surpasses a 500 bed, university based, Level I trauma center. We safely returned to the states 550 injured U.S. service members. We returned them to their families, children, and spouses. We changed the devastated lives of 450 Afghan nationals and won their hearts. I will never forget the bonds we formed with so many. And the kids – my God, I will never forget the kids; reaching out their little hands, with a smile, at the time of discharge as if to say thank you, 'I'll be okay, and can I go home now?' As a result of your dedication and work, this hospital and this team set the theater standard, and broke theater records for caseload, admissions, transfers, and outcomes. We transformed this time, mid to late 2009, into an era never to be forgotten."

CJTH also functions as the primary theater Aeromedical Evacuation (AE) hub, for out of country casualty transport. The Contingency Aeromedical Staging Facility at Bagram

facilitated an average of 500 patient movements per month, starting July 2009. “They are the ‘Angels of the Battlefield’ - medics dedicated to transporting wounded U.S. and coalition service members, as well as locals, to the medical care they need. It's our job to take care of these wounded warriors," said Maj Dawn Rice, an Air Force Reserve flight nurse and medical crew director assigned to the 451st Aeromedical Evacuation Squadron (AES). "We take great pride in getting people the top-notch care they deserve. Our country and our military will do whatever it takes to get people to the appropriate medical facilities. We want people to know this," she added. "Hopefully, it will give them some comfort when they are outside the wire fighting the enemy.”

Air evacuation is a detailed process with the aircrew acting as the most visible link in the chain. The process typically begins at a local level. "The primary mission at smaller field hospitals is simply stabilizing the patient," said Chief Master Sergeant John Trujillo, 451st AES superintendent. "Once the patient is stabilized and can be moved to another more capable hospital, then it's our job to get them there.”

While caring for wounded service members is the crew’s primary mission, they provide the same level of dedication to all. The squadron recently flew a 9 year-old Afghan girl and her 13 year-old brother from a major hospital at Bagram Airfield to a base in Southern Afghanistan. She had been at the hospital at Bagram for two months recovering from injuries received during a mortar attack on her village. Prior to the United States stepping in, her brother had been tasked with her care, replacing bandages on her legs and overseeing her well-being. As she was brought aboard the aircraft for her flight, nurses from Bagram said their tearful goodbyes while crewmembers gave the children gifts and treats, bringing out their smiles. Looking at the children, the Major spoke about this moment and

how it transcended geographical borders and political differences. It was truly a moment of human compassion. The care being given was not just between Americans and Afghans, or adults and children, but between human beings taking care of each other. "This is why we do what we do," said Major Rice softly. "These are the moments we live for," she added with a smile.

Nursing Services are integral to the support of global and home base operations. Day after day, we take the best care of our Nation's heroes at home and abroad. AE continues to be one of the greatest successes in the war on terror, and is the vital link to saving lives. Another example of our AE teams' heroic efforts occurred when a skilled team of medical personnel worked tirelessly to keep a badly burned 23-year old civilian alive. Having already died and been brought back to life by a shot of adrenalin and cardiopulmonary resuscitation, he was carried by litter onto a C-17 medical evacuation flight from Balad, Iraq to Germany. Lieutenant Colonel Belinda Warren tucked a blanket around the patient and inserted numerous tubes to provide vital fluids to his body. "You have to make sure the burn victims don't get cold, replace all the fluids leaking from their burns, and make sure they don't go into hypothermia or get their blood clotting factors out of whack," she said. As an Air Force Reserve Critical Care Air Transport Team (CCATT) nurse, her goal was to make the patient as comfortable as possible. On a return flight to Germany later that month, she learned that he had about a 20 percent chance of survival, a higher rate than usual, and is doing better than expected, given the severity of his injuries.

These critical missions sustain world-class care across the continuum, ensuring our warriors are able to return to the fight with continued healthcare and family support. Since overseas contingency operations began in 2001, over 70,000 patients have been

aeromedically evacuated. Year 2009 proved to be a robust one for patient movement. We moved 21,500 patients globally including over 9,000 from the war fronts in Iraq and Afghanistan. Men and women of the 32 Total Force Aeromedical Evacuation (AE) Squadrons were augmented by CCATTs delivering hands-on care in the air. These units are currently staffed at approximately 90 percent, but as the troops in the Area of Responsibility (AOR) increase, additional crews will be needed and are being built to support them.

One of our challenges in developing new AE crews is the training pipeline. It currently takes approximately six to nine months to train each new crewmember. The initial phase of this training takes place at our School of Aerospace Medicine and is standardized for the Total Force. Once the didactic portion of AE is completed, flight nurses and technicians return to their units. The time required for nurses and technicians to be qualified on an aircraft can take an additional two to six months. The Total Force is pursuing a single standardized Flight Training Unit (FTU) similar to that being used by our pilots. This FTU will standardize the upgrade training process across the Total Force by creating a single level of qualification and will, most importantly, shorten the pipeline to approximately four weeks, creating parity among all AE crews.

