

Deployment Quarterly

Winter 2002 Vol. 1 Issue 3

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DIRECTOR'S message

Dear Readers:

Like Januaries of the past, today's new year is a time of resolutions and reflection. For many, however, "these are the times that try men's souls." Those words, penned by Thomas Paine more than 200 years ago, truly apply today. These are challenging times for everyone, both military and civilian. It is still difficult to realize and understand why America and her values were attacked on September 11th. As time passes and the fires finally burn out, Americans will recover from the shock and horror of that day. The president has urged us to live our lives, to go about our business, and to establish some sort of normalcy. But these are not normal times for those men and women who are responsible for defending our country and our freedoms both at home and abroad. We are a nation at war.

Nearly 59,000 men and women serving in today's National Guard and Reserve have put their lives on hold as they were called to join our active duty forces. Many have been deployed to our nation's airports and borders to defend the homeland against any possible terrorist attack from within. Some have been sent overseas to combat terrorism while others have been deployed to provide peacekeeping duties and humanitarian relief.

We remain focused on assuring that Defense Department programs to protect the health of those individuals being deployed are robust and that any health concerns they may have after deployment are completely addressed. That same concern for health extends to those who have served in the past on other deployments. Our contact managers remain available to assist servicemembers, families and anyone with a question on deployment health. They may be reached through our toll-free telephone number (800) 497 - 6261. We are here to listen to your concerns, take action and keep you informed.

Our directorate is working hard to share deployment health-related information with the Department of Veterans Affairs so that everyone obtains the health care they deserve. We are trying to optimize each department's medical care for those who have served. We have established a dialogue that allows us to share information and ideas on how to better care for the men and women of the armed forces.

The events of 2001 are among those we will never forget. Please accept our best wishes for the new year: may it be safe and a year that we will all wish to remember.

Sincerely,
Michael E. Kilpatrick, M.D.



Deployment Quarterly

The Deployment Health
Support Directorate

Volume 1 Issue 3

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SUBMISSIONS: Print and visual submissions of general interest to active duty, Reserve Component members, veterans and families are invited. Please send articles with name, rank, phone number, e-mail and complete mailing address and comments to:

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U.S. Marine Corps photo by Sgt. John Vannucci
A M1A1 Abrams from Charlie Company, 1st Tank Battalion, 1st Marine Division, assaults an objective on Nov. 4, 2001, as part of the Mobile Assault Course during Combined Arms Exercise 2/2001.

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USNS Comfort (T-AH 20) berthed in Baltimore, Md.

On the Cover

From the U.S. Army's photo archives. Soldiers use cold-weather gear in an undisclosed location. "We train as we fight."

Official U.S. Army photo



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News from Around the World

TRICARE Changes Mean Lower Healthcare Costs for Reservists

WASHINGTON (DefenseLINK) – Defense Department officials have enacted health care system changes to make life a little easier for Reserve Component members and their families following the Noble Eagle/Enduring Freedom call-up to active duty.

The most significant change is a national demonstration project that waives all TRICARE deductibles for family members of Noble Eagle/Enduring Freedom activated Guardsmen and Reservists for care received since Sept. 14, 2001.

TRICARE officials realized many of these families probably paid deduct-

ibles for their civilian health plans earlier in the year. They didn't feel it fair for them to shoulder another financial burden just because their sponsor was called up toward the end of 2001, said Coast Guard Lt. Cmdr. Robert Styron, regional operations officer for the TRICARE Management Activity.

Another change for Reserve Component members is that TRICARE will pay for up to 115 percent of what is usually allowed for care under existing guidelines. Styron said the change would help Reservists who live far from active military facilities in areas that don't have TRICARE provider networks. Their families probably would end up paying more out-of-pocket if TRICARE hadn't agreed to the higher fees.

The third change is that TRICARE officials have waived the need for Guard and Reserve family members to obtain non-availability statements before receiving care from a civilian provider. Styron said DoD acknowledges many Reserve families have existing relationships with

civilian providers.

"If you've already got these established relationships with a provider, we're not going to get in the way. We will allow you to continue seeing providers you know," he said.

Active duty family members don't need a non-availability statement if they're far from a military treatment facility. If they live near a military facility, however, they generally need the statement or they must pay for the care themselves.

DoD officials have explained that families of Reserve Component members called up for at least 30 days are eligible to use TRICARE benefits. Families of those activated for at least 179 days are also eligible to enroll in TRICARE Prime, which offers the most cost-effective way for military families to receive medical care.

For more information on these new benefits and on health care for Guardsmen and Reservists, visit TRICARE for the Reserve Components at <http://www.tricare.osd.mil/reserve/default.htm>.

Web Site Offers Families Valuable Information

WASHINGTON (DeploymentLINK) — Peacekeeping missions in Bosnia and Kosovo, and now Operation Freedom, are demonstrating that the National Guard and Reserve members are an integral part of the military's total force. There are approximately 1.4 million Guard and Reserve members and since Nov. 29, 2001, more



than 57,000 have been called to active duty. More are expected to be called up before the U.S. war on terrorism ends.

To help Guard and Reserve families prepare for the eventual separation, the Office of the Assistant Secretary of Defense for Reserve Affairs developed an online Family Readiness Tool Kit and Help Guide at <http://www.defenselink.mil/ra/family/toolkit/>. This online guide combines the most useful aspects of all the services' family readiness programs and Web pages into one consolidated site. The tool kit is broken down into sections for use by commanders, Guard and Reserve members and their families.

For commanders, it lists best practices, examples of briefings and advice on how to communicate clear messages. For families, it lists Web sites, toll-free phone numbers for medical and financial assistance, legal advice and emergency contacts.

For servicemembers, it includes planning advice, such as leaving a power of attorney, writing a will or how to set up childcare arrangements. All of the tabs include readiness checklists to secure that servicemembers and their families will be prepared for day-to-day living and for emergencies.

Since its launch on the Internet Oct. 1, the Family Readiness Tool Kit and Help Guide has already received more than 46,000 hits. Reserve Affairs says the office has gotten a lot of positive feedback and plans to monitor the site and update it with new information as it becomes available.

Marine Corps Child Care Centers Are Accredited

QUANTICO, Va., (Marine Corps News) — For the first time, the National Academy of Early Childhood Programs has accredited 100 percent of the eligible childcare centers in the Marine Corps.

The National Academy of Early Childhood Programs is an independent accrediting system sponsored by the National Association for the Education of Young Children. NAEYC is the nation's largest organization of early childhood professionals. NAEYC has provided distinguished leadership in the field of childcare and early education for more than 70 years.

"One hundred percent accreditation in the Corps was achieved as a result of a great deal of effort and dedication by child development center staffs and their leadership," said Michael Berger, deputy head, Marine Corps Family Team Building, Personal and Family Readiness Division, Manpower and Reserve Affairs, Headquarters, Marine Corps.

"Now our challenge is to stay accredited and to ensure new centers go through the process," he added.

According to Berger, the accredited childcare centers demonstrated a commitment to providing a high-quality program for young children and their families. While the accreditation process examines the

total program, emphasis is placed on the quality of interactions among teachers, caregivers, and children and the developmental appropriateness of the curriculum. Health and safety, staffing, staff qualifications, physical environment, and administration were also reviewed during accreditation, but primary consideration is given to the nature of the child's experience.

For additional information, visit <http://www.usmc-mccs.org>.

Special Ops Group Aids in Typhoon Recovery

KADENA AIR BASE, Japan (Air Force News) — After typhoon Linding left a trail of death and destruction in the Philippines late last year, Air Force Pacific Command and the American Embassy in Manila called on the 353rd Special Operations Group at Kadena Air Base to transport disaster relief aid to the stricken area.

The Philippine Red Cross made an official request for assistance when more than 130 bodies were recovered and hundreds of others were feared dead. The 353rd SOG had three MC-130P Combat Shadows in the country at the time.

"We were less than two hours away," said U.S. Air Force Maj. Pat Butler, a pilot with the 17th Special Operations Squadron. "When the order came for us to fly south, we were ready to go."

On Nov. 12, 2001, a crew from the 17th SOS loaded a plane with 10,000

pounds of rations, mosquito nets, sleeping mats and other relief items. They flew from Manila to Surigao and offloaded the items with engines running.

The next day, two crews flew similar missions to Cagayan de Oro on Mindanao, and Iloilo on Panay Island. The final mission sent another 10,000 pounds of relief to Iloilo on Nov. 14, 2001.

The crews were able to add the relief missions on to their daily flying schedule, said Butler.

"We stretched our crew days a bit, but otherwise the trips south were uneventful," he said.

Because the cargo was not on pallets, Tech. Sgt. Roger Brown and other 17th SOS loadmasters had to optimize the load while ensuring safety.

Brown said it felt good to help out people in their time of need.

"They had been whipped pretty badly by that typhoon, but their spirits were still high," he said.

Capt. Scott Hartman flew into Cagayan de Oro. He said his efforts were greatly appreciated by the volunteers that showed up to help offload the plane.

"They were very excited that we were able to fly those relief supplies out to them," he said. "There was a sense of urgency to get the supplies out to those villages that had been hardest hit."

Hundreds of families fled their homes to escape raging waist-deep floods, civil defense officials said. The storm, with winds gusting up to 55 mph, knocked down power and telephone lines.

The experience for Butler hit a little closer to home.

