

April 14, 2014

# NSSC This Week



Natick Soldier Systems Center Public Affairs Office



*Weathering the Marathon*

*Shouldering the Burden*

*Heroic Deeds*

2013 Army Keith L. Ware  
Award-winning  
digital publication



U.S. ARMY

Also:



## Publisher's Note

John Harlow  
USAG-Natick and NSSC Chief of Public Affairs



## Welcome to NSSC This Week version 3.0



It is hard to believe how far things have come since we started this little endeavor a little over four years ago.

When *NSSC This Week* was started, it was five headlines, a quick synopsis and the links to the full articles. Our little newsletter earned the 2011 IMCOM Keith L. Ware 1st Place award for online publication and 3rd Place in 2012.

With the original format, we were averaging about 400 reads per edition.

In May 2013, we took a critique to heart. We were told the content was great, but design was a problem. We went to Phil Fujawa at StratComm and asked him to redesign the newsletter. *NSSC This Week* 2.0 was born.

In 2013, *NSSC This Week* earned the Department of the Army and IMCOM [Keith L. Ware](#) Journalism 1st Place Awards for Digital Publication. The newsletter is currently being judged at the DoD Thomas Jefferson journalism awards.

Since we started keeping track of the statistics of *NSSC This Week* 2.0, it has averaged more than 4,100 views per edition, more than 10 times what the original *NSSC This Week* received.

Bob Reinert, Phil and I sat down and asked each other, What can we do better? The answer was, become more interactive ([page 16](#)).

There will be interactive links in the stories that will give you more background into the story being told. You can click between pages and go back to the table of contents if you want to read specific stories. We are always looking for ways to make *NSSC This Week* more informative to you, the reader.

This award-winning publication couldn't be done without the help of the many subject matter experts willing to share their stories. You can be the best writer in the world, have the best layout and graphics, but if you don't have a story to tell, it doesn't work. We are thankful for the partnerships that we have formed with the different units across the installation.

Welcome to *NSSC This Week* version 3.0. As always, we welcome your feedback.

John Harlow  
USAG-Natick and NSSC Chief of Public Affairs

## NSSC This Week

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### NSSC Social Media Sites

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### About this newsletter

*NSSC This Week* is a biweekly newsletter covering NSSC news within the Army and commercial media.

*NSSC This Week* is maintained by the USAG-Natick Public Affairs Office.

Art Direction by Philip Fujawa, NSRDEC Strategic Communications.

To subscribe to *NSSC This Week*, please contact Bob Reinert at [robert.j.reinert.civ@mail.mil](mailto:robert.j.reinert.civ@mail.mil).

On the Web: [www.army.mil/natick](http://www.army.mil/natick)

Cover: Marathon photo: FayFoto/  
Boston

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# NSSC This Week

## Within the Gates

### Red Sox tickets

The Civilian Welfare Fund has tickets available for four Red Sox games this season. The dates include July 4, Orioles; July 18, Royals; Aug. 15, Astros; and Aug. 22, Mariners.

The deadline for tickets is April 18.

For more information, call Janice Kopacz at ext. 4205.

## Upcoming Events

### Troutfest 2.0

Bring your fishing pole, catch some fish and win prizes at "Troutfest 2.0" on April 26 from 8 a.m. to noon at Gibson Pool, presented by Family and Morale, Welfare and Recreation.

The cost per person is \$5 per angler. Food and drinks will be on sale.

Contact Sherita Baker at [sherita.m.baker.naf@mail.mil](mailto:sherita.m.baker.naf@mail.mil) or ext. 4791.

### Silent Scream

In support of Child Abuse Prevention Month and Sexual Assault Awareness Month, the Family Advocacy and SHARP Programs present an April 23 presentation by Barbara Joy Hansen, an award-winning international speaker, author, chaplain, prevention advocate and warrior.

Hansen, a survivor of domestic violence, child sexual abuse and pre-teen crime, will share her story in Hunter Auditorium at 9 a.m. and 1 p.m.

For more information, call Julie Lindahl at ext. 6925.



# Going back to Boston

Natick employees return to run, work marathon



Shivaun Pacitto never doubted that she would be back to run again this year.

Pacitto was at the finish line of the 2013 Boston Marathon when the bombs went off, but she fortunately was unhurt. The day after, before the bombing suspects were identified, she had vowed not to be intimidated by terrorists.

“The Boston Marathon means too much to our city or even to our nation,” said Pacitto, a research psychologist with the Consumer Research Team, Natick Soldier Research, Development and Engineering Center, or [NSRDEC](#). “It’s an international event that we’re so proud of, and I just don’t want it to be tarnished like this. I will not let whoever did this win.”

Mike Nixon was running between miles 23 and 24 as the bombs detonated. He didn’t finish the course, but the program analyst for the Expeditionary Basing and Collective Protection Directorate at NSRDEC immediately began planning a return to Boston.

“My reaction to this kind of stuff is, I’m not going to let them control me via fear, you know?” Nixon said on the day following the attack. “You’ve got to stay strong. You’ve got to think of the good things. This could have been so much worse.”

Pacitto and Nixon will be at the starting line in Hopkinton, Mass., April 21, for the [118th Boston Marathon](#).

“I never reconsidered my decision to run,” said Pacitto, a veteran of five marathons whose first Boston run was a year ago. “Running Boston in 2014 is not only about my personal quest to run again, it is about honoring the victims of those who were killed and injured in last year’s tragedy.”

Nixon struggled with his training over the long New England winter, but his wife pushed him to enter when the Boston Athletic Association invited those who didn’t finish the 2013 race to run the 2014 edition.