Captain Jac Solghan and his Aeromedical Evacuation Liaison Team's (AELT) actions provide a great example of what individuals and teams bring to the fight when put to the test. Within 12 hours of landing at Bastion Joint Operating Base, an improvised explosive device (IED) explosion/multi-collision incident injured 5 Afghan National Army personnel and 12 local nationals. After their initial medical assessments and treatments, Capt Solghan's

AELT responded by providing Afghan patient movement requests for rotary wing airlift. Within 40 minutes, the patients were ready for transport to Kandahar Air Base.

Additionally, Capt Solghan and his team successfully coordinated with the United Kingdom (UK) Aeromedical Evacuation Control Center (AECC) for the transport of a UK solider that suffered a blast injury that left him with only one functioning lung. Capitalizing on the capabilities of the USAF Lung Team stationed at Ramstein Air Base, Germany, and the technology of a Nova artificial lung, this UK service member was transported in the U.S. Aeromedical Evacuation System to Germany for critical treatment, and then finally to the Birmingham Military Hospital, UK, where he is now doing well. This success story demonstrated a multinational effort of over 1,000 aircrew, ground, and medical personnel.

Capt Solghan and his team significantly improved the Afghan patient movement system, integrating United States airlift capability with International Security Assistance Force and Afghan hospital networks. They executed the first-ever United States airlift transport of an Afghan patient to an Afghan hospital and enabled eight new casualty transport routes, increasing inpatient turnover by 70 percent and influencing new joint theater policy. They also initiated joint operations with the Afghan National Army Air Corps, enabling more than 43 patient evacuations with indigenous air assets thus fostering national military airlift capability.

Major Louis Gallo, another Air Force nurse, elevated the level of care delivered to our wounded warriors, by leading the first Contingency Aeromedical Staging Facility at Bagram Air Base, Afghanistan. His team set up tents to stage patients as they waited for flights to Germany. He coordinated the procurement of essential communication equipment and

support services needed to sustain operations. Knowing that injured patients needed more than medical care, he contacted the United Service Organization, whose volunteers set up a morale tent within days with supportive and recreational services to aid those awaiting transportation.

Humanitarian

As a result of the devastating earthquake in Haiti on January 12, 2010, the Special Operations Surgical Teams and Special Operations Critical Care Evacuation Teams, assigned to the 1st Special Operations Wing, Hurlburt Field, Florida, deployed with the initial response aircraft and were the first military medical teams on the ground. The intense training and combat experience gained in OPERATION IRAQI FREEDOM (OIF) and OPERATION ENDURING FREEDOM (OEF) prepared the teams for extremely difficult conditions. They worked around the clock to provide emergency life-saving care to countless American citizens and Haitian Nationals. The teams established treatment areas at the Port-au-Prince Airport and the American Embassy. The Critical Care Nurses provided casualty evacuation of patients both in and out of country as well as pre- and post-operative intensive care unit management. The Nurse Anesthetists assisted in lifesaving surgeries including several amputations, and augmented the ICU.

Our Air Force Nurse Corps mission is “we lead, we partner, we care.” These words have never been more relevant as when the nurses and medical technicians of Joint Base McGuire-Dix-Lakehurst repatriated our fellow Americans who survived the horrific earthquake in Haiti. “Over a four day period, around the clock, plane after plane, those three words, ‘lead, partner, and care,’ defined every aspect of the mission we found ourselves involved in,” stated Major Robert Groves, Deputy Chief Nurse and Education and

Training Flight Commander. He summarized his team's experiences using the Air Force Nurse Corps mission as a backdrop:

We lead. Every shift had an assigned Nurse Corps officer and Senior Non-Commissioned Officer, an Aerospace Medicine Services Technician, to organize healthcare, mentor colleagues who had never participated in such an operation, and, of course, to provide care to earthquake survivors. Among the major tasks were organizing the treatment areas in the evacuation operations center, inventorying and obtaining supplies, meeting planes, triaging patients, and assisting with patient transport to higher echelons of care.

We partner. When operational tasks did not involve direct care, one could find nurses and technicians supporting the endeavors of our other Air Force colleagues. We allowed survivors to share their experiences, played soccer with children in the fitness center gym, assisted them to find appropriate clothing at the donation center, helped them pack new suitcases for their trip to families, and provided the use of personal cell phones to call loved ones to let them know they were okay. For some, these were the first words heard from loved ones in the four days following the earthquake.

We care. Direct patient care came easily and naturally to our nurses and aeromedical technicians. But, it was more than that. From the beginning of operations it was decided that no survivor would be alone while on the ground in our area. While few evacuees required transfer to higher echelons of care, when they did, there was a member of our team assigned to accompany them throughout the process. Many evacuees had not navigated the American healthcare system. To prevent them from being overwhelmed and lost in an unfamiliar system, one of our team remained with them until they boarded flights to their families. Sometimes it involved overnight stays at local hospitals so they had a

familiar, encouraging face during their treatment. In the end, we processed 579 evacuees, with 70 needing more extensive medical care and six requiring transport to community medical partners. But, the knowledge, skills and cooperation with each other and our Joint Base mission partners will be a long-lasting experience and will carry fond memories of our military service long into the future. These four days are what our readiness training had adequately prepared us to do. This is what our service is all about.