"My wife, Shirley, is from the Philippines," he said. "One of her strongest childhood memories was right after a typhoon wiped out her village. U.S. helicopters flew to her town and hovered overhead. The crews would throw out loaves of bread, packets of coffee and other supplies that would help get them through a couple days. It felt great to step in and fill that role — one which means so much to those folks and Philippine-American relations."

An average of 20 typhoons lash

the Philippines every year. Lingling was the 14th to hit the country since January 2001.

Edwards Helps NASA Capture Leonid Data

EDWARDS AIR FORCE BASE, Calif. (Air Force News) — People from the Global Reach Combined Test Force stepped up to the plate recently to help NASA researchers capture one-of-a-kind data. The squadron offered 18 U.S. scientists a ride aboard a specially modified aircraft so they could collect data during last year's Leonid meteor shower.

The specially modified aircraft, an NKC-135E Stratotanker, is also known as the Flying Infrared Signature Technology Aircraft. The aircraft is equipped with quartz-crystal windows designed to support advanced technology optical data collection. The windows include defrosters and adjacent mountings for cameras, and highly specialized equipment to gather signature data on meteors.

The mission left Edwards Air Force Base at 10 p.m., flew throughout the shower, and returned at 6:30 a.m. the following morning. While the shower could be viewed from the ground, the goal for the mission was to get above the clouds and other atmospheric interference to meet NASA's specific viewing needs.

"This data is being used to better characterize the threat that our satellites have to space hazards, so its benefits will touch each of us some day," said U.S. Air Force Lt. Col. Jeff Smith, director of the Global Reach CTF.

Meteor storms have historically eluded planned observation. The Leonid storm offered researchers an opportunity to plan viewing based on its predicted appearance.

The Leonids are minute dust particles shed by comet Tempel-Tuttle. The comet swings around the sun once every 33 years, leaving a trail of dust. Each November, the Earth's orbit takes it through that slowly dissipating trail. ■

Over One Million Served



Top: U.S. Air Force Col. Bob Allardice, commander of the C-17 humanitarian missions to Afghanistan, holds the symbolic one-millionth humanitarian daily ration before it is placed on a C-17 Globemaster III October 30, 2001, at Ramstein Air Base, Germany. Staff Sgt. "Pete" (right) was the loadmaster for that flight.



Staff Sgt. "Pete," a loadmaster on board one of two C-17 Globemaster III cargo planes, tosses the symbolic one-millionth humanitarian daily ration out the rear of the aircraft as it flies at high altitude over Afghanistan Oct. 31, 2001.

U.S. Air Force photos by Staff Sgt. Jeremy Lock

ASK OUR **doctors**



Q *I have been recently diagnosed as having chronic obstructive pulmonary disease by my doctor. What is it and how can it be treated?*

A Chronic obstructive pulmonary disease, or COPD, includes emphysema and chronic bronchitis. These two separate but closely related and usually co-existing conditions damage the lungs and prevent them from doing their job of bringing oxygen to the body and getting rid of carbon dioxide. COPD is characterized by a progressive limiting of the airflow into and out of the lungs. More than 10 million Americans suffer from COPD, many of them smokers or former smokers. And more than 60,000 die each year as a result.

Cigarette smoking is the major cause of COPD. Seventy-five percent of individuals with chronic bronchitis have a history of heavy smoking. Exposure to air pollution can irritate the lungs, also. And exposure to both air pollution and smoking is particularly harmful. Although any of these may cause COPD, together they have a synergistic effect. That is, their combined effects are stronger than exposure to each one separately. Other risk factors include gender (men are more susceptible than women), family history, and age.

Treatment focuses on two areas: slowing the progress of the disease and relieving the symptoms. Practices such as not smoking, avoiding polluted air or environments where the air is too hot, too cold, or too thin (high altitude), and taking precautions to protect oneself against respiratory infections can help slow the advance of the disease.

Antibiotics can control respiratory infections; corticosteroids and bronchodilators can be prescribed to prevent respiratory attacks and improve airflow.

You should contact a health professional if you have a sudden increase in shortness of breath; sharp chest pain with coughing; a productive cough with green, yellow, or rust-colored sputum; wheezing; changes in the nature of your cough; a cough that is so severe it is exhausting; or a cough that lasts longer than seven to 10 days without improvement.

What is a repetitive motion injury? How do I recognize if I'm at risk?

Q When you perform the same movement day after day, you may set yourself up for

A repetitive motion injury. For example, people who spend long hours at a computer terminal, play a musical instrument or work on assembly lines may suffer from repetitive motion injuries. These injuries affect the soft tissues and nerves around the neck, forearm, hand, back and feet.

Several factors add to your risk of developing a repetitive motion injury, including poor posture, faulty equipment or performing the repeated motion in the cold or with vibrating tools.

Although repetitive motion injuries typically affect middle-aged people, no age group is immune to these disorders. In fact, children who play computer games for long stretches at a time are at risk for repetitive motion injuries.

One of the most common repetitive stress injuries is carpal tunnel syndrome. This injury affects the hands, fingers and wrists, and develops when repeated motion causes nerves to swell. Tendinitis is another



Michael E. Kilpatrick, M.D.

common repetitive motion injury.

Symptoms of repetitive motion injuries may initially seem subtle, but if you ignore them (or simply live with them), matters usually go from bad to worse. As with most health problems, early diagnosis and treatment is key.

If pain from a repetitive motion injury persists, by all means see your doctor. He or she may treat you with medications, cortisone injections or a splint (to rest the injured area). You may also need additional therapy to heal your injury.

Occupational therapists specialize in treating repetitive motion injuries of the upper extremities. In severe cases or if a repetitive motion injury has been left untreated, surgery may be needed to restore function in the injured area.

Consult your doctor if symptoms persist after two weeks, and you are unable to perform your activity or job.



Francis O'Donnell, M.D.

RECRUIT ASSESSMENT PROGRAM SHOWS LOTS OF PROMISE

by austin camacho

After nearly a year of field testing the Recruit Assessment Program, officials say this relatively simple information gathering process could be an important factor in protecting the health of servicemembers in the not-too-distant future.

Last summer, it was reported that doctors at the Naval Medical Research Center in Silver Spring, Md., and the Naval Health Research Center in San Diego, Calif., were investigating the use of a baseline medical database to evaluate the health of military members. Health professionals from the departments of Defense, Veterans Affairs and Health and Human Services collaborated to develop a way to gather baseline data, that is, information on the health status of people as they enter the military. That data gathering system became the Recruit Assessment Program, or RAP. One of the creators of the program, former U.S. Navy Capt. Kenneth Craig Hyams, M.D., said that the idea for the RAP grew from lessons learned after the Gulf War.

"We need greater baseline data to understand changes in veterans' conditions after they return from dangerous deployments," said Hyams. "Once a wartime deployment occurs, it's difficult or impossible to go back and get

that information."

In fact, the lack of complete pre-war medical records for the servicemembers and veterans who developed symptoms is part of the reason it has been so difficult to determine the causes of symptoms among Gulf War veterans. A baseline medical database could give doctors a "before and after" picture of a servicemember's health they might need after a future conflict.

Testing and implementation of the RAP has progressed at the U.S. Marine Corps Recruit Depot in San Diego. The project is run by DoD's Center for Deployment Health Research, which is part of the Naval Health Research Center. U.S. Navy Commander Margaret Ryan, M.D., director of the Center for Deployment Health Research, says the program is going extremely well.

"All Marine Corps recruits who came on board since June 2001 have completed the RAP survey," Ryan says. "That's more than 7,000 recruits as of September first."

The testing has already shown that the RAP could add value to the military medical system. For example, medical in-processing of troops has been enhanced because the RAP is used to automatically enroll new recruits into the military's Composite Health Care

System, which is their health care database. That's being implemented at the Marine Corps Recruit Depot in San Diego with positive results so far.

"The RAP system's automated registration into CHCS [Composite Health Care System] is working beautifully," Ryan says. "This process saves the MCRD-SD clinic valuable man-hours. Plus, CHCS registration data



Basic trainees at Fort Jackson participate in the "Fit to Win" endurance course. Trainees must complete all obstacles prior to graduating basic military training. Fort Jackson is the Army's largest basic training post with thousands of recruits passing through its gates each

quality is improved, which the Naval Medical Center San Diego Information Systems specialists can appreciate."

The RAP survey, which is still being refined, is an electronically scannable paper questionnaire which recruits fill out during their first week of training. Ryan says it's important to capture health status before service actually begins. Also, recruits tend to be very forthcoming and honest about health challenges during in-processing. Over time, Ryan and her team have improved the questionnaire to make it better for both recruits and the medical systems taking the information.

"The original survey has been shortened," she says, "and questions refined to make them clear and brief. It now takes less than 30 minutes to complete."

With any new program intended for DoD use, officials always expect a few surprises. But according to Ryan, testing of the RAP program has been unexpectedly smooth.

"We are only surprised at how quickly recruits, recruit training staff and medical staff have recognized the value of RAP and supported the process," she says.

So, when will the RAP become a part
— Continued on Page 16



Homeland Defense

by master sgt. bob haskell
national guard bureau

gt. Jason, let us call him, is an astute young man who knows when his team's time has come. That time is now.

He belongs to the Minnesota National Guard's 55th Civil Support Team. There was no doubt in his mind a week before Thanksgiving at Fort Leonard Wood, Mo., that he is a bona fide soldier in the American army whose new call to arms is homeland defense in the war against terrorism.