“Initially, I reluctantly agreed,” Nixon recalled. “Now, I am thankful she pushed me off of the fence, because this will be an amazing, ... historic marathon that will help further the healing for the running commu-

nity, the city of Boston, New England, and most importantly, all those that were injured by last year’s tragic events.”

As they make their way through Framingham, Pacitto and Nixon could take water from Melvin Williams, an equipment specialist with NSRDEC’s Shelter Technology, Engineering and Fabrication Directorate, who has been captain of a hydration station there since 1995.

“It was devastating,” said Williams of last year’s tragedy. “I planned on coming back. The people at the (Boston Athletic Association) were concerned and stayed in touch with each of us captains. I feel real safe this year.”

**“Boston took immediate care of those affected, and with support from the public identified, found and pursued those responsible in a very short period of time. I am very proud of my fellow brothers and sisters in blue, and for anyone else involved who puts the interests of other’s before themselves.”**

Wes Long, NSRDEC

One of those providing security in Framingham will be Wes Long, an equipment specialist at NSRDEC’s Department of Defense Combat Feeding Directorate, who is an auxiliary police officer in that town. As he was a year ago, Long will be on duty during the marathon.

“This year’s marathon will be very interesting, to say the least,” Long said. “I feel extremely proud and lucky that I am able to be a part of it. It will be Boston’s time to shine yet again

and let the world know that we are ‘Boston Strong,’ will not tolerate terrorism, and that our people are resilient.”

Despite last year’s events, Long said he was proud of the first responders who rose to the occasion.

“Without question, the actions of these brave men and women saved countless lives,” Long said. “Boston took immediate care of those affected, and with support from the public identified, found and pursued those responsible in a very short period of time. I am very proud of my fellow brothers and sisters in blue, and for anyone else involved who puts the interests of other’s before themselves.”

Long predicted that this year’s Boston Marathon would be the best ever.

“It will be symbolic of how Bostonians and Americans, in general, deal with tragedy,” Long said. “I take great pleasure in having the opportunity to be there, to serve others while mourning and remembering those who we have lost or that were victimized. It is truly patriotic and humbling.”



# Heroic Deeds

## National Guard Soldiers remember Boston bombings

By Bob Reinert, USAG-Natick Public Affairs / NATICK, Mass. (April 11, 2014)



Photo: Sgt. 1st Class James C. Lally, Massachusetts National Guard Public Affairs

Already, a year has passed, but three Massachusetts Army National Guard Soldiers who helped save the lives of bombing victims at last year's Boston Marathon can still recall most details as if the event had taken place yesterday.

"Those landmark moments will always be there," said 1st Lt. Steve Fiola. "And it's good that they will be, because you can't change what happened.

"I can't change what I experienced, but I can learn from it. I don't ignore it, but I also don't focus on it."

When the two bombs detonated April 15, 2013, Fiola, 1st Sgt. Bernard Madore and Staff Sgt. Mark Welch, three Massachusetts natives assigned to the 1060th Transportation Company of Framingham, Mass., followed their instincts and training. They ran directly toward the victims and aided them any way they could.

"I always talk about the switch," Fiola said. "When the switch turns on, as a Soldier, you have to turn your emotional mind off — not really off, but you just kind of ignore it.

"Now, looking at it, I'm just amazed that, one, it ... happened. Two, it's been a year. I think it's all pretty fresh."

The three Soldiers had just finished the "Tough Ruck," marching the 26.2-mile marathon course from Hopkinton to Boston, carrying approximately 35 pounds each to raise funds for families of fallen Massachusetts service members. They were exhausted but in perfect position to lend a hand when the unthinkable happened.

"I still see it pretty vividly," said Madore of the bombing aftermath. "It's a strong memory, that's for sure. It's not something that fades away.

"I talk to my friends and my Soldiers about it. It's a good thing to talk about it. I mean, it's not something you hide away from."

Welch, who works in Boston, will talk about it, but he said he still avoids the site of the bombing.

"I've only been to Boylston Street twice since last year, and I work in Boston," Welch said. "I still can't even step near that place. I don't want to have it come back, you know?"

Like Madore, Welch had deployed twice to Iraq, but he said that the carnage he saw that day in Boston wasn't the same.

"It definitely is different, because it's your own people," Welch said. "You expect stuff like that to happen in war. You have to live that day to day, knowing that something might happen, in order to do your job over there.

"Here, you don't expect that. When something does happen, it hits a different nerve. You cannot train for what happened (in Boston)."

All three men said that increased media coverage leading up to the 118th Boston Marathon on April 21 has taken them back to that horrible day. Fiola said it hit him one recent evening at home.

"I was walking through my house, and I actually stopped," Fiola said. "I started to run through it all again."

Some of those news reports dealt with new security measures that will be in place for this year's marathon. One is a ban on ruck marchers, which forced the relocation of the Tough Ruck. That was a relief to Welch but not Madore.

"After they announced the new security restrictions and everything," said Madore, "that's when it dawned on me that I really

would have liked to have more closure on the event by being part of it again this year."

Madore said he completely understands the measures, however.

"I would have liked to do (the marathon course) and walk away from there with the same feeling I had (last year) when I finished it," Madore said. "That's for me to deal with, and I'll deal with that as a big boy."

As an alternative, ruck march organizer Fiola came up with the idea to hold the event April 19 on the Battle Road Trail in Concord, Mass., where the American Revolution began on that same date in 1775. Fiola expects 400-450 service members from around the nation to ruck march the 26.2 miles. Only 30 participated last year on the marathon course.

"To think that we could be on this area where our American Revolution began," Fiola said.

"It's going to be great," Madore said. "Just the history alone, to walk on the same grounds as (the Minutemen), is going to be incredible."

Fiola refused to be negative about not being allowed to ruck at the marathon.