Recruiting and Retention

A robust recruiting program is essential to keep the Nurse Corps healthy and ready to meet the complex challenges in healthcare and national security. While we have executed incentive programs to address the nursing shortage, shortfalls continue to be an enormous challenge. Today's nursing shortage is expected to deepen as nursing faculty ages. The capacity for nursing schools to educate sufficient numbers of registered nurses (RN) to meet the future demand is stressed, largely due to the limited number of nursing faculty. On July 2, 2009, the U.S. Bureau of Labor Statistics reported the healthcare sector of the economy is continuing to grow, despite the recession, with more nursing jobs expected to be created in the next decade than in any other single profession. RNs will be in high demand to fill the majority of these positions, as they are the largest component of the healthcare workforce. The BLS projects that nearly 600,000 new RN jobs will be created by 2018. Quality of life and career opportunities, coupled with bonuses, special pays, and other incentives, are critical recruiting tools for Air Force Nursing.

Recruiting fully qualified nurses continues to be one of our largest challenges and our historical and present statistics tell us this will be an issue for years to come. In Fiscal Year 2009, we accessed 284 nurses against our total accession goal of 350 (81 percent), down

12 percent from what I reported the previous year. National competition to access nurses will continue as many professional employment opportunities exist.

Our Nurse Enlisted Commissioning Program continues to be a superb resource as we continue to grow our own from our valuable enlisted medics. In Fiscal Year 2009, of 69 applicants, 40 qualified candidates were selected. In Fiscal Year 2010, we will meet our steady state goal of 50 quotas per year. The graduates from this program are commissioned as Second Lieutenants and will continue to be valuable assets.

As we strive to meet our recruiting goals, NC retention remains challenging. In Fiscal Year 2009, 267 (almost 10 percent) nurses separated or retired from the Air Force, with 73 percent having 20 years or less time in service and 58 percent being Lieutenants and Captains. With an Incentive Special Pay (ISP) budget increase of $3.3 million compared to last year, our NC ISP is currently in its second year of execution. Seventy-eight percent of our nurses exercised single or multi-year contracts. This year's focus was to increase retention by recognizing advanced academic preparation, certification and experience. In addition, we expanded the number of nurses eligible for ISP by adding additional Air Force Specialty Codes and clinical settings. While the ISP was not a retention bonus out right, we look forward to seeing a positive impact on retention as a result of this initiative.

A number of societal, scientific, and professional developments have stimulated a major paradigm change in graduate nursing education. One major impetus for this change was the American Association of Colleges of Nursing's (AACN) decision in 2004 to endorse the Position Statement on the Doctorate in Nursing Practice (DNP). This decision moves the current level of preparation necessary for advanced nursing practice from the master's degree to the doctorate-level by the year 2015. The U.S. Air Force Surgeon General fully

supports AACN's decision, and in response, the Air Force Nurse Corps has researched current practice issues within the Nurse Corps and has developed an implementation proposal for achieving the AACN goals by 2015. Currently, all Air Force Nurse Practitioners are trained through a master's degree program. The Air Force NC recommends a phased implementation approach to meet the AACN intent. Starting in Calendar Year 2010, the Air Force Nurse Corps proposes a small pool of Nurse Corps candidates to be selected to attend Doctor of Nursing Practice (DNP) programs and by 2015, all students entering the nurse practitioner (NP) career path will graduate with a DNP. In addition, by 2015, all new Air Force NP candidates accessed through the Health Professions Scholarship Program (HPSP) will be prepared at the doctorate level. Recruitment of fully qualified NPs has been a challenge and will likely become more difficult with the increased educational requirements. The Nurse Corps must pursue additional incentives to entice DNPs to enter the Air Force.

Operational Currency

Education and training is the foundation of the Nurse Corps competencies and one of our priorities is to ensure currency platforms meet emerging clinical and operational requirements. The Nurse Transition Program (NTP) continues to be one of our many successes with 10 military and two civilian locations. We graduated 158 NTP nurses in Fiscal Year 2009. Last year; I reported a civilian partnership with the Scottsdale Healthcare System, in Scottsdale, Arizona was on the horizon. I was honored to deliver the commencement address for the second class in December, where we graduated 15 students. We have partnered with an outstanding Magnet status organization and our new Air Force nurses are getting unprecedented clinical opportunities. At just six months, the

Scottsdale program is already proving to be a cornerstone in the success of a strong military partnership between Scottsdale Healthcare and Luke Air Force Base, Arizona, located 35 miles east of Scottsdale. From October to December, nurses trained on inpatient units at two Magnet-recognized facilities where they gained hands-on clinical experience and competence in direct patient care under the supervision of nurse preceptors. Their training was further enriched with rotations in peri-operative services, wound care, infusion services, laboratory, pediatrics and the Maricopa County burn unit. The privilege of training in Magnet-recognized facilities is an experience that will prepare our nurses to meet the demands in our stateside facilities as well as in deployed settings around the globe. I am proud of the exceptional work the course supervisors, Majors Deedra Zabokrtsky and Nancy Johnson, have achieved in such a short period of time. The Scottsdale program will begin a steady state of 20 to 25 nurses per class in 2010, making it the largest nurse transition-training site.