That was when that 22-member team passed its final Army test, its external evaluation, in order to be certified by the secretary of defense to identify biological, chemical or radiological agents from weapons of mass destruction anywhere in the country.

That was when the civil support teams from Minnesota and Louisiana became qualified to join thousands of their National Guard brothers and sisters who have acquired a new sense of urgency and purpose, a "new normal," following the black Tuesday terrorist attacks of Sept. 11.

"That really intensified our training and made it more realistic," observed Sgt. Jason while preparing his air tank and A-level chemical suit for a training exercise at the fort where the warm autumn mornings echoed with the cadence of young soldiers in training running before dawn.

"Before Sept. 11, a lot of people believed that something like that would never happen and that these teams would never be needed," he added. "The terrorist attacks have solidified our purpose for being around. That makes us wake up in the morning feeling proud of what we do."

Thousands of Army and Air National Guard troops shared that sensation about their roles in homeland defense that was being defined by the president and by many governors across the country during the



Photo by Paul Disney

Members of the National Guard's 55th Civil Support Team from Minnesota show they know how to check the air and ground for explosive gases and dangerous radiation levels during their First Army evaluation for federal certification at Fort Leonard Wood, Mo.

final months of the first year of the new millennium.

Twenty-seven federally certified state civil support teams and thousands of citizen-soldiers pulling security duty with police at 424 commercial airports as well in railroad stations and at bridges and tunnels from coast to coast characterized the new era for the National Guard.

President George Bush announced that Guard troops would reinforce airport security checkpoints for up to six months beginning Sept. 27 and promised on Nov. 9 to increase that force by 25 percent, to 8,000, for the holiday season.

"We are fighting the war on many fronts. And we could not win the war without the help of the Guard and the Reservists," observed the president, a former Texas Air Guard fighter pilot, during a White House ceremony.

By then, governors had already called on Army and Air National Guard troops to help protect highways and byways, from Grand Central Station and Pennsylvania Station in New York City to the Golden Gate Bridge in California.

Guard troops have also been helping to secure nuclear power plants. District of Columbia Army Guard military police began helping

U.S. Capitol Police provide security around the Capitol on Nov. 16, the first troops assigned to that duty since the 1968 riots. And 200 New York Army Guard soldiers were called up for 90 days of security duty at the United States Military Academy at West Point.

Three civil support teams, from Colorado, Massachusetts and Texas, have been assigned to assist with security during the Winter Olympics around Salt Lake City, Utah, next February, a Guard spokesman explained.

Ten highly trained civil support teams, originally called RAID teams when they were formed in 1998, were already fully equipped with mobile laboratories and sophisticated communications vans before Sept. 11.

Fourteen more teams, organized to help firefighters, police officers and other civilian emergency responders, were evaluated by teams from the First and Fifth U.S. Armies at Fort Leonard Wood three to six months earlier than originally scheduled, explained Tennessee Army Guard Lt. Col. Gordon Fuller, the officer in charge of the accelerated evaluations in central Missouri.

Teams in Alaska, Hawaii and
— Continued on Page 19

E-mail shown to have positive impact on emotions between deployed sailors and family members

by barbara ross

The deployment experience within the submarine lifestyle creates a broad range of emotional responses in both the active duty member and his spouse. The recent implementation of e-mail as a communication tool used between sailors and their families during deployment has introduced a new variable to the dynamics of separation and maintaining an emotional relationship with loved ones during separation. A survey was conducted to examine the impact of e-mail on morale, emotional connectedness during separation, reunion, expectations, the ability to focus during deployment and the existing emotional cycle.

A combination of closed- and open-ended responses was collected from written surveys distributed to crew members and spouses from three fast attack submarines homeported at the Naval Submarine Base New London in Groton, Conn. Each submarine had returned from deployment (a separation of three months or longer) less than 120 days prior to receiving the survey.

The typical respondent for this survey was a 28-year-old married male with one or more children and with an annual family income of \$40,000 or less. He has completed some college coursework and has experienced at least three deployments

lasting a minimum of ninety days each.

Survey results indicate that e-mail boosts morale, increases emotional connectedness and facilitates a positive reunion experience. However, respondents note that expectations about e-mail were not met. In addition, respondents indicated that the emotional cycle of deployment may be shifting to include more positive emotions such as confidence and self-assuredness.

A comparison between emotional responses during deployment that became the basis for the existing emotional cycle of deployment and current emotional responses during three phases of the deployment cycle indicate greater self-assuredness and confidence during the beginning and end phases of the cycle.

While historically these two phases of deployment have been emotionally difficult for most, increased feelings of confidence and self-assuredness during these periods indicate a shift from the traditional cycle. While this study cannot directly attribute the shift to e-mail use or to other factors inherent to the sample population, the shift invites further discussion and analysis of current education and training programs that may need to be modified.

The ability of sailors to focus or concentrate during deployment is essential and driven by the nature of the work and the risks inherent in operating the required equipment and ensuring the safety of fellow crewmembers.

In this study, male respondents report only mild disruption in concentration as a result of e-mail use. Spouses report much higher levels of disruption. Those with less deployment (lifestyle) experience indicated even higher disruption.

Lastly, communication tools utilized by the Navy to educate sailors and spouses about e-mail use have been effectively implemented. Interestingly, despite the variety and frequency of messages about e-mail use during deployment, expectations are still not met.

Commands must better educate both sailors and spouses about current e-mail technology, processes, potential pitfalls and differences between civilian and onboard e-mail systems to enable formation of realistic expectations.

In addition, implementation of technology to enhance e-mail reliability and efficiency may be warranted.

Separation from loved ones is difficult under any circumstances. Deployment for several months with limited, sporadic communication can be challenging for even the most adaptable and self-sufficient families. E-mail has introduced a new dynamic to the quality of life enjoyed by sailors and their families. While not a perfect system, the increased communication opportunities provided by e-mail have contributed to increased satisfaction, greater spousal confidence during separation and enhanced overall quality of life – important assets to mission readiness. ■

Barbara Ross is the program coordinator at the Fleet and Family Support Center, Groton, Conn.



DoD concludes investigation ammo supply point in Kuwait



The Department of Defense has concluded its investigation into the reports of possible chemical warfare agent detections at an ammunition supply point located some eight miles west of Kuwait International Airport. The report, "Fox Detections in the ASP/Orchard," released Nov. 29, 2001, presents the final conclusions of investigators working for the Special Assistant for Gulf War Illnesses, Medical Readiness and Military Deployments. Investigators assess that it is unlikely that chemical weapons were stored in the ammunition supply point.

"We believe the existing evidence indicates that chemical weapons or chemical warfare agents were not present in the ASP," said Tim Gainor, an investigator working for the special assistant's office. "We examined a lot of evidence and talked to key witnesses. Despite the Fox alerts to the possible presence of chemical warfare agents, there isn't any evidence to corroborate agent presence."

Initially published as an interim report on September 23, 1997, this final report incorporates recommendations of the Presidential Special Oversight Board. The board concurred with the interim report's assessment and recommended publishing a final report. Investigators conducted two additional interviews and included information from those interviews in this report. The special assistant's staff has received no new information that contradicts the interim report's assessment.

On February 28, 1991, a Fox Nuclear, Biological and Chemical Reconnaissance vehicle, assigned to Task Force Ripper and commanded by then U.S. Marine Corps Gunnery Sergeant George Grass, inspected an ammunition supply

point located southwest of Kuwait International Airport. While inspecting the site, the Fox crew reported their MM-1 mobile mass spectrometer detected the possible presence of three chemical warfare agents: sulfur mustard, HT mustard and benzyl bromide. The MM-1 operator printed tapes of the three alerts. Grass gave the tapes to a senior officer, who, in turn, reported up the chain of command through the 1st Marine Division to U.S. Central Command.

The next day, March 1, 1991, Grass escorted a five-member explosive ordnance team to the ASP/Orchard. Using M8 and M18A2 chemical detector kits, the EOD team checked for chemical contamination in the area and did a visual and hands-on inspection of the bunkers and munitions. During the inspection, which lasted several hours, the team found no evidence of chemical weapons or chemical warfare agents in the ASP. The team only found conventional munitions such as small arms, grenades, artillery and mortar rounds. The EOD team leader recalled informing Grass and Task Force Ripper's NBC officer that they found no chemical weapons at the ASP. Additionally, no one who entered the ammunition supply point reported any physical symptoms of chemical warfare agent exposure.

Word that no chemical weapons were stored at the ASP was reported up the chain of command through the 1st Marine Division to U.S. Central Command.

After the Gulf War, Kuwait contracted ordnance-clearing services to rid the country of munitions left by Iraq's occupying army. Teams of explosive ordnance experts

dismantled the ammunition supply point during clean-up operations and found no chemical weapons or chemical warfare agents.

"We have a lot of experience examining Gulf War MM-1 alerts," said Gainor. "We've learned from MM-1 experts that the MM-1 was susceptible to contaminants other than chemical warfare agents. And, in some cases, falsely alerted to the presence of chemical warfare agents."