"I don't ever really want to talk about problems," Fiola said. "I want to talk about solutions. It doesn't really matter where we do it. It just matters that we're doing it."

A year ago at this time, these three Soldiers were doing something they never could have anticipated — treating the wounds of American citizens at the Boston Marathon. They won't forget that day, but they also won't be defined solely by it.

"This gives me a perspective on how frail we actually are and how important it is to take each day and move it forward," Fiola said. "For us, it's always been about moving forward, not just moving on."

Massachusetts Governor Deval Patrick shakes hands with Staff Sgt. Mark Welch, who is flanked by 1st Sgt. Bernard Madore and 1st Lt. Steve Fiola. The three Massachusetts National Guard Soldiers were awarded Army Commendation Medals June 3, 2013, on Boston Common for their efforts in saving victims of the Boston Marathon bombing.



# Weathering the Marathon

## USARIEM, BAA collaborate to fight heat injuries

As runners get ready for the Boston Marathon, many no doubt partake in training programs aimed at helping them to be optimally prepared, whether it be helping them achieve their best times and reduce physical injuries or simply to finish. With all this preparation, many may be surprised to find out about the wild card that April brings — the weather.

In 1967, snow squalls accompanied the runners through the first five miles. In 2004, temperatures reached midsummer levels, topping out at 86 degrees. In 2012, as many as 2,100 runners were treated at medical tents along the 26.2-mile course for dehydration, heat exhaustion and other ailments as temperatures soared into the upper 80s, smashing records.

“April is a very volatile month in Massachusetts in terms of weather,” Samuel Cheuvront, a research physiologist with the [U.S. Army Research Institute of Environmental Medicine](#), said. “Conditions can vary greatly from extreme cold to extreme heat. Extreme heat can be challenging for marathon runners who have been training in the cold for months. This can lead to excessive heat injuries.”

Since 2012, USARIEM has been an official course weather monitoring authority for the [Boston Athletic Association](#). Collaborative research between USARIEM and the BAA is focused on determining how many locations are required for monitoring along the 26.2-mile route, as well as to determine if a 72-hour forecast would give accurate results for race day planning. According to Cheuvront, USARIEM provides real-time, hourly [WetBulb Globe Temperature](#) measures on the course for race officials.

“Since last year, our researchers have been stationed at three places along the marathon route with portable WetBulb Globe Temperature devices that provide real-time readings of the conditions as racers go by,” Cheuvront said. “We have also done and will continue this testing through September to give us more data to help us achieve long-term, accurate readings.”

Cheuvront said the BAA chose USARIEM for this task partly because of their partnership, which dates back to the 1970s, when Soldier medics would volunteer to care for runners in medical tents while simultaneously conducting light weather monitoring. The other and more scientific reason is the military’s expertise in the use of the WetBulb Globe Temperature Index and its important use in sports medicine.

The WBGT measures heat stress in direct sunlight, which takes into account humidity, temperature, wind speed, sun angle and cloud cover (solar radiation). Cheuvront said it is a more sophisticated measurement than a simpler heat index, which accounts for air temperature and humidity only and was not designed with heavy activity in mind.

“Military agencies, the [American College of Sports Medicine](#) and many nations use the WBGT as a guide to managing heat stress,” Cheuvront said. “The majority of the heat gained by runners comes from muscle contraction. The WBGT informs us of how easy or difficult it will be for runners to balance that heat gain with heat loss.”

Since the 1950s, U.S. military installations have displayed flags to indicate the heat category based on WBGT. White, green, amber, red and black flags represent conditions ranging from WBGT readings of 79.9 degrees (white) to more than 90 degrees (black). Each flag serves as an indicator for guidelines for water intake and physical activity level for individuals based on the heat category. The sports medicine community uses WBGT flag categories also, though the absolute values used for guidance are different.

“Our hope is that by measuring the WBGT on the course, we can provide more accurate information than airport weather given many miles away, Cheuvront said. “We also hope that accurate 72-hour forecasting may be possible.”

“If the WBGT can be accurately forecasted, and we know that race day’s flag will be red, for example, then the organizers can plan for more water stations, more ambulances and more signage to alert runners that they may have to take it easier on the course.”

This research is not just going to benefit marathon runners. It will also be used to update the guidance that USARIEM provides to service members through the doctrine it publishes for heat injury management.

“The information we learn here will be taken to update the guidance we push out to the field to help protect the Soldier from heat injury. That is always a huge priority for us,” Cheuvront said.



Photo: Ken Fara/Reuters



# Shouldering *the* Burden



## Natick Soldier shrugs off cancer to prevent suicides

By Bob Reinert, USAG-Natick Public Affairs /  
NATICK, Mass. (April 4, 2014)

Photo: David Kamm, NSRDEC photographer

Twenty-two veterans commit suicide each day, which adds up to more than 8,000 a year, or, as Fitch pointed out, more than have died in the entire Global War on Terrorism since 2001.

IT HAS become a familiar, symbolic sight — Capt. Justin Fitch walking along local roads, carrying his rucksack.

Fitch, the Headquarters Research Development Detachment commander at the [Natick Soldier Research, Development and Engineering Center](#), does this to raise awareness — and money — for Soldiers, veterans and their families suffering from post-traumatic stress, or PTS, and suicidal thoughts.

“We’re raising awareness, and that’s very important,” Fitch said. “Part of fixing a problem is knowing that a problem exists.

“(Suicide is) a very taboo topic with a lot of stigma. It’s just not talked about.”

Twenty-two veterans commit suicide each day, which adds up to more than 8,000 a year, or, as Fitch pointed out, more than have died in the entire Global War on Terrorism since 2001.