The 882nd Training Group at Sheppard Air Force Base, Texas, is instrumental in establishing the largest joint armed services medical education and training center that the world has ever seen. To date, the 882 Training Group spent more than 11,000 hours working side by side with their Army and Navy counterparts to consolidate 15 military enlisted medical technical training courses. These collaborative efforts have allowed the three services to incorporate best practices and build state-of-the-art training platforms that will prepare the next generation of medics for the military's diverse missions. The 882 Training Group began transitioning key and essential personnel in the fourth quarter of Fiscal Year 2009 and will continue staging instructor staff and equipment to the Medical Education and Training Campus (METC) at Fort Sam Houston in San Antonio through the

last quarter of Fiscal Year 2011 when all courses are projected to be operational. The first METC Senior Enlisted Advisor is Chief Master Sergeant Kevin Lambing, an Air Force Senior Aerospace Medical Technician.

Our enlisted medical technicians, led by Chief Master Sergeant Joseph Potts, are vital to the achievements of the TNF. One of many outstanding Airmen is Staff Sergeant Christopher Brown, a medical technician deployed from the 88th Medical Group for 192 days to Kabul, Afghanistan, where he was assigned to Joint Task Force Phoenix VII. SSgt Brown received a Meritorious Service Medal in recognition of his superior performance as a medical technician while supporting humanitarian missions, conducting medical evacuations, training Afghanistan medics, participating in military convoys, and setting up an Afghanistan medical clinic. He was the sole medic for a 12-person police mentoring team traveling to various remote areas surrounding Kabul to train Afghan police. Assigned to the Afghan Evaluation Transition Team, he was given 14 Afghan medics to train and prepare to treat patients at a bare base. He participated in the longest convoy in OEF history to move the Afghan Kadack to the bare base in western Afghanistan. SSgt Brown is a fine example of the many committed Airmen who continue to make our Air Force proud.

In an effort to increase advanced life support capability at bases, we have trained several of our Aerospace Medical Service Technicians to the National Registry of Emergency Medical Technician-Paramedic level. The inaugural class launched last fall graduated19 students. This initiative helps reduce the number of contract services in our emergency response platforms by growing our own paramedics from our enlisted force. This will also provide a marketable career path outside the military when these individuals retire. We are expecting an annual growth rate of 50 per year with the vision of providing

relief for a stressed career field.

Another force multiplier is our Independent Duty Medical Technicians (IDMT). We continue to see a steady increase in our IDMTs as we balance the end strength of our medical technicians. They play an integral role within our Air Force Medical Service as our physician extenders. They are designed to function in a small footprint providing patient care, as well as fourteen other ancillary support functions. The continued efforts to recruit IDMTs have garnered our highest "true" volunteer candidates equaling 24 in the past 10 years. The remainder of our IDMT candidates are gained through the Noncommissioned Officer Retraining Program designed to right size undermanned career fields across the Air Force. Additionally, continuation of the selective reenlistment bonus has aided the recruitment and retention of these valuable assets. Information technology has further enhanced our IDMTs' capabilities. We supply each IDMT with a hand-held Hewlett-Packard iPAQ that is fully loaded with reference materials, thereby increasing access to the most up-to-date medical information without adversely affecting space and weight limitations of their medical bags.

Skills Sustainment

For nearly a decade, the Air Force Medical Service has partnered with high volume civilian trauma centers to prepare doctors, nurses, and technicians to care for combat casualties. Maintaining readiness to care for the complex traumatic injuries seen in war is challenging as most military treatment facilities care for lower acuity patients. To bridge this gap, three Centers for Sustainment of Trauma and Readiness Skills (C-STARS) platforms were established at the R Adams Cowley Shock Trauma Center in Baltimore, at University Hospital Cincinnati, and at Saint Louis University Hospital. C-STARS Baltimore has a

surgical and emergency care focus. C-STARS Cincinnati is designed specifically for the clinical sustainment of Critical Care Air Transport Teams. C-STARS St. Louis serves a range of medical and surgical specialties. In 2009, 817 doctors, nurses, and technicians completed vital training at one of these three centers. Since inception, these partnerships have enabled 4,336 Total Force medical Airmen to maintain clinical currency. During their two to three week tours, participants complete 90 to100 percent of required readiness skills through hands-on patient care, supplemented by didactics, cadaver labs, training with patient simulations, and field exercises.

In addition to the immersion experience obtained at C-STARS, a complementary initiative was started in 2009 called STARS-P, the Sustainment of Trauma and Resuscitation Skills Program. Personnel assigned to designated STARS-P military treatment facilities at Wright-Patterson AFB, Ohio; Luke AFB, Arizona; Nellis AFB, Nevada; Travis AFB, California; and Wilford Hall Medical Center, Texas, rotate through local civilian Level I trauma centers as part of their normal duty time. For example, medical personnel assigned to Luke AFB, routinely rotate to nearby Scottsdale Healthcare. As a new initiative, we continue to define processes that best match the needs of the military treatment facility and the host civilian institution; however, STARS-P holds great promise as another approach to honing war-readiness skills. These partnerships with civilian medical facilities have proven to be invaluable to maintaining a high state of readiness to deliver quality care to our Soldiers, Sailors, Airmen, Marines, their families and coalition partners.