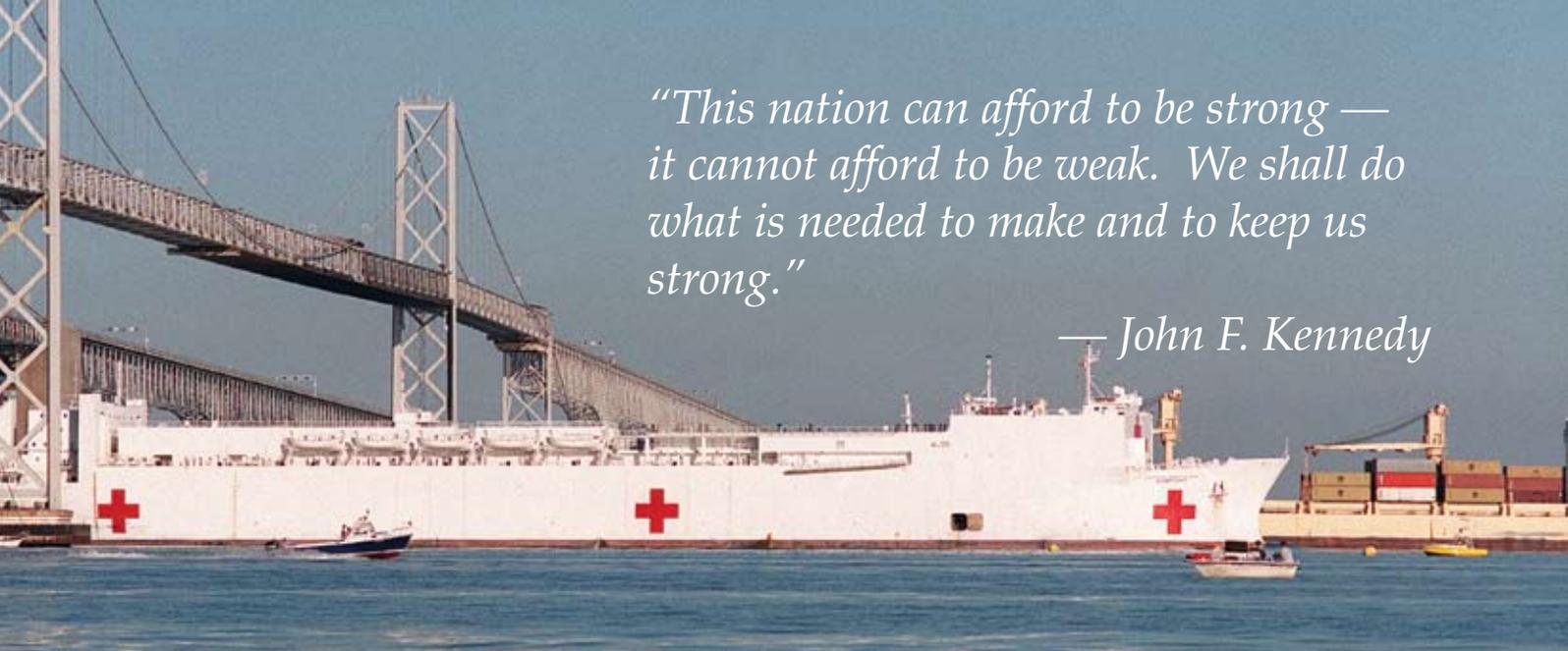
Without the Fox MM-1 tapes — which were lost and most likely destroyed — it is impossible to determine what the MM-1 alerted to. Hence, our assessment is unlikely. However, other evidence suggests an absence of chemical warfare agents," says Gainor.

Gainor said in all alerts to possible presence of chemical warfare agents, investigators searched for additional corroborating information. In this case, says Gainor, there is none. The EOD team found no evidence of chemical warfare agents and no chemical weapons. Further inspection of the ASP by Marines using chemical agent monitors found no evidence of chemical warfare agents or chemical weapons. Teams of ordnance experts involved in post-war clean-up operations in Kuwait discovered no chemical weapons or chemical warfare agents in Kuwait or in the ammunition supply point.

Additionally, UNSCOM and the U.S. intelligence community believe no evidence exists that Iraq moved chemical weapons into Kuwait.

“This nation can afford to be strong — it cannot afford to be weak. We shall do what is needed to make and to keep us strong.”

— John F. Kennedy



U.S. Navy photo by Chief Photographer's Mate Philomena Gorenflo

The hospital ship USNS Comfort (T-AH 20) leaves Baltimore harbor en route to Earle, N.J., where it will embark Navy medical personnel before setting sail for the coast of New

Waiting for the Call to Duty

by joan kennedy

In a bright, warm morning in August, we walked up the gangway of the USNS Comfort (T-AH-20) for a tour of the hospital ship with her then-skeleton crew. Our visit to Comfort in repose revealed an extensively equipped — and very nearly unpopulated — hospital, one of the world's two largest afloat. Comfort is also the seventh-largest hospital in the world. U.S. Navy Cmdr. Tommy Stewart, a nurse and a Navy counselor, took us through the different compartments on Comfort in roughly the same order that a patient might experience them while being moved inward from the deck.

“This is the decon station,” Stewart said of a space still outside, where a shower hose is poised to soak a vinyl-covered bed. “If you were contaminated with a chemical agent, you would be hosed off here and given a clean gown before we brought you to the triage space.”

Comfort's skeleton crew has a staggering number of systems to maintain, each with its own schedule for monitoring and upkeep, all of which must be kept operational for the next time Comfort is called to duty. There are freezers that maintain stored blood at minus 82 degrees Fahrenheit. An oxygen-generating facility which produces pure oxygen and tanks that store it. Blanket

warmers, CT scanners, X-ray machines, seawater desalinating apparatus, computers, lifeboats and stretchers that need to be maintained. Even the flight deck and its operations needed for helicopter landings get a going over. In short, everything that can wear out, run out, go stale or malfunction is closely monitored, so that if pressed into service, Comfort can transform itself within five days from a squeaky-clean ghost town to the world's largest floating trauma center.

When Comfort is on full operating status, Stewart explained, the ship's civilian mariner crew is augmented to a strength of 63. The military treatment facility at that time may be activated to treat 250, 500 or 1,000 patients. The military crew increases to as many as 1,214 Navy military personnel, depending on the directed level of activation.

Every where you look, there is evidence of a staggering array of con-

tingency plans: the number of all the disastrous “what ifs” you can imagine, dwarfed by the number that you cannot. D-rings coming up from the floors assure that anything on wheels will be lashed into place if there is turbulence. Wall after wall is lined with orange lunch box-sized containers of oxygen, any of which would give 15 minutes of good air to anyone making their way through smoke to the deck and into a lifeboat. Sheets of plastic hang from

ceiling to floor in isolation pods, designed to keep communicable microbes in one place. And every crewmember aboard, whose blood has been typed and tested, is a potential donor at all times.

“The crew can function as a walking blood bank on a moment's notice,” said Stewart.

The Comfort crew regularly rehearses for catastrophe. In recent dock exercises, Comfort has used “simulators,” individuals who may be professional actors and have been coached to present symptoms while staying in character. This is meant to prepare doctors and medical staff as much as possible for the emotional curves that can be thrown at them when dealing with people under extreme stress.



These exercises can involve as many as 50 simulator patients, who may be screaming, sobbing, seeming to bleed profusely, and doing everything possible to make the scene challenging for the medical staff and ship's crew.

Simulator exercises are also meant to expose potential gaps and deficiencies — prior to the occurrence of a real-life disaster — that might not show themselves under traditional training methods. A simulation is carried through up to the point of actual medical tests and even surgery.

Commissioned 12 years after the end of the Vietnam War, Comfort saw her most intense sustained activity to date during the Gulf War. During Operation Desert Shield, Comfort operated in the Persian Gulf and Gulf of Oman, rotating with Military Sealift Command's other hospital ship, USNS Mercy (T-AH-19). During Desert Storm, Comfort was positioned close to Kuwait, off the coast of Saudi



Arabia near Khafji. Comfort treated more than 8,000 outpatients and 700 inpatients, performing 337 surgical procedures. In this longest

sustained period of activity since the Comfort's commissioning, the staff also saw to more than 2,100 safe helicopter evolutions, filled 7,000 prescriptions, completed 17,000 laboratory tests, made 1,600 eyeglasses, took 1,340 x-rays and performed 141 CT scans.

There are places on Comfort in which, once you see past the oxygen bottles and the D-rings, you can almost forget you are onboard a ship. In the physical therapy room, the operating room, the room where the CT scanner ("the only CT scanner afloat," Stewart notes) is kept, the feeling is that of being in a hospital. But the sight of any of the ship's 16 patient wards, each with 40 beds in bunked groupings, puts you right back on a

ship.

"The patient who's less severely disabled would be given a top bunk, and would be expected to help care for a patient in worse shape on the bottom bunk," said Stewart of how the military's ever-present buddy system translates to life in a floating hospital ward.

Four days after the World Trade Center disaster, Comfort and her crew arrived in New York to provide respite for the thousands of men and women involved in rescue and recovery efforts. Berthed alongside Pier 92 on the Hudson River in Lower Manhattan, Comfort's red crosses brought a symbol of hope to the people of New York City.

Her crew, consisting of doctors, nurses, corpsmen, ship's servicemen, mess specialists and civilian mariners, transformed this immense surgical facility into a place where workers could get a hot shower, a place to sleep, and a hot meal. Working non-stop, Nursing Service personnel transformed wards into sleeping quarters. A registration area was set up in what would normally be the Casualty Receiving area. Standing ready, the workers were greeted by nurses, corpsmen and mental health specialists. They were registered, provided a bedroll consisting of a blanket, sheets, and a pillowcase, as well as a personal hygiene roll consisting of a towel, face cloth, soap, toothbrush, toothpaste, shaving cream, razor and lotion. Emergency workers were escorted to waiting beds where they could rest and remove themselves, for a moment, from their grim tasks.