“Twenty-two a day?” Fitch said. “We want to make that number zero. One veteran’s suicide is too many.”

Toward that end, Fitch and his Team Minuteman alone have raised more than \$75,000 since November through [“Carry the Fallen,”](#) a series of 12-hour team ruck marches. There are 50 such teams nationally, according to Fitch.

Funds from those events go to the [“Active Heroes”](#) organization, which is developing a \$5 million, 144-acre military family retreat in Shepherdsville, Ky.

“This event is growing,” Fitch said. “We definitely raised awareness on a large scale. This cause has gone viral.”

*Capt. Justin Fitch of the Natick Soldier Research, Development and Engineering Center has used ruck marches to help raise tens of thousands of dollars for Soldiers, veterans and their families suffering from post-traumatic stress and suicidal thoughts, while waging his own battle against Stage IV colon cancer.*

Fitch has remained steadfast in his support of the cause despite carrying his own heavy burden: The 31-year-old Hayward, Wis., native has Stage IV colon cancer, and he has become the public face of this effort.

“I absolutely don’t mind putting myself out there as long as it strengthens this cause,” said Fitch, quick to add that, “It’s about so many more people than me.”

Fitch pointed to the Carry the Fallen event March 29 along the Boston Marathon course in which dozens of participants rucked. Among them was Jason Wheeler, a veteran who lost the use of both legs, is partially blind, and suffers from PTS and a traumatic brain injury. Despite recent foot surgery, Wheeler used his wheelchair to carry his ruck along the course.

“It’s just inspirational,” Fitch said. “There’s a reason why this event means so much to him.”

Then there was Denise Florio, a disabled veteran with PTS who is also coping with thyroid cancer. Duncan McNaughton, a teenage son of a retired Army Ranger, completed both the November and March events that took place on the marathon course.

Natick employees Darren Bean, Raul Lopez and Sarah Welch supported the event. Bean reached into his own pocket to rent a recreational vehicle so that participants would have a mobile latrine and water source.

Welch, a former Army medic, provided medical support out of the RV. Lopez helped them and did some rucking for Fitch when the chronic pain from his cancer flared up.

“There’s so many inspiring people, so many inspiring stories, so many heroes, in my mind, out there,” Fitch said. “That alone just makes it a great event.

“We had a lot of Gold Star Families show there, too. It was such a big deal to these families that people were standing up to keep

this from happening to other people.”

Five miles into the ruck march, pain forced Fitch into the RV. He continued to jump out onto the course for a mile or two at a time to walk with others. He latched onto a group of five, covered the last four miles and crossed the finish line.

“I was extremely happy with the whole event, overall,” said Fitch, adding that participation had more than doubled from November’s ruck march.

Fitch pointed out that participants included some who had experienced PTS and suicidal thoughts firsthand.

“They find great purpose in (the event),” said Fitch, “because they’re tied to it and they’ve lost friends, brothers and sisters in arms, even family members, because of suicide that’s service connected. Just the event itself, participating in it, has (helped) people.”

Fitch counts himself among them, because there was a time in his own life when thoughts of suicide nearly consumed him.

“It’s OK to seek help,” Fitch said. “You can get help. Look at me. I’m a captain, I’m about to be a major, and I sought help.”

The next Boston ruck march will be held May 31, on the marathon course. Fitch said he is already looking forward to it, but he is also realistic.

“I want to keep rucking,” Fitch said. “I want to be on the ground with everyone else rucking, defying my condition, but I also may need to take a step back.”

The cause is just too important for him not to be involved, either as a participant or supporting others, however.

“If all we do is just save one life, one that wouldn’t have been saved otherwise,” said Fitch, “I say that’s mission success.”

# Physical Demands

## Setting the standards for combat arms

By Lisa Ferdinando, Army News Service / FORT STEWART, Ga. (March 12, 2014)

**I**n full gear, Sgt. Shawanna Washington moved ammunition, loaded mortar rounds into a gun tube, moved agilely as if under enemy fire, and completed other physically demanding tasks of a Soldier on the battlefield.

Washington completed the tasks as part of the Army's Physical Demands Study. She was among 89 male and 58 female Soldiers of the 3rd Infantry Division who volunteered to take part in the study at Fort Stewart. Their job was to help the Army develop gender-neutral standards for infantry tasks.

Washington, who served a year-long and a 15-month-long deployment in Iraq, said she wants to be in the infantry. She signed up for the study, she said, to be a part of something bigger than herself and support the Army as it moves forward in opening combat jobs to women.

"I always dreamed of being an infantrywoman. I wanted to see exactly the experience and everything I learn from it while I go through the training," she said, as she prepared to scale a six-foot wall during the testing.

The Physical Demands Study is part of Soldier 2020, the Army's plan to integrate women into previously closed military occupational specialties in infantry, combat engineer, field artillery and armor military occupational specialties.

The Army's Training and Doctrine Command, along with other research institutions, identified 31 common and physically de-

manding tasks in these military occupational specialties.

Other bases where the study has taken place include Fort Bragg, N.C.; Fort Bliss, Texas; Fort Hood, Texas; and Fort Sill, Okla.

The Physical Demands Study, which is distinct from the Army's gender integration study, is assessing the strength, endurance, and power required to do combat arms tasks.

The [3rd Infantry Division](#) Soldiers trained and prepared for a month. The testing was done the week of March 10.

Spc. Kendra Avery said she volunteered for the study to be a part of history as women are integrated into combat roles. She supports "100 percent" women serving in that greater capacity.

Although she does not plan on seeking a combat position, Avery said she took part in the survey to support women who want to enter those jobs.

"Looking back with my kids and grandkids, I can say, 'I did this.' If I can do it, anybody can," she explained.