Another valuable skills sustainment program is the Critical Care/Emergency Nursing (CC/EN) Fellowship. The three fellowship sites, Wilford Hall Medical Center, San Antonio, Texas, St. Louis Hospital, St. Louis, Missouri, and the National Naval Medical Center,

Bethesda, Maryland, continue to produce superbly trained nurse clinicians. Many graduates have already employed their new skills at deployed locations in Afghanistan or Iraq, and several stationed at the 59th Medical Wing have returned to one or both AORs for more than one tour. Forty-three percent of the San Antonio Military Medical Center graduates have obtained advanced certification as Critical Care Registered Nurses. As of March 2009, 99 of 313 critical care nurses are Critical Care Registered Nurses. Graduates of these benchmark programs are phenomenal and often light years ahead of their peers. Nurse leaders repeatedly report from the deployed environment that our graduates are the best, "Put into any situation and they simply shine." They have developed critical thinking skills that often exceed those of more experienced critical care nurses.

We received updates from two of our June 2009 graduates, Captain Matthew Howard and Captain Lindsay Erickson, both currently serving at Bagram Air Base, Afghanistan. Their comments clearly highlight their enhanced level of clinical and critical thinking skills. Capt Howard stated, "I in-serviced the staff on ventriculostomies the very first shift I worked. We set a record last month for the most traumas since the war started here, and if we keep going, we will exceed it this month. More importantly, the survival rate is up 3 percent and at a record high."

Capt Erickson stated, "By the end of my second week, a mass casualty situation arose. The unit was full with 16 patients. We moved three non-vented patients to the ward, and quickly acquired six new trauma/burn patients. I started the day with a three-patient assignment and ended up taking one of the new traumas on top of that. It was challenging but I felt very well prepared and took the assignment on without hesitation. No doubt my Critical Care fellowship training prepared me well. One of the burn patients required bladder

pressure monitoring. Many of the nurses here aren't too familiar with this, so I volunteered to teach."

The CC/EN Fellowships have set the standard. Our graduates provide the highest quality care, both stateside and in the deployed environment, positively impacting lives on a daily basis. In the area of responsibility, the impact is palpable with a sustained 95 percent survival rate for OIF, and 96 percent survival rate for OEF.

Organizational Structure

The Air Force Medical Operations Agency (AFMOA) in San Antonio, Texas is a single support agency that stood up in September 2008 under the command of Brigadier General Mark A. Ediger. Nearly eighteen months later, AFMOA has progressed as a robust centralized reach-out, reach-back clinical support hub, collaborating with the major commands to standardize business practices across the Air Force Medical Service in pursuit of "Excellent Healthcare, Clinical Currency." To that end, the AFMOA Surgeon General Nursing Directorate, comprised of three divisions and led by Colonel Leslie Claravall, has concentrated efforts toward developing currency platforms to sustain clinical skills for deployed operations. For example, the Provision of Nursing Care Division, led by Colonel Doug Howard, participated in an "Emergency Department Analysis and Process Improvement Project" in November 2009 and is partnering with emergency services leadership of nine military treatment facilities to employ efficient evidence-based processes. Ultimately, the goal is to increase throughput leading to enhanced patient safety and satisfaction, while providing more experience and opportunity for medics to sustain clinical currency. Other clinical arenas, to include inpatient care and specialty care clinics, will be targeted in the same manner.

Additionally, AFMOA Surgeon General Nursing is contributing to efficient healthcare and clinical currency by building tools to enhance mentoring and information sharing. To illustrate, the Education and Training Division, led by Colonel Lilly Chrisman, was key in facilitating "Mosby on line" as an Air Force Medical Service enterprise-wide reference tool. Modernizing access to the most current edition of a sound clinical reference allows our medics to obtain guidance anytime from any computer, while saving countless dollars by averting the distribution of new hard copies to replace outdated ones across the Air Force Medical Service

AFMOA Nursing Service Resourcing Division, led by Colonel Robert Hontz, was the last division to stand up this summer. This division analyzed nurse resources across the major commands making recommendations to support Air Force initiatives such as the Medical Home Model for patient-centered care, a new Special Needs Coordination Cell to improve continuity of care for special needs family members, and the plus up of mental health nurses to support increasing deployment demands on a stressed career field. The Mental Health Nurse (46P3) and the Mental Health Nurse Practitioner (46Y3P) Air Force Specialty Code (AFSC) is currently staffed at 77 percent for 46P3 and 100 percent for the 46Y3P. The high mobility tempo of this specialty makes it difficult to retain these critically manned mental health nurses. Currently, there are 30 psychiatric nurses in deployment unit type codes increasing to 40 in Fiscal Year 2010 to meet the career field's rigorous mobility requirements. The entire Air Force Medical Service mental health career field is in the Band "D" Battle Rhythm which requires a 1:2 deployment: dwell time. Seven to eight psychiatric nurses are deployed worldwide in support of OIF and OEF each cycle.