Working with local organizations, Comfort's crew obtained additional relief supplies such as personal hygiene items, socks, underwear and clothing for the workers. Many had come to the disaster site to help and had only the clothes they wore. Recognizing a need for laundry services, the ship's laundry geared up to process laundry for the guests and other agencies such as the American Red Cross. Dur-

ing this time more than 4,000 pounds of laundry were processed for the guests and other agencies.

The galley onboard Comfort was transformed into a 24-hour diner, with mess specialists providing more than 17,000 meals to the guests. The galley area quickly became a meeting place for the workers and a place to unwind. Mental health workers from Comfort and two volunteers from the American Red Cross mingled with the guests. Most of the time spent was focused on helping the workers learn how to deal with their feelings during this extremely stressful time. A group of massage therapists, on hand to help with stress relief, provided nearly 1,300 massages for the workers.

On Oct. 1, 2001, as the city's infrastructure began its recovery, Comfort transitioned out of New York to make her way back down to Baltimore. Her sailors manned the rails and she started back down the Hudson River, the pier lined with men and women waving to her crew. ■



No Link Between Depleted Uranium, Illnesses

by sgt. 1st class kathleen t. rhem
american forces press service

Defense Department deployment health officials have released an information paper that states no country that sent troops to the Balkans has found a health threat related to depleted uranium.

Depleted uranium is a byproduct of the process by which natural uranium is enriched to produce reactor fuel and nuclear weapons, according to the paper. DU's extremely heavy and dense nature has made it a valuable component in

U.S. armor and weapons for many years, it says.

In early 2001, international media reported an alleged link between depleted uranium use in the Balkans and leukemia in Italian troops who served there. U.S. officials have repeatedly said there is no danger from exposure to depleted uranium under the conditions faced in the Balkans.

The new DoD paper, released Nov. 6, 2001, recaps studies done by European countries and international organizations that basically substantiate what the United States has been saying for years — there's no danger. The organizations behind the cited studies are credible and independent of DoD, the paper states.

The DoD report explains that at least 13 countries and several international organizations have sent survey teams to the Balkans to collect and analyze soil, air, water, vegetation, and food samples. Many countries that have sent peacekeeping troops to the region have also begun medical monitoring of these forces.

"These surveys consistently report no widespread DU contamination and no current impact on the health of the general population or deployed personnel," the DoD paper states.

Uranium is a naturally occurring substance. Very small amounts can be found in everyone, so testing for exposure to depleted uranium can be tricky, DoD experts explained. The most common method of testing for DU exposure is urine testing.

"We all excrete uranium every day," Jeff Prather said. "It's in the water. It's in our food, particularly in root vegetables." Prather is a member of the Deployment Health Support team studying possible effects of DU exposure for the Special Assistant for Gulf War Illnesses, Medical Readiness and Military Deployments.

Depleted uranium isn't any more dangerous than natural uranium, Prather explained. And DU is 40 percent less radioactive, so it poses less of a radiological threat, he added.

Urine testing is a useful tool for assessing whether someone has received a significant uranium exposure, but since everyone has some uranium in their urine, low exposures to depleted uranium are hard to confirm, the experts explained. Depleted uranium exposures that produce urine uranium levels at about the same amount as normal would not cause concern, they explained.

Prather stated there are three ways depleted uranium can enter the body: by ingestion, by inhalation of dust particles in the air, or by DU shrapnel wounds. Uranium doesn't generally contaminate a person through fragments embedded in the body, he said. Ingested amounts of depleted uranium generally pass quickly through the body and aren't retained, he said.

Inhaled dust is the only real health concern because the body may retain particles for a long time, said Pat Williams, head of the DoD deployment

health support DU team. "However," Williams explained, "it is essentially impossible to inhale enough DU to do any serious harm."

The DoD report provides information on health testing being done by many European countries on their servicemembers who served in the Balkans. For instance, all Belgian servicemembers returning from the Balkans take a urine uranium test. By December 2000, the Belgian Medical Service had conducted 3,580 urine uranium samples. None exceeded normal levels of uranium for the Belgian population, the report states.

Finland, France, Germany, Lithuania, the Netherlands, Portugal, Slovakia and Spain have all conducted tests on varying numbers of troops and none has been found to have an elevated level of uranium, the report states. It contains a chart that breaks down exactly what type of testing each country performed, how many troops were tested and the results.

In addition, Italy now reports that the number of soldiers who've developed leukemia is actually only about half the number that would be expected to be diagnosed with the disease based on the country's average leukemia rate. The DoD information paper quotes a March 2001 Italian study that states, "There is nothing to lead to the conclusion that Italian troops were significantly exposed to DU."

The information paper also addresses environmental contamination with DU in the Balkans. It quotes a March 2001 U.N. report stating that its environmental researchers had "found no depleted uranium contamination of the water, milk or buildings in Kosovo."

The complete DoD report, including links to the original European studies cited, is on the Internet at http://www.deploymentlink.osd.mil/du_balkans/.

Peer Review Essential for Scientific Advances

by Kelly Sharbel

Following the Gulf War, the search to understand, prevent and treat deployment-related illnesses has produced many ideas for scientific research.

Obtaining federal funds for a scientific research project, however, requires more than just a good idea. It must be a good idea that has the potential to contribute to the nation's knowledge about a subject deemed a national priority and deserving of taxpayers' support. To earn that support, a researcher must describe a well-conceived hypothesis and a detailed plan of study that can withstand the rigor of scientific peer review.

Scientists say peer review is a critical quality control principle in the planning, design, conduct and interpretation of scientific research. Peer review of research reflects scientists' commitment to careful and objective pursuit of knowledge. Through peer review, researchers allow other experts to examine, criticize and improve their work.

"Peer review is a cornerstone of the scientific processes," observes U.S. Army Lt. Col. Karl Friedl, Ph.D., director of the U.S. Army's Military Operational Medicine Research Program at Fort Detrick, Md. Without open and critical discussion of experimental interpretations, he says, both logical and flawed analyses are given equal weight, making it much more difficult to improve understanding of the issues being studied.

"An individual who claims to have a novel approach to a problem must present enough of a coherent plan that other scientists can follow the logic and agree that the likely payoff of the experiment is the best use of taxpayer funds for research and that it is worth the risk of human research subject participation."

Strong endorsement of the science by nationally recognized experts is the first and perhaps most important indicator that Friedl looks for as he manages the Department of Defense's research portfolio on Gulf War illnesses. Every step of the process through which research topics are chosen and scientific projects are selected for funding is intended to produce good science, defined as

studies that are well designed with testable and important hypotheses that are likely to result in definitive answers. It is not a process unique to Gulf War illness research; DoD has been using a similar process for decades to develop innovative warfighting technology. However, developing new information about possible causes of the illnesses affecting Gulf War veterans presents researchers with added challenges.

"It is important that we obtain useful results that will make a difference for Gulf War veterans who are ill, and that we address some of these issues before the next major deployment, so we have to try to get things done quickly," Friedl says. "As we evaluate research proposals we might have to settle for 90 percent of the answer rather than spend an extended period of time trying to get an answer that is 99 percent right. This is not just an interesting academic exercise; this is a significant taxpayer investment intended to solve some difficult biomedical problems."

Regardless of the department's desire to get information to the veterans, servicemembers and their families as quickly as possible, there are no shortcuts in the process used to determine the topic areas and select the projects for research. It is a process marked by

collaboration and consultation among scientists and research administrators so that the research chosen for funding is appropriately focused on filling gaps in knowledge and providing a scientific basis for conclusions. Peer review plays an important role in deciding what topics will be examined and which research projects will be funded.

The process begins with Friedl and other scientists at the U.S. Army Medical Research and Materiel Command and within the Department of Defense constantly reviewing results from previous and ongoing research. For example, Friedl is able to draw on the collective expertise of senior scientists at the U.S. Army Medical Research Institute of Chemical Defense for advice on toxic chemicals, scientists at the Walter Reed Army Institute of Research for neurobiology and immune function, and Navy scientists at the Center for Deployment Health Research for advice on epidemiological studies ranging from general patterns of health care use to development of better surveillance methods for changes in the health status of servicemembers.

Friedl also receives guidance from the Office of the Director of Defense Research and Engineering, which exer-

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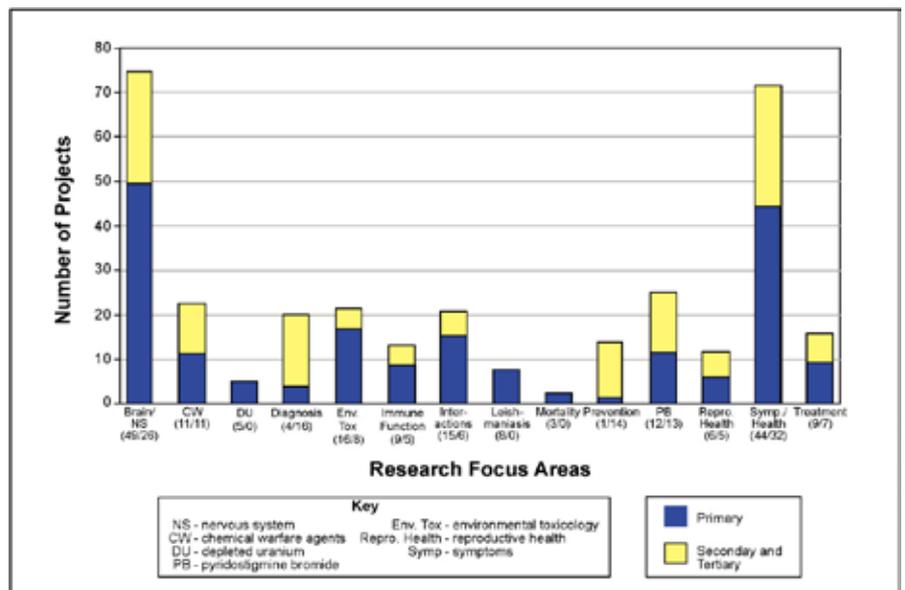


Chart created by Anne M. Saphara

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cises broad jurisdiction over DoD research, and the Office of the Assistant Secretary of Defense (Health Affairs) which oversees the Defense Health Program. Friedl says scientists currently engaged in research also make important contributions to determining what topics should be selected for future research.