As part of the study, Soldiers donned oxygen masks and put on heart-rate monitors before carrying ammunition boxes weighing 45

pounds each. Army technicians recorded the data on laptops.

Other tasks over the test week included a road march; dragging a 270-pound dummy for 15 meters; moving a "casualty" out of a vehicle; and loading a TOW-2B Aero Missile into a ground mounted weapon system.

The purpose of the study is to develop gender-neutral physical standards to put the best Soldier — male or female — in the right job, according to Maj. Gen. John M. Murray, commanding general of the 3rd Infantry Division.

"We're equally interested in what's right for that Soldier, to give Soldiers the ability to be anything they want to be in the Army," he said.

In addition, said Murray, the Army will have an opportunity to examine the physical conditioning of Soldiers, and how to avoid overuse injuries.

The study is being conducted in conjunction with [U.S. Army Training and Doctrine Command](#), and the [U.S. Army Research Institute of Environmental Medicine](#).

Edward Zambraski, division chief of U.S. Army Research Institute of Environmental Medicine Military Performance Division, is leading the research teams.

The goal of the study is to come up with predictive, physical performance tests that assess different elements of strength, endurance and coordination, Zambraski said.

"The whole idea of this physical standards study is to develop some tests so essentially we pair the person with the correct skills and attributes to those demands, so there is less chance of that Soldier being hurt," he said.

"If we can do that, we've achieved a major milestone for the Army," he said.

He said the Army began the testing last year and has three years to complete the study.

*Sgt. Shawanna Washington (right) loads mortar rounds into a gun tube, during the Army Physical Demands Study, at Fort Stewart, Ga., March 12, 2014.*



Photos: Lisa Ferdinando, ARNews

# Sleepless in Natick

## Study examines stress, Soldiers' immune systems

By Bob Reinert, USAG-Natick Public Affairs / NATICK, Mass. (March 21, 2014)

Training and operations can put such tremendous physical and psychological stresses on warfighters that their immune systems may be compromised.

A study being conducted by the [U.S. Army Research Institute of Environmental Medicine](#) at [Natick Soldier Systems Center](#) will examine how sleep restriction — the stressor — affects wound healing and whether nutritional supplements can help offset the effects. In a sub-study, the effect of sleep restriction on friend-foe recognition during marksmanship is also being observed.

“Immune responsiveness is suppressed in warfighters exposed to physical and psychological stress,” said Tracey Smith, Ph.D., a research dietitian with USARIEM’s Military Nutrition Division, who used Ranger School and Special Forces Assessment School as examples. “Research has shown that modest improvement in immune responsiveness, as determined from blood markers, was noted when Soldiers were provided a nutritionally fortified energy bar during Special Forces Assessment School.”

Smith said the Special Forces research didn’t focus on whether nutrition helped wounds to heal or defend against a virus, however.

“Immune markers measured from blood samples provide an indication of systemic immune response,” said Smith, “but the systemic immune response does not necessarily reflect the functional status of the immune

system — for example, wound healing time.”

In the study, male and female Soldiers were given suction blisters on their forearms. Some volunteers slept at least seven hours per night, and the current group is undergoing 50 hours of sleep restriction, with Soldiers allowed just two hours of sleep per night over that period.

“This was the amount of time that we thought would cause decrements in healing time and immune responsiveness at the wound site in young adults,” Smith said. “This model may provide a way to more effectively study effects of stress on wound healing, and a means to test prototype countermeasures, like nutrition interventions, to stress-related effects on healing.

“We are using the suction blister model as a tool for studying immune responsiveness of warfighters coping with stress, and nutrition interventions to mitigate decrements in immune responsiveness caused by stress.”

Capt. Adam Cooper, Ph.D., a research psychologist at USARIEM, piggybacked his marksmanship research on Smith’s study.

“We are interested in how sleep restriction differentially affects marksmanship performance during a simple versus mentally challenging friend-foe task,” Cooper said. “The factors we are examining are reaction time, accuracy and correct decision.

“Once it is known what factors are affected

during low versus high mentally demanding marksmanship tasks, leaders can make more informed decisions concerning what types of missions their Soldiers will be able to successfully complete given their current state of rest.”

Smith said that the marksmanship “keeps the volunteers awake, engaged and, hopefully, adds to the sleep restriction stressor.”

The USARIEM study is using 60 volunteer Soldiers, split into groups of four per session. Smith and her colleagues will soon examine preliminary data from eight volunteers to see if the sleep restriction is an adequate stressor to slow healing time. Once they are confident with the stressor, they will move on to test nutrition interventions to promote immune recovery.

“Blister wounds typically heal in five days for volunteers who receive adequate sleep,” Smith said. “We expect healing time to be delayed by one to two days in volunteers who are sleep restricted, and we expect that healing time will be back to five days in volunteers who consume a specially prepared nutrition beverage during sleep restriction and in the recovery period.”

Smith and her colleagues hope to provide warfighters with a food item or beverage that they can consume during and after periods of stress that will support their immune system and promote recovery.

Pvt. 2 Daniel Pardo dozes off after a period of sleep restriction in a study conducted by the U.S. Army Research Institute of Environmental Medicine to see how nutritional supplements might help wounds heal in warfighters under stress

# Physical Demands

Setting the standards for combat arms

By Lisa Pridemore, Army News Service / FORT STEWART, Ga. (March 12, 2014)

In full gear, Sgt. Shawanna Washington moved ammunition, loaded mortar rounds into a gun tube, moved agilely as if under enemy fire, and completed other physically demanding tasks of a Soldier on the battlefield.