The Air Force Medical Service is taking steps to alleviate the stressors on the mental health nursing career field, and plans are under way to build a formal training program at the David Grant Medical Center at Travis AFB, California. This course will train clinical nurses to become mental health nurses. Additionally, we are pursuing an increase in mental health nurse and mental health nurse practitioner authorizations. Our goal is to place 10 additional mental health nurses in our bedded military treatment facilities to augment the staff caring for our wounded warriors and other beneficiaries. The advanced clinical capability of our mental health nurse practitioners has been lauded by patients as well as other provider staff. The Air Force Medical Service has "grown our own" through the Air Force Institute of Technology program, with 14 of our 15 nurse practitioners having come from our mental health nurse career field.

Research

Air Force nurse researchers are integral to the joint research conducted in the U.S. Central Command area of responsibility. The Joint Combat Casualty Care Research Team (JC2RT) consists of six Army and three Air Force members with the mission of fostering and facilitating medical research, performance improvement, and evidence-based practice initiatives for the United States Central Command Joint Operations Area: Multi-National Corps-Iraq Theater, U.S. Forces Afghanistan, and Kuwait. In March 2009, the Department of Defense medical research program was initiated in Afghanistan under the direction of Colonel Elizabeth Bridges, an Air Force Reserve PhD prepared nurse. Simultaneously, Lieutenant Colonel Teresa Ryan, also an Air Force Reserve PhD prepared nurse from Keesler AFB, Mississippi was the senior Deployed Combat Casualty Research Team (DC2RT) researcher at Balad, Iraq.

Colonel Bridges laid the groundwork for the arrival of a team of six researchers (physicians, nurses, a nutritionist, and a physiologist) who arrived in September to Bagram. Currently, Major Candy Wilson, a PhD prepared nurse, from the 59th Clinical Research Squadron at Lackland AFB, Texas is at Bagram. In August 2009, the JC2RT Headquarters office moved from Ibn Sina, Iraq to Bagram, Afghanistan. In October 2009, Lieutenant Colonel Kevin Bohan from the Graduate School of Nursing, Uniformed Services University of the Health Sciences along with SGT Andrew Coggins, a Army laboratory services NCO, established an office in Kandahar to expand the research program. The nurse researchers assigned to the DC2RT identified the following major areas for research: mild traumatic brain injury, management of complex orthopedic trauma, pain management across the continuum of care, and integration of information from the Level II medical facilities and the en-route phase of care, both medical evacuation and aeromedical evacuation.

The teams provide guidance and review for all research conducted in Afghanistan, Iraq and Kuwait. The PhD prepared nurses provide leadership and guidance on scientific merit, design and methodology of research. Each team member is involved in collecting data for a variety of research protocols focusing on combat casualty care. Over 150 research studies have been conducted or are being planned as a result of the JC2RT's efforts. More than 20,000 subjects have been enrolled in research studies. Areas of research conducted by the U.S. military in Afghanistan and Iraq have led to advancements in combat casualty medical care and therapies to include tourniquet application, combat gauze, life saving interventions, en-route care, resuscitation, blood product administration, burns, wound care, post traumatic stress disorder (PTSD), traumatic brain injury, and infectious diseases.

Colonel Bridges, as the first research nurse in Bagram, Afghanistan, from April to August 2009, received Tri-Service Nursing Research Program (TSNRP) funding for a functional hemo-dynamic study in Afghanistan. Since 2006, 34 nursing research protocols have been approved with U.S. Air Force nurse researchers being principal investigators in five of those studies. The overall nursing research themes include warrior care, healthcare delivery, trauma, behavioral health, and nursing/healthcare professional issues. Nursing principal investigators have investigated pain management, functional hemo-dynamics, and StO2 monitor for occult hypo-perfusion, carbon monoxide exposure, women's health, sleep disturbances in soldiers, oral care in the critically ill, retention, recruitment, PTSD, burnout, compassion fatigue, and moral distress in nursing personnel. To date, three Air Force led nursing research protocols are in the final stages of approval by the institutional review board, which researchers by law must submit their research proposal to receive approval before beginning a research study.

As a member of the Joint Combat Casualty Research Team, Major Wilson augmented the Combined Joint Special Operation Forces to provide healthcare for local men, women, children and the Afghanistan National Army. During visits to the villages, Maj Wilson, a nurse practitioner, along with other healthcare professionals, provided medical care for over 10,000 patients during a six-day period. The rugged and austere healthcare delivery conditions required medical diagnoses to be made based on patient presentation, without the aid of laboratory or radiology analyses. In addition to the direct benefits of the care provided, valuable and actionable intelligence was gathered on these missions that resulted in improved situational awareness by U.S. forces and directly resulted in saving lives of service members.

The TSNRP Executive Director position transitioned to Colonel Marla DeJong in 2009, the second Air Force nurse researcher to hold this position. The TSNRP is the only program with the primary mission of funding military unique and military relevant nursing research. Colonel DeJong is responsible for facilitating tri-service nursing research to optimize the health of military members and their beneficiaries. The goal of military nursing research is to produce knowledge that further enhances clinical practice, the delivery of healthcare, nursing education, and nursing management. Since its inception in 1992, the TSNRP has funded more than 300 military nursing research studies and several evidenced-based practice projects. Ultimately, application of this new knowledge improves the quality and delivery of nursing practice, promotes the best possible outcomes for patients and families, and informs healthcare policy decision makers. With the support of TSNRP funding, the pocket guide, Battlefield and Disaster Nursing Pocket Guide, which I shared during last year's testimony, has been distributed to 15,000 Air Force military nurses and medics to augment readiness preparation.