“These researchers are on the leading edge of science,” he says. “They know what gaps exist in knowledge in their respective areas of expertise.”

Friedl cites recent materials and armaments research to consider substituting tungsten for depleted uranium in anti-tank ammunition as an example of how researchers can help identify new areas of inquiry. While

there is a growing body of scientific evidence affirming the safety and effectiveness of depleted uranium ammunition, researchers noted that very little study had been devoted to learning the toxicity of tungsten, another heavy metal. As a result, new projects in this area were specifically solicited in one of the research announcements for Gulf War illnesses research in 2000. Research is now being funded to investigate the potential toxic effects of tungsten alloys before they are considered for use in new munitions.

This consultative process among scientists inside and outside DoD produces a preliminary list of topic areas for new research which Friedl shares with the Military and Veterans Health Coordinating Board, formerly known as the Persian Gulf Veterans Coordinating Board. The board was established by then-President Clinton as an inter-agency advisory panel responsible for coordinating and tracking all Gulf War-related research conducted or sponsored by the departments of Defense, Veterans Affairs and Health and Human Services.

The board’s Research Working Group provides a wide range of consultative services, and coordi-

nates and oversees research projects and conferences for the Gulf War illnesses investigations conducted by the three departments. Its membership consists of senior scientists and managers from the three agencies.

“Keeping track of the ongoing research for Gulf War illnesses was a small task when the board was first organized,” says Dr. Kelley Brix, assistant chief of the Department of Veterans Affairs Research and Development Office and a member of the board’s Research Working Group. “It is, of course, a much larger and more diversified task today.”

Funding for Gulf War illnesses scientific research has grown from \$7.4 million in Fiscal Year 1994 to \$29.6 million in Fiscal Year 2000 for a seven-year total of about \$155 million for 192 individual research projects. The Defense Department has established a line item in its budget for this research and committed \$17 million a year for the four-year period that expires at the end of Fiscal Year 2002. After FY02, DoD plans to continue with at least \$5 million per year for Gulf War research and related force health protection issues.

The board adopted a framework of 14 focus areas to guide Gulf War research. These focus areas were designed to cover the broad range of symptoms being experienced by Gulf War veterans and potential causes of illnesses. They range from general topics such as environmental toxicology and brain and nervous system function to more specific topics such as leishmaniasis and pyridostigmine bromide.

With that framework established, Brix believes the Research Working Group’s strongest capability is overseeing and tracking what Gulf War-related

Funding for Gulf War illnesses scientific research has grown ...

research all three executive departments are doing. So, when Friedl or one of his counterparts from the other agencies brings a preliminary list of topics to be researched to the Research Working Group, they benefit by learning if any of the topics on their lists are already being examined in research sponsored by one of their sister agencies. That allows Friedl and his counterparts in other departments to make decisions that avoid duplication and get the most benefit from the pool of tax dollars devoted to Gulf War research.

The consultations with the Research Working Group also serve as another opportunity for scientific review and can help refine the research topic by better focusing the specifications of the Broad Agency Announcement, which DoD issues to solicit research proposals from scientists in and out of government. The departments of VA and HHS issue similar solicitations known as requests for proposals.

Broad Agency Announcements, published in the Commerce Business Daily, are requests for proposals and generally specify the purpose of the research, the amount of funds available and note any limitations, if any, on who can submit research proposals and the deadline for submitting proposals. Each department writes the specifications to meet its own needs and, independent of one another, evaluates the proposals it receives.

The Defense Department uses an independent organization, the American Institute of Biological Sciences, to recruit scientific experts to serve on the panels evaluating the proposals it receives. The panels are composed of distinguished scientific scholars who themselves are experienced researchers. In addition to their impeccable academic reputations, the panel members must formally attest to the absence of any conflicts of interest in the role that they play in rating the proposals. To ensure an independent assessment of the science, no Department of Defense employees are permitted to serve on these review panels.

The grading of the proposals includes raising questions of science but also addresses basic questions similar to everyday questions asked by consumers when they get their car repaired or their homes renovated. For example, the

panel members will want to know if the principal investigators are experienced in the field they plan to investigate, or if they have appropriate support from more experienced collaborators. Panel members will want to know if the proposed budget is adequate for the work proposed, if the hypothesis is scientifically sound and if the research methods to be used are feasible for that specific type of research.

They also consider the ethics of the
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Hospital Records Provide Wealth of Information for Researchers

by diana beradocco

Medical analysts hope that a new database developed from archived Gulf War inpatient hospital records at the National Personnel Records Center in St. Louis, Mo., may somehow shed light on the possible causes of Gulf War illnesses. The database captures information from medical records of Gulf War veterans who were hospitalized in theater or in Germany from August 1990 through August 1991. The database also links the discharge diagnoses with patient demographics and unit locations.

"Now we have a database that contains sufficient information about what happened to many servicemembers who were hospitalized during the war," said Mike Boyle, a project manager in the Deployment Health Support Directorate. "Based on records that are available at the

tal records in an effort to assist Gulf War veterans who require records to file claims with the Department of Veterans Affairs. Going beyond their previous work, staff members engaged in an additional project from November 2000 to May 2001 at the St. Louis location. The result is a database that contains the discharge diagnoses and their international disease codes for Gulf War hospitalization records and incorporates patients' units of assignment and unit locations.

Boyle said estimates of the total number of admissions to U.S. military hospitals in the theater of operations ranged from 27,000 to 35,000. The records archived at the center represent approximately 80 percent of the highest estimated admissions from the theater. To ensure thoroughness of approach, the special

"We have a database that contains sufficient information about what happened to many servicemembers ..."

center, we can begin to get a picture of the reasons servicemembers were hospitalized, and the care they received."

Theoretically, Boyle said, leadership can use this database as another means for determining possible disease and non-battle injuries rates to ensure proper levels of medical care and total force readiness. In addition, the scientific community could use the information in studies such as comparing diagnoses to suspected low-level exposures to various occupational and environmental hazards.

Since 1998, staff members, working on behalf of the special assistant, assisted by National Personnel Records Center personnel and service medical records advisors, located, documented and inventoried approximately 28,000 Gulf War hospi-

assistant's staff turned its attention to U.S. military hospitals in Europe to find other inpatient records of Gulf War evacuees who had no corresponding in-theater record of admission on file at the center.

At the conclusion of the data capture operation in May this year, the Gulf War inpatient record database contained 28,007 records of admissions to U.S. military hospitals in the Gulf War theater of operations and evacuee admissions to hospitals in Germany. Of that number, 21,050 were U.S. military personnel; 1,394 were allied forces personnel, U.S. and contract civilians, local nationals and enemy prisoners of war; and 5,563 were patients evacuated to Germany.

"We went to the German hospitals because they were on the main evacuation route. We wanted to find



U.S. Navy photo by PH2 Steven Harbour
Hospital Corpsman Renaldo Galang from Subic Bay, Philippines, verifies data entries in a few of the 5,000 crewmembers' medical records aboard the aircraft carrier USS Theodore Roosevelt (CVN 71).

as many patients as possible coming through the entire system," Boyle said.

"And we located an additional 1,998 records for which there were no corresponding records in the desert. Of those, 700 were identified as being Gulf War veterans for whom the Defense Manpower Data Center had no record of their having served in the Gulf," he added, noting that the team physically examined every record that has been retired.

The database can link diagnoses, personnel and unit and locations data, thereby enabling researchers to perform analyses of illnesses and injuries tied to approximate times and places across the Gulf War Theater of Operations during Operation Desert Shield/Desert Storm.

The project team built on the original information contained in the medical records by adding demographic data from the Defense Manpower Data Center's Gulf War personnel data file, as modified by the U.S. Armed Services Center for Unit Records Research at Fort Belvoir, Va. Best-fit unit identifier codes, which represent the best unit of assignment match for each individual, were then linked to each ID. \$6

Hospital Records

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military patient's admission record. With this data, the patient's unit of assignment locations point to the individual's approximate location on the day of admission, and for the three, five and seven days prior to an admission.

Boyle acknowledged there are some limitations to the data. During the Gulf War, a servicemember's assignment to other units or temporary duty was rarely recorded. And when a unit reported more than one location for a 24-hour period, the first reported location for a given day was used in the database application. Nevertheless, the linking of this information to an individual gives a general indication as to the patient's location on the day of admission to a hospital, and several days before admission.

"We took every patient, identified their unit and tied that patient to a location by using where the unit said it was that day. However, we are aware that a patient could have been detached from their unit's headquarters element that day, or the particular company they were with could have been many miles away. Even with these limitations, the information does begin to provide some trends," Boyle said.