Washington completed the tasks as part of the Army's Physical Demands Study, a three-month study of the physical demands of the 3rd Infantry Division who volunteer to take part in the study at Fort Stewart. Their job was to help the Army develop gender-neutral standards for infantry tasks.

Washington, who served a year-long and a 15-month-long deployment in Iraq, said the reason to be in the infantry, she signed up for the study, she said, to be a part of something bigger than herself and support the Army as it moves forward in opening combat jobs to women.

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manding tasks in these military occupational specialties.

Other tasks over the test week included a road march, dragging a 270-pound dummy for 15 meters moving a "casualty" out of a vehicle and loading a TOW-29 Anti-Missile into a ground-mounted weapon system.

The purpose of the study is to develop gender-neutral physical standards to put the best Soldier — male or female — in the right job, according to Maj. Gen. John M. Munter, commanding general of the 3rd Infantry Division.

"We're equally interested in what's right for that Soldier, to give Soldiers the ability to be anything they want to be in the Army," he said.

In addition, said Munter, the Army will have an opportunity to examine the physical conditioning of Soldiers, and how to avoid exercise injuries.

The study is being conducted in conjunction with U.S. Army Training and Doctrine Command, and the U.S. Army Research Institute for Environmental Medicine.

and Zamboski, division chief of U.S. Army Research Institute of Environmental

Medicine, leading the research team.

The goal of the study is to come up with predictive physical performance tests that assess different elements of strength, endurance and coordination, Zamboski said.

"The whole idea of the physical standards study is to develop some tests to essentially we put the person with the correct skills and attributes to those demands, so there is less chance of that Soldier being hurt," he said.

"If we can do that, we've achieved a major milestone for the Army," he said.

He said the Army began the testing last year and has three years to complete the study.

Although she does not plan on working a combat position, Army said she took part in the survey to support women who want to enter these jobs.

"Looking back with my kids and grandkids, I can say 'I did this.' If I can do it, anybody can," she captioned.

As part of the study, Soldiers donated oxygen tanks and put on heavy tan munitions before carrying ammunition boxes weighing 45

Sgt. Shawanna Washington (right) loads mortar rounds into a gun tube, during the Army Physical Demands Study at Fort Stewart, Ga., March 12, 2014.



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NSSC This Week

By Philip Fujawa, NSRDEC Strategic Communications / NATICK, Mass (April 11, 2014)

A little less than a year ago, Natick Soldier Systems Center Public Affairs partnered with Natick Soldier Research, Development and Engineering Center Strategic Communications to find a solution to increase both the readability and circulation of *NSSC This Week*. What you're seeing now is the result of constant refinement over that period. We initially focused on presenting the material in a more attractive manner and finding a way to distribute the stories in their entirety.

Our circulation has skyrocketed. In our effort to better serve the reader, we are

looking at ways to get our message across. When evaluating our readership, it becomes apparent that most of our readers view the document online, which presents us with a number of possibilities for expanding the usefulness of our publication.

As you look around the online version of *NSSC This Week*, you will see many of the features we are discussing. Navigation becomes much easier as individual page, cover and table of contents links allow the reader to navigate directly to whichever stories they want to read. The stories themselves

now contain links to related individuals, organizations, websites and other stories to give every subject expanded attention.

Most important, this document now makes interacting with the NSSC community easier than ever. With email, website, and social media links to the Public Affairs Office, Command Group and NSSC tenants, it's never been easier for you to communicate with us.

So take *NSSC This Week* for a spin. Try out the new features and let us know what you think.



### A. Book Style Navigation

Page arrows and table of contents links are featured in the control bar at the bottom of all pages. Flip through *NSSC This Week* in order or jump to specific stories.

### B. Table of Contents

All the stories featured in each issue of the newsletter have direct links from the table of contents page. The table of contents page also contains calendar events with links to POCs where appropriate.

### C. Interactive Masthead

Publisher and command information are available at a glance, and links to senior leaders, authors, editors and social media are now only a click away.

### D. Content-Related Links

Stories will contain links to relevant persons and organizations, with more information available by links to outside organizations, stories and subject matter experts.

### E. Info and Events

Information on special events at NSSC are featured with links to POCs where appropriate.

### F. Cover Page Title Links

When a story on the cover grabs your attention, the new direct links allow you to jump to what interests you.

In just her second full week as acting director of the Natick Soldier Research, Development and Engineering Center, Dr. Laurel Allender was already hopping a work-related flight.

Jokingly referring to it as “a TDY within a TDY,” Allender was off to Washington, D.C., having accepted an invitation to attend the “Third District Day 2014,” a legislative issues seminar hosted April 8 by U.S. Rep. Nikki Tsongas of Massachusetts.

“I’m really glad to hit the ground running ... to show the continuity of leadership,” Allender said. “Before I got here, I had a letter of welcome from Representative Tsongas. Clearly, [NSRDEC](#) and the [Soldier Systems Center](#) here (have) a very special relationship with the state and national representatives.”

Allender replaces Dr. John P. Obusek, who retired March 27 after serving as NSRDEC director since February 2011. She comes to Natick from the Human Research and Engineering Directorate (HRED), Army Research Laboratory, where she had served as director. In all, she has nearly 30 years in government service.

The new NSRDEC acting director holds a bachelor’s degree in psychology from the University of Northern Colorado, and a master’s degree and a doctorate in cognitive psychology from Rice University.

Allender has earned a number of honors, including the Superior Civilian Service Award in 2011.

“I’m pleased to be here,” Allender said. “I had known Dr. Obusek when he was commander at (U.S. Army Research Institute of Environmental Medicine) and worked very closely with some areas of NSRDEC already.”

Allender pointed out that with HRED, she gained great familiarity with NSRDEC’s modeling and simulation work. She added that she believes she can add further emphasis to the NSRDEC-led Soldier Systems Architecture.