During 2009, military nurse leaders, researchers, and stakeholders of the TSNRP revised the mission and research priorities to ensure the funding clearly reflects the mission and research vision of military nurses. The current TSNRP research priorities are 1) force health protection, 2) nursing competencies and practice, and 3) leadership, ethics, and mentoring. The TSNRP sponsors Grant Writing Workshops for novice and experienced researchers to learn how to design studies and write high-quality applications that will be competitive for funding. Annually, the TSNRP conducts a Post-Award Management Workshop to inform grant recipients of Federal, Department of Defense, and TSNRP management policies and guidance on grant execution.

Results from TSNRP-funded research impacts nursing clinical practice in deployment resilience, retention, methods to reduce ventilator-associated pneumonia, health disparities, and women's health during deployments. For example, Major Jennifer Hatzfeld who defended her dissertation in 2009, "Assessing Health Disparities in the Air Force "documented the prevalence of health disparities according to race or ethnicity for chronic diseases such as hypertension, high cholesterol, and diabetes among adult Active Duty Air Force members; however, she found no evidence of disparities in the treatment outcomes of patients with these conditions, indicating patients received appropriate medical care.

Numerous mission-relevant studies are in progress. Colonel Bridges' study is designed to evaluate new methods of monitoring patients after hemorrhage on the battlefield. Colonel Penny Pierce, a retired Air Force nurse reservist, and her colleagues have systematically collected comprehensive survey data from deploying troops beginning with the Persian Gulf War and continuing through OEF and OIF. The initial studies focused primarily on military women due to the sociopolitical concerns raised by deployment of large numbers of women, reservists, and mothers of dependent children. Later studies included men and women from the Air Force and Army, enabling researchers to compare findings by gender, military service, and deployed locations. Data collection pertained to physical, mental, and gender-specific health issues. Junior enlisted women and families experiencing economic hardships were particularly vulnerable to work-family conflict. Further, individuals with work-family conflict were at high risk to develop post-traumatic stress disorder. Stressors such as family conflict and organizational issues influenced the physical and mental health of military members and impacted retention. Importantly, these stressors are

potentially modifiable. Work is underway to identify interventions that will benefit individuals, families, and the uniformed services.

TSNRP-funded researchers continue to disseminate the results of their studies through peer-reviewed publications and numerous presentations at nursing and medical conferences. The TSNRP co-sponsored the Karen A. Rieder Nursing Research Poster Session at the 115th annual meeting of the Association of Military Surgeons of the United States. Air Force nurses presented 29 of the 90 posters which summarized the results of recent studies, evidence-based practice projects, and process improvement activities. Colonel Bridges, for example, recommended interventions to prevent complications during en-route care of casualties transported by Critical Care Air Transport Team during OEF and OIF.

In addition to her duties as TSNRP program director, Colonel DeJong is assigned to the DoD Blast Injury Research Program Coordinating Office. She organized and hosted an international, state-of-the-science meeting on blast-related mild traumatic brain injury. The meeting resulted in a thorough assessment of knowledge about TBI and identified the gaps necessary to shape future research. Colonel DeJong also co-chaired the Joint Program Committee for Battle Injury Prevention Research and helped execute the $247 million Battle Casualty and Psychological Health Research Program.

Colonel Karen Weis, another one of our PhD-prepared nurses, co-authored Psychosocial Adaptation to Pregnancy: Seven Dimensions of Maternal Role Development. Colonel Weis also authored a nurse-physician communication assessment tool used in several military treatment facilities, as well as the Methodist health system in Houston,

Texas. The instrument assesses perceived barriers to physician-nurse communication enabling focused attention for improved staffing effectiveness.

Colonel John Murray just completed a chapter entitled, "The U.S. military health system: Meeting health care needs in wartime and peacetime", to be included in Policy & Politics in Nursing and Health Care. As the Director of Education, Training & Research, Joint Task Force, National Capital Region-Medical, he developed Joint-level DoD Assurance and Issuing authority for research within the National Capital Region. Colonel Murray is a member of the Department of Veterans Affairs (VA) National Research Advisory Council and the VA workgroup for Research on Educational Interventions for Health Professionals.

Lieutenant Colonels Patricia Bradshaw and Karen O'Connell, and Majors Susan Dukes, Brenda Morgan, and Antoinette Shin are near completion of their PhD program. These nurses will be deliberately placed as the Nurse Corps builds research specific locations or "cells".

We recently developed a nursing research fellowship and the first candidate will begin this spring. This one-year pre-doctoral research fellowship will focus on clinical and operational sustainment platforms. The intent of this program is for the fellow to develop a foundation in nursing research and ultimately pursue a PhD.