The most common primary discharge diagnoses for U.S. servicemembers hospitalized in theater include gastroenteritis and colitis, lower back pain, asthma, unspecified

chest pain, unspecified viral infections, abdominal pain, observation (to rule out a particular illness), inguinal hernia, kidney stones and tooth disturbances. For servicemembers evacuated to Germany, the most common diagnoses include asthma, lower back pain, knee sprain, inguinal hernia, brief depressive reaction,

unspecified chest pain, observation (for other suspected conditions), other post-surgical status, continued care for illness or injury treated in the theater of operations and lower leg joint pain.

The accuracy of the data capture and coding process was a prime consideration for project members. The International Classification of Diseases, 9th Revision — known as the ICD-9 coding system — classifies diseases and provides an essential source of data for studies in epidemiology. Thirty-three medical records specialists — including registered health information administrators, registered health information technicians and certified professional coders — participated in the data capture process. Only the registered health information technicians and certified professional coders performed the coding and quality assurance reviews. Each record was subjected to a rigorous quality assurance review

on a rotational basis, insuring at least four quality assurance reviews. Project managers also created a unique software product to guarantee document control and total accountability of the records.

"We built and implemented a system that could document and defend everything we set out to accomplish," said Tom Rupp, project team member.

The study also benefited by cooperative alliances with organizations which provided epidemiological expertise. The Naval Health Research Center in San Diego, Calif., the Patient Administration Systems and Biostatistical Activity at the U.S. Army Medical Command in San Antonio, Texas, and the Deployment Health Clinical Center at Walter Reed Army Medical Center in Washington, D.C., helped to formulate the data capture plan, develop protocols, and ultimately, determine whether the records contained sufficient information to support a study.

Boyle said the information contained in the report will help the Department of Defense and other agencies answer some very basic questions about what caused servicemembers to be hospitalized during the Gulf War. The project may also provide an essential source of data for force health protection measures related to future allocation of hospital and medical support in theater.



RAP Shows Promise

— Continued from Page 6
of recruit processing throughout DoD? While more testing and modifications may be called for, Ryan says many in the military believe it should be implemented throughout the services as soon as possible.

"There is widespread recognition that baseline data will be important in addressing health challenges that may arise from imminent deployments," Ryan says. "But it will certainly take time for resources to be

provided and for training centers to gear up. In the meantime, the RAP process and the survey itself will continue to be honed by sites like MCRD-San Diego."

Ryan adds that the Marine Corps Recruit Depot-Parris Island in South Carolina will probably implement RAP soon, as will the Army's Fort Jackson, S.C. These sites are likely to provide valuable information on the women's health questions on the survey, because no women train at Marine Corps Recruit Depot-San Diego. And the team at the Center for Deployment Health Research will continue to do reproducibility testing, validity checking,

and improving the process based on feedback from the medical staff, training staff, and recruits. They believe that soon the Recruit Assessment Program could become a permanent part of DoD's induction process. ■

Latest VA Study Shows Gulf War Vets Have Higher Rates of ALS

by austin camacho

ased on new research evidence, the secretary of veterans affairs said veterans who served in the Gulf during the period from August 2, 1990, through July 31, 1991, and who subsequently developed Lou Gehrig's Disease will be compensated.

VA Secretary Anthony Principi announced that the VA now has preliminary evidence that veterans who deployed to the Gulf War are nearly twice as likely as their non-deployed counterparts to develop Lou Gehrig's Disease, technically known as amyotrophic lateral sclerosis or ALS. The VA, together with the Department of Defense and other agencies, sponsored a study that looked for cases of ALS among the nearly 700,000 servicemembers deployed to Southwest Asia and the 1.8 million on active duty during the period who were not deployed to the Gulf.

The study, done by researchers at the Durham VA and Duke University Medical Centers in North Carolina, found 40 cases of ALS among deployed veterans and 67 cases among the much larger non-deployed group. This translates to a nearly two-fold increase in the rate of this disorder in the deployed group compared to the non-deployed group.

ALS is a rare, chronic disease of the nerves. Medical science doesn't know the cause of this progressive illness, and there is no scientific evidence pointing to what might have caused ALS among Gulf War veterans. It most often strikes adults 50 to 70 years of age, although it has been diagnosed in patients as young as 19 years old. Lou Gehrig was 36 when he was diagnosed. There is also no effective treatment for ALS, which generally leads to death in two to seven years.

Assistant Secretary of Defense for Health Affairs Dr. Bill Winkenwerder, Jr., said that joint research into ALS over the past several years reflects

both departments' commitment to investigate the health concerns of Gulf War veterans.

"Scientific research helps answer veterans' questions and holds the promise for better protection of the health of our men and women during future deployments," Winkenwerder said.

The Defense Department's director for deployment health support, Michael E. Kilpatrick, M.D., said that this research demonstrates both the DoD's and the VA's commitment to Gulf War veterans. He said the study has significance for the VA in its mission to provide health care for veterans, for DoD in its programs to protect the health of those who serve, and for the larger society in its understanding of

ALS.

"DoD supports the VA's decision to compensate veterans who served in the Gulf and who later developed ALS, based on the preliminary findings of our jointly sponsored research," Kilpatrick said. "Both departments recognize that the most important issue is to provide assistance to our sick veterans and their families quickly. Time is of the essence for those who suffer from ALS."

Kilpatrick added that DoD concurs with the VA's recommendation for further research which may lead to an understanding of the cause of ALS. ■

VA to Lower Copayments for Outpatient Care

WASHINGTON — Veterans who currently make copayments for outpatient health care provided by the Department of Veterans Affairs will have lower bills, and in some cases, no bills at all, under rules published December 6, 2001, in the *Federal Register*.

Secretary of Veterans Affairs Anthony J. Principi is lowering the \$50.80 copayment some veterans now pay for outpatient care. This decrease is part of an evaluation of co-payments — outpatient, medication and long-term care — by VA.

The new regulation sets up a three-tier copayment system for outpatient care. The first tier will be for preventive care visits and will cost veterans nothing. This care includes flu shots, laboratory tests, certain radiology services, hepatitis C screenings and numerous other preventive services. Primary care outpatient visits comprise the second tier and will require a copayment of \$15. The last tier includes specialty outpatient care, like outpatient surgery, audiology and optometry and will cost \$50.

The copayments do not apply for the treatment of medical problems

that are officially recognized as "service connected." For nonservice-connected conditions, the outpatient copayments apply primarily to veterans enrolled in Priority Group 7.

"This is great news for veterans," said Principi. "It eliminates barriers for veterans to get the preventive care they need and will lower the cost of health care for many. Although VA recently announced increases in medication copayments, the decrease in outpatient copayments often will offset the pharmacy increases."

Another VA regulation will increase the copayment some veterans make for outpatient medications from \$2 to \$7 for each 30-day supply, with maximum annual out-of-pocket payment of \$840 for veterans in certain enrollment priorities.

The \$7 medication copayment would be lower than — or equal to — most medication copayments charged by the private health care industry.

For more information, Call the VA Health Benefits Service Center toll-free at 1-877-222-VETS. ■

Peer Review

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proposed research, commenting freely if they feel that the risk to human subjects or proposed procedures in animal studies are justified and meet current ethical standards. Some researchers have been surprised to discover that DoD is enforcing the most stringent standards of any federal agency for ethical human and animal research.

Each panel member gives the proposals a grade of one to five, with one being the strongest and five being the weakest. They then meet together to further debate the advantages and disadvantages of each proposal before rank ordering them based upon their scientific merit.

"A project with a grade of four or five has fatal flaws," Friedl notes. "And these panels don't miss the mark. If they say it is bad research, there is a concern about whether or not the objectives can or should be realized. If they say it is really good science, I only worry that it may be too safe, leading to evolutionary but not revolutionary advances in our knowledge.

"Good, but not necessarily top, scores are what's required to be further considered for funding. It's difficult to get a near perfect score for important human studies where comparison groups and other limitations may prevent the 'perfect' experimental design, compared to a cell culture study that may be less directly relevant but has much tighter control of conditions."

Friedl also observes that the debates over the proposals sometimes get pretty intense before the proposals are given a final score and detailed comments are written on the strengths and weaknesses of each proposal. The final grade and the detailed remarks are forwarded to the investigator who submitted the proposal. Investigators whose proposals did not receive grades high enough to warrant funding can present counter arguments explaining why they believe the panel's decision was wrong. However, such protests have to address the scientific deficiencies the panel found in the proposal. Friedl says he has never heard a protest that successfully countered the evidence supporting the final grade given to a proposal by the panel in his seven years of managing the program.

"This is largely a testament to the high quality of the review panels, the panel chairs and monitors, and the overall care exercised by the American Institute of Biological Sciences to ensure that every proposal receives a scrupulously fair treatment," Friedl notes.

At the conclusion of the evaluation process, Friedl has a list of projects worthy of funding. He also faces a complex challenge in distributing a finite amount of available funding to address a broad, balanced array of scientific inquiry on Gulf War and force health protection issues.

From the financial perspective, a proposal with a perfect score may not get funded if to do so takes all of the available research funds available in a given year. Obtaining a broad, balanced mix of research projects demands a review of ongoing research and a close look at the different types of research in the approved proposals. It may also involve another meeting with the Research Working Group to determine how the chosen research projects complement the projects selected by VA and HHS.

All of the exhaustive consultations and reviews culminate in the awarding of funds to investigators pursuing knowledge that will help answer questions Gulf War veterans have about their health concerns.