“The Army is really attending to Soldier research, Soldier capability at that individual, small squad, small unit level,” Allender said. “And NSRDEC is so well poised to be leading that conversation.”

Allender admitted that the conversation takes place in an era of fiscal restraint.

“Budget’s a concern,” Allender said. “I know that as we look at what’s currently planned, there are some programs at NSRDEC that have maybe more concern today than others. So that clearly will be a priority for me to un-



## New NSRDEC acting director ‘hit the ground running’

By Bob Reinert, USAG-Natick Public Affairs / NATICK, Mass. (March 28, 2014)

derstand why there could be some shortfalls, how we can address those, and ensure that there isn’t a real impact.

“NSRDEC has some unique roles that are really not funded anywhere else – and that’s obviously the Combat Feeding program and the Airdrop program. So I intend to understand those programs a little more fully and see how we can better enable those conversations.”

Allender acknowledged that leadership changes can be difficult for organizations such as NSRDEC.

“I know people get nervous,” Allender said. “People like to prepare for the worst so when the worst doesn’t happen, they can feel better. I firmly believe that we don’t have to prepare for the worst, because it’s a vibrant organiza-

tion and it’s got a very important part to play as we go forward.”

NSRDEC’s people have been understanding, said Allender, as she tries to absorb a great deal of information in a short time.

“Everybody has also already been very kind in letting me go back to the table at the buffet two or three times – not insisting that it be one pass through and that I’ve got to have it all,” Allender said. “There’s also just been a lot of great support.”

Allender said that she hopes to “contribute directly” to the important work underway at NSRDEC. Toward that end, she will get out of her office, make the rounds and meet people.

“Look for me,” Allender said. “I’ll be coming around.”

# ‘NSSC This Week’ Wins Army Journalism Award

By Bob Reinert, USAG-Natick Public Affairs / NATICK, Mass. (April 11, 2014)

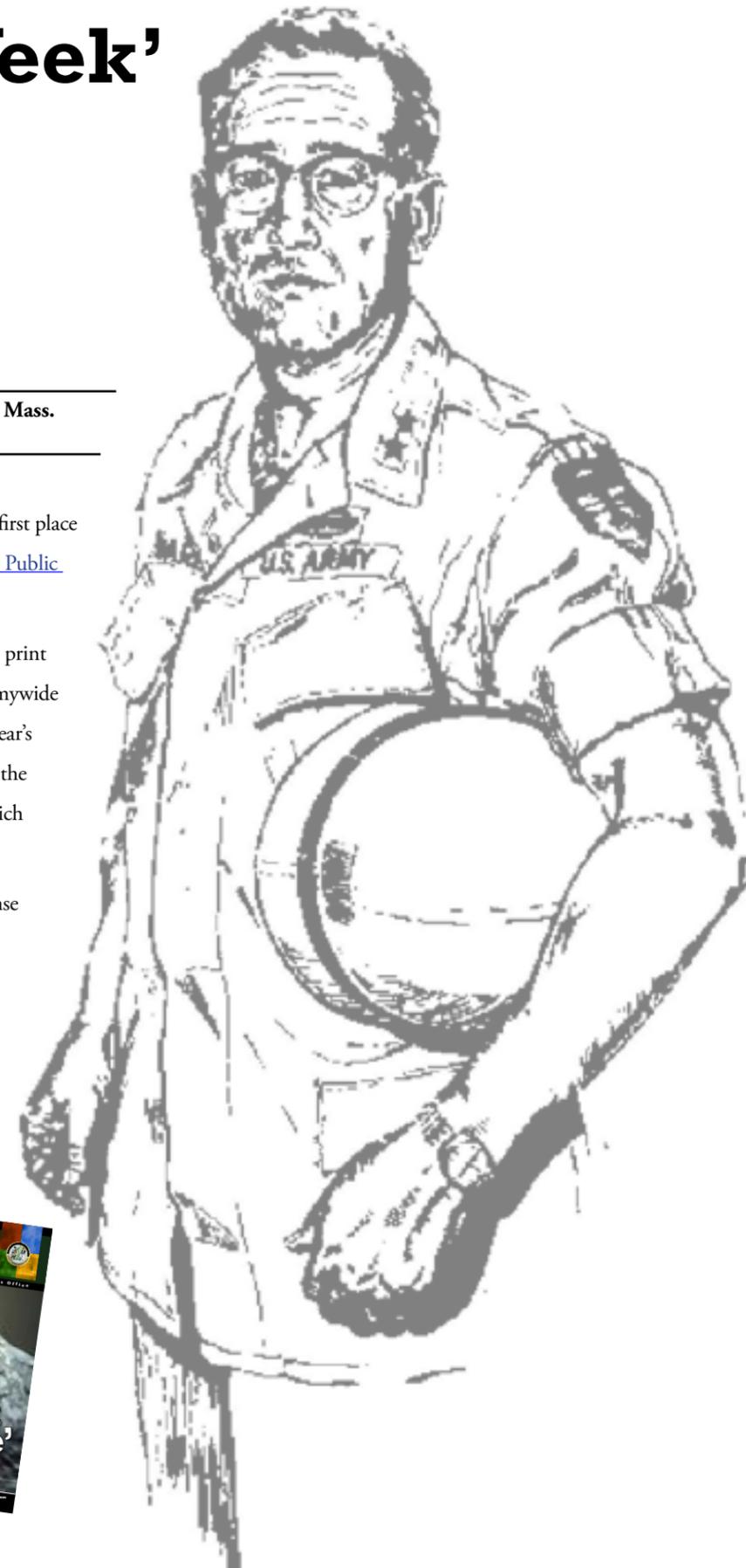
The U.S. Army Garrison Natick Public Affairs Office earned first place in digital publications in the [2013 Major Gen. Keith L. Ware Public Affairs Awards Competition](#).