The desire for evidence-based nursing care is at the forefront of the nursing staff at the 59th Medical Wing, Wilford Hall Medical Center, San Antonio, Texas. Newly hired nurses are oriented to the benefits of nursing research and evidence-based practice during nursing orientation. The deliberate promotion of nursing research has resulted in three nurses developing protocols for funding from TSNRP.

Nursing staff from the 88th Medical Group, Wright-Patterson AFB, Ohio, have submitted three research grants this year and are participating in two nursing studies. Major Bonnie Stiffler, the primary investigator for the study, "Barriers to Screening Mammography for Medical Treatment Facility Enrolled Beneficiaries," is conducting telephone interviews to identify barriers to obtaining provider recommended mammography. The goal is to identify barriers to care and then develop methods to minimize or eliminate the barriers. Colonel Robie Hughes is the primary investigator for a funded multi-site study titled, "Air Force Nurse Transition Program Student Quantitative Medical Simulation Performance". This study will be the first formal study conducted at the nine Nurse Transition Program sites during a simulated medical scenario evaluating nurse performance from this established 11-week training program.

Strategies for the Future

I am proud to report that we have created a Master's Degree in Flight Nursing with an Adult Clinical Nurse Specialist focus and concentration in Disaster Preparedness. This program, the first of its kind in the country, was designed and ready for students in just three months. We partnered with Wright State University-Miami Valley College of Nursing, Dayton, Ohio and the Health and National Center for Medical Readiness Tactical Laboratory at Calamityville. Graduates from this program will gain expertise in Flight Nursing as well as emergency and disaster preparedness from military and civilian perspectives. Our first candidate will begin in the spring. The unique and diverse curriculum will meet Homeland Security Presidential Directive #21 and include advanced clinical courses in acute and chronic health issues for the adult population with an emphasis in flight and disaster nursing. The Flight Nursing component will address symptom management and stabilization during

air transport. In addition to the classroom training, students will be connected with a preceptor in an active flight nursing setting with both fixed and rotary aircraft at the 375th, Scott AFB, Illinois and Care Flight at Miami Valley Hospital, Dayton, Ohio. Students will be exposed to tragic scenarios to illustrate the impact disasters place on the health and safety of individuals and families. A former 54-acre cement plant in Ohio is being developed into an all-hazards disaster and training facility. This site will be incorporated into joint civilian and military training programs to provide a realistic venue to simulate natural and man-made disasters. Upon completion of this rigorous program, graduates will be eligible to take the Adult Health CNS and American Nurse Credentialing Center certification exams.

The Graduate School of Nursing at the Uniformed Services University Health Sciences (USUHS) continues to provide cutting-edge academic programs to prepare nurses with military unique clinical and research skills in support of delivery of patient care during peace, war, disaster, and other contingencies. As they move toward their vision of being a nationally recognized academic leader, while on the forefront of a nurse and nurse educator shortage, the Graduate School of Nursing was asked to collaborate with the Federal Nursing Service Chiefs to increase the cadre of baccalaureate-prepared military nurses, through creative partnerships with existing schools of nursing. One of Uniformed Services University Health Sciences' top initiatives is to work with civilian nursing institutions to address the military nursing shortage and assist the Department of Defense to identify strategies to encourage and incentivize potential applicants to enroll in baccalaureate nursing programs. USUHS plans to develop and deploy a comprehensive survey to assess the willingness of potential student populations to consider accepting an undergraduate nursing education in return for a commission as a Nurse Corps officer in the Armed Forces with a subsequent

service obligation. The targeted populations will include students in nursing school programs, qualified applicants who are not accepted for admission to nursing school due to space limitations, associate-degreed registered nurses, second career nurses, and enlisted service members with a desire to be commissioned as a nurse corps officer. Data from these surveys will be analyzed to identify and quantify perceptions of potential nurse applicants towards military service.

As I reported last year, we developed Master Clinician roles to afford our most clinically experienced senior nurses with advanced academic preparation to remain at the bedside without sacrificing promotion opportunities. We have 20 Colonel positions identified across our military treatment facilities and are diligently working to fill these authorizations in Fiscal Year 2010.

Way Ahead

Nursing, the essential healthcare profession, is highly valued for providing skilled, evidence-based quality care to Airmen and their families. We continue to arm our nursing service personnel with the necessary skill sets through education, training, and research to meet the challenges of operating in the ever changing global environments.

Nurse recruitment and retention continues to be our focus as we develop academic partnerships, sustain our accession programs, reward clinical practice through incentive specialty pay, and enhance nursing capabilities through advanced academic preparation such as the Masters Degree in Flight Nursing and our DNP implementation plan.

We look forward to the future. By being actively engaged in nursing research, we are generating the knowledge necessary to guide Air Force and Joint nursing operations. Through the synergy of our AD, ANG, AFRC, civilian, and contract forces, coupled with the

collaborative relationships of our sister Services and civilian partners, we are prepared to meet emerging challenges with strength and confidence. Air Force Nursing stands ready today to embrace the challenges of tomorrow as we lead, partner, and care, every time, everywhere.

Mister Chairman and distinguished members of the Committee, it is my honor to be here with you today representing a dedicated, strong Total Nursing Force of nearly 18,000 men and women. We sincerely thank you for your tremendous support for Air Force Nursing.