Once funded, the scientists doing the research are required to submit peer reviewed annual reports so that the agencies can make sure they are meeting required milestones. These annual and final reports are archived with the Defense Technical Information Center so that results are permanently captured for all future researchers and policymakers.

While encouraged to publish the results of the research in more widely circulated peer-reviewed journals, researchers are not required to do so. Brix, however, prepares an annual report to Congress, which includes a summary of the research projects. The most recent report is available online at <http://www.va.gov/resdev/pgrpt99.htm>.

The Defense Department and other federal agencies recognize the

primary importance of moving research results to where the knowledge gained will benefit veterans and servicemembers. In part, this is done through the Research Working Group, where action officers from DoD, VA and HHS can directly incorporate validated conclusions into improved policy and doctrine.

In the final analysis, Friedl, Brix and their colleagues in other agencies and research institutions manage a research selection process that demands fair and impartial judgement of proposals. Scientists who submit those proposals to compete for funding must be dedicated to the values that are the foundation of scientific advancement. They agree that Gulf War veterans and others to come who may benefit in the future deserve no less. ■



Homeland Defense

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Ohio that have been organized and trained since the spring of 2000 were scheduled for their final exams on their home turf in early 2002, Fuller added.

Here's what created the push to do in six weeks what had been scheduled to take six months. Gen. Eric Shinseki, the Army's chief of staff, in mid-October said he wanted those 17 new teams validated for federal service by the end of that year. National Guard officials made every effort to comply.

Furthermore, the Defense Department authorized full-time teams in five more states on Nov. 15, 2001. The new teams will be located in Alabama, Kansas, Michigan, Tennessee and West Virginia. They are scheduled to be certified for federal service in 2003 and will bring the total number of civil support teams to 32.

New York's 2nd Civil Support Team, one of the original 10, went to war first. It broke the ground for all of the teams on the day the two hijacked jetliners toppled the World Trade Center in lower Manhattan.

Members of the team commanded by Lt. Col. Bob Domenici tore down a display at a Veterans Administration hospital in Albany, got to New York City in a hurry and went to work that night.

They spent several days testing Ground Zero for deadly chemical and biological agents amid the smoking, dusty rubble and reassuring other emergency workers that the site had not been contaminated. They helped the FBI set up a secure communications network.

"The New York police officers and firefighters were so happy to see us," said one team member, a former member of the Marines' Chemical-Biological Incident Response Force. "They kept asking us 'Are we OK?' We kept telling them they were OK."

The requests have kept on coming because anthrax spores have been sent through the mail and because of the possibility that terrorists will target Americans with smallpox and who knows what else.

Before it was federally certified, for example, the Minnesota team tested

parts of the state capitol building, the governor's mansion and state mail centers for anthrax on orders from Gov. Jesse Ventura, said Air Guard Lt. Col. Earl Juskowiak, the team's commander.

"The tests were all negative, but that gave us a baseline in case those buildings are contaminated," said another Guard spokesman.

Furthermore, the New York team became part of the massive security force for the three World Series games played at Yankee Stadium and for the New York City Marathon on November's first Sunday. The first of California's two teams was pressed into service for the four World Series games in Phoenix, Ariz.

"I like this Guard team because it trains to do this 365 days of the year," said Deputy Inspector Thomas Graham, commander of the New York Police Department's Disorder Control Team. "It has a mobile lab and biochemical testing equipment that we don't have — yet.

We were always prepared to deal with explosives," said Graham, in light of the vehicle bombs used to blast the World Trade Center in 1993 and the federal office building in Oklahoma City in 1995. "We had never seen anthrax released in this city or in this country. That was never on our scope of possibilities."

Neither was guarding airports and other transportation centers for many members of the National Guard.

Well before Veterans Day, however, armed Massachusetts Guard soldiers were on duty at Logan International Airport in Boston, where 10 terrorists boarded the jetliners that crashed into the World Trade Center.

New York citizen-soldiers, meanwhile, were searching a steady stream of rental trucks and other vehicles randomly selected by police officers before being allowed to cross the East River from Brooklyn to Manhattan. Guard troops were making sure that drivers' licenses and paperwork were in order and that the vehicles are not carrying cargo that could create more terror for New York City.

"Most of the Guard troops are working on the Brooklyn end of the bridges, because we're more concerned about trucks going into Manhattan," explained New York Po-

lice Sgt. Stephen Patino. "They can't take any direct action unless a police officer is present."

They were, however, in the right places at the right time to help civilian authorities close the bridges and tunnels leading to Manhattan for about 45 minutes on Monday morning, Nov. 12, after American Airlines Flight 587 crashed into a Queens neighborhood after taking off from JFK International Airport.

That means New York Guard troops are engaged for the first time at home by order of their governor and overseas as part of the president's partial mobilization for reserve forces, pointed out Gov. George Pataki.

"You are up to the challenge. You are doing the job. We are so proud of you," Pataki told Guard troops at the Park Avenue Armory, home of New York's historic 7th Regiment that was the first unit to be called the National Guard.

The transportation duty is being taken far more seriously than, say, making sure that no one buys or sells the Brooklyn Bridge — one of America's most infamous scams.

"It keeps you busy, but I'd rather be doing something than standing around," said Staff Sgt. Arthur Dunkin at the end of the Manhattan Bridge where a team from the New York Army Guard's 42nd Infantry Division inspected vehicles.

"It's not practice. It's not training. It's not anything, but the real thing," said Maj. Gen. George Garrett, the "Rainbow Division's" commanding general. He is leading the task force that is helping to protect America's largest city. "We are running this just as if we were in Afghanistan getting ready to roll our tanks."

The 42nd's mission in New York City has been expanded from the original job of helping to secure ground zero after hijacked jetliners toppled the World Trade Center, Garrett acknowledged.

The joint task force includes members of the Army and Air National Guard and personnel from the Navy and the Marines.

"This is as joint as we can be," said Garrett. "We have so many strengths that we can do whatever needs to be done." ■



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<http://www.afa.org>

American Legion
1608 K St., NW
Washington, DC 20006
Phone: (202) 861 - 2700
<http://www.legion.org>

American Red Cross
17th & D Streets, NW
Washington, DC 20006
Phone: (202) 639 - 3520
<http://www.redcross.org>

AMVETS
4647 Forbes Blvd.
Lanham, MD 20706
Phone: (877) 726 - 8387
<http://www.amvets.org>

Association of the U.S. Army
2425 Wilson Blvd.
Arlington, VA 22201
Phone: (800) 336 - 4570
<http://www.ausa.org>

Department of Veterans Affairs
810 Vermont Ave, NW
Washington, DC 20400
Phone: (202) 273 - 4300
<http://www.va.gov>

Disabled American Veterans
807 Maine St., SW
Washington, DC 20024
Phone: (202) 554 - 3501
<http://www.dav.org>

Enlisted Association of the National Guard
1219 Prince St.
Alexandria, VA 22314
Phone: (800) 234 - 3264
<http://www.eangus.org>

Fleet Reserve Association
125 N. West St.
Alexandria, VA 22314-2754
Phone: (703) 683 - 1400
<http://www.fra.org>

Marine Corps Association
715 Broadway Street
Quantico, VA 22134
Phone: (866) 622 - 1775
<http://www.mca-marines.org>

Marine Corps League
8626 Lee Highway, #201
Merrifield, VA 22031
Phone: (800) 625 - 1775
<http://www.mcleague.org>

National Guard Association of the United States
1 Massachusetts Ave., NW
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Phone: (202) 789 - 0031
<http://www.ngaus.org>

National Association for Uniformed Services
5535 Hempstead Way
Springfield, VA 22151
Phone: (800) 842 - 3451
<http://www.naus.org>

Naval Reserve Association
1619 King St.
Alexandria, VA 22314-2793
Phone: (703) 548 - 5800
<http://www.navy-reserve.org>

Navy League
2300 Wilson Blvd.
Arlington, VA 22201
Phone: (800) 356 - 5760
<http://www.navyleague.org>

Non Commissioned Officers Association
225 N. Washington St.
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Phone: (703) 549 - 0311
<http://www.ncoausa.org>

Reserve Officers Association
1 Constitution Ave., NE
Washington, DC 20002
Phone: (800) 809 - 9448
<http://www.roa.org>

Retired Officers Association
201 N. Washington St.
Alexandria, VA 22314
Phone: (800) 245 - 8762
<http://www.troa.org>

Veterans of Foreign Wars
200 Maryland Ave., NE
Washington, DC 20002
Phone: (202) 543 - 2239
<http://www.vfw.org>

Vietnam Veterans of America
8605 Cameron Street, Suite 400
Silver Spring, MD 20910-3710
Phone: (301) 585 - 4000
<http://www.vva.org>

more information

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Department of Veterans Affairs
(800) 827 - 1000

VA Persian Gulf War Registry
(800) 749 - 8387

VA Benefits and Services
(877) 222 - VETS

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Department of Defense
<http://www.defenselink.mil>

Department of Veterans Affairs
<http://www.va.gov/>

Department of Veterans Affairs Benefits and Services
<http://www.va.gov/vbs/health/>

DeploymentLINK
<http://www.deploymentlink.mil>

GulfLINK
<http://www.gulflink.osd.mil>

National Archives and Records Administration
<http://www.nara.gov/research/>

National Personnel Records Center
<http://www.nara.gov/regional/stlouis.html/>

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