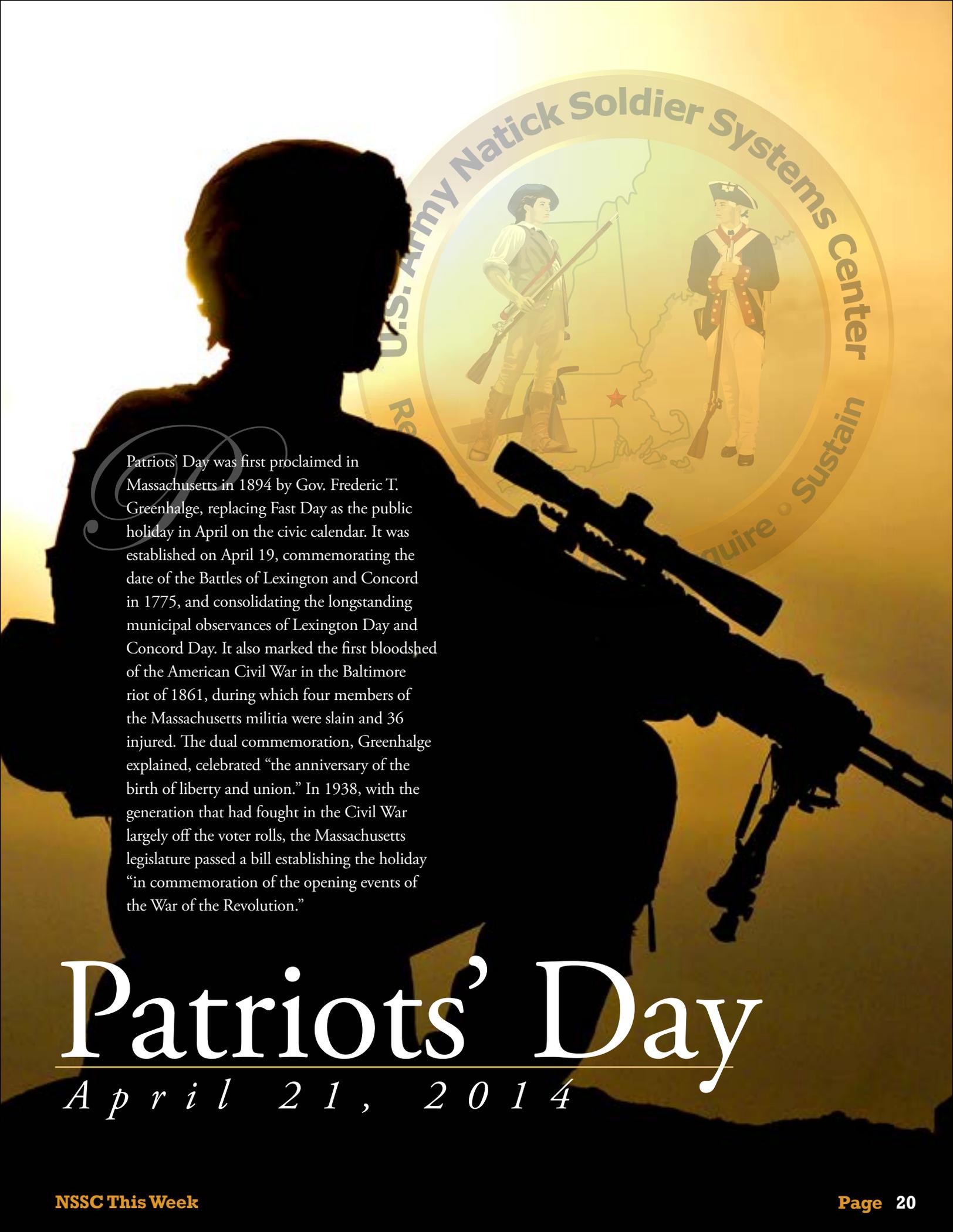
*NSSC This Week*, USAG-Natick’s biweekly newsletter, won in print Category C, which featured 14 finalists. This was the first Armywide win for the publication, which also earned first place in this year’s Installation Management Command competition. It marked the third IMCOM honor in as many years for the newsletter, which placed first in 2011 and third in 2012.

The Natick publication advances to the Department of Defense Thomas Jefferson Awards program, where it will be judged against winners from the other services April 8-9. Thomas Jefferson Awards should be announced April 21.

“The level of talent in our public affairs community is phenomenal, which clearly can be seen in the quality of the entries we saw in this year’s competition,” said Maj.

Gen. Gary J. Volesky, Army chief of Public Affairs, in announcing this year’s Keith L. Ware awards. “I look forward to our public affairs professionals excelling in this year’s Thomas Jefferson Competition.”





Patriots' Day was first proclaimed in Massachusetts in 1894 by Gov. Frederic T. Greenhalge, replacing Fast Day as the public holiday in April on the civic calendar. It was established on April 19, commemorating the date of the Battles of Lexington and Concord in 1775, and consolidating the longstanding municipal observances of Lexington Day and Concord Day. It also marked the first bloodshed of the American Civil War in the Baltimore riot of 1861, during which four members of the Massachusetts militia were slain and 36 injured. The dual commemoration, Greenhalge explained, celebrated "the anniversary of the birth of liberty and union." In 1938, with the generation that had fought in the Civil War largely off the voter rolls, the Massachusetts legislature passed a bill establishing the holiday "in commemoration of the opening events of the War of the Revolution."

# Patriots' Day

*April 21, 2014*