

# ARMY MUSEUM MEMO

U.S. Army  
Center of Military History

Issue 74

Fall 2014



## MAINTAINING MACRO ARTIFACTS: The Adopt-a-Vehicle Program at Fort Hood

By Steven Draper, Director

The U.S. Army's largest post also has one of the largest historical vehicle collections. Between the 1st Cavalry Division and the 3d Cavalry Museums, post units, and headquarters displays, we have about 200 historical vehicles at Fort Hood. Over the years, it has become increasingly difficult to keep up the appearance of these vehicles. Multiple unit rotations overseas have reduced support in maintaining the vehicles. In the past, we have relied on contract support to paint our vehicles. However, the funding for this work has been slim to none and the quality of the contracted work has been subpar. We asked commanders to consider reducing the number of vehicles on display to make it a more manageable collection and we were met with a universal "no."

We recognized that this problem would worsen with inaction so the 1st Cavalry Division Museum developed a two-part plan to get historical vehicles on post painted and maintained. Part one of the Adopt-a-Vehicle program provides for the distribution of all historical vehicles among the Division's four brigades, the 3d Cavalry Regiment, and the other tenant units on post. Working with the Division G3, we developed an Operation Order for the program detailing unit responsibilities to maintain their assigned vehicles.

To help the units, we created data sheets which provided paint colors, markings, and historical background for each assigned vehicle. To further define the work, we also prioritized the condition of all the vehicles and determined which vehicles needed special attention.

### In This Issue

Maintaining Macro Artifacts..... 1

#### STAFFING

Dalessandro's Farewell ..... 2  
New Leadership at CMH ..... 3  
Hails and Farewells ..... 4  
Staff Profile:  
    Quartermaster Museum ..... 4  
    Advanced Museum Training Course... 5  
    Training Schedule ..... 6

#### EXHIBITS

New Long-term Exhibits..... 7

#### COLLECTIONS

Comments on Conservation ..... 8  
Artifact Spotlight ..... 11

#### FIELD MUSEUMS

War Fighter Museums ..... 16  
IMCOM Museums ..... 20  
TRADOC Museums..... 23  
National Guard Museums..... 25



---

The second part of the plan was creation of a “flying paint detail”, which is a consolidated detail formed from multiple units that works directly for the Museum. These crews work separately from unit Adopt-a-Vehicle participants and work on the neediest vehicles under supervision of museum staff.

To make this program work, we needed full commitments from the Division, Brigade and smaller units. Necessary funding for paint, equipment and supplies was requested and received from the Center of Military History and the 1st Cavalry Division. Finally, dedicated NCOs and enlisted crews had to be willing to take on the project and make it their own. This program has worked for us but may not work at other installations. You need the support of your units, resources, and manpower. It’s been a lot of work, but we are beginning to see some great results.



*Soldiers of our “flying paint detail” stencil markings on our M47 and M48 Patton Tanks.*

---

## FAREWELL TO CMH

*By Robert J. Dalessandro*



By now, many of you have heard of my departure from the Center of Military History (CMH) to join the American Battle Monuments Commission (ABMC) as its executive director. I reached this decision after much reflection and many mixed feelings.

As most of you know, I have been serving as the chairman of the congressionally constituted U.S. World War One Centennial Commission, charged with leading efforts across the United States to commemorate this watershed event.

My duties at the commission fostered an understanding of the important connection between our efforts at the centennial commission and the work going on at the ABMC. Ultimately, I realized there was no better way to honor our soldiers than to focus on the education of the millions of visitors that come to our most sacred cemeteries and battlefields. At staff rides over the years, I learned that battlefields present the perfect venue to teach Army history, and I realized at Arlington National Cemetery that nothing is more powerful than telling the stories of our hero soldiers at graveside.

My five years at CMH have passed swiftly; I was honored to serve as your chief for three and half of those five years. It was a tumultuous period dominated by resource reductions, the threat of eliminations, and realignments. Here at CMH, we attempted to guide our actions

through an innovative strategic plan that produced some great successes along with some setbacks, but overall, I believe I leave the history program better positioned to serve the needs of our Army.

These five years have seen some remarkably important actions foremost is our initiative focused on the collection, indexing, and testing of a comprehensive records group for Army operations in Operations ENDURING FREEDOM (OEF), IRAQI FREEDOM, and NEW DAWN. This collection will support the ongoing Chief of Staff-directed OEF project aimed at a first turn on the history of this conflict, along with future histories, and veterans’ claims.

This foray into the digital world will facilitate a future, fully cloud-based collection that will unify historical sources across the Army, allowing historical professionals access to our Army historical program’s rich holdings.

Our continued status as the Army’s most visited Web site confirms the desire both inside and outside the department for access to our research collections, and our digital initiatives will pave the way to satisfying this need.

CMH designed and implemented a career program that would manage the development of our historians, archivists, and museum professionals. To date, we have held three courses with over seventy participants. This program will recast the

*continued from p. 2.*

way we train, assign, and develop our future professionals.

We succeeded in reestablishing the Department of the Army Historical Advisory Committee, now under the auspices of the Army Education Committee, to provide advice, oversight, and assistance to our historical work—this was a hard-fought battle and a significant win for our program.

Our museum division occupied the newly constructed museum support center at Fort Belvoir, Virginia, and turned the facility, and the associated collections, into the gold standard for museum storage, all while redeveloping the curatorial storage at

Anniston Army Depot. When coupled with our collections streamlining and macro consolidation, our initiatives advanced collections management beyond expectation.

We have made great strides in our initiatives across each of our historical domains. I thank each and every one of you for your support, suggestions, and counsel. I foresee a bright future for our program and am confident that you will continue to better your individual areas.

So, it is with a truly heavy heart that I bid you farewell, I thank you for all you do, and I know that your love of Army History will “go rolling along”!

Keep Army History Alive!

## NEW LEADERSHIP AT CMH

*By Dr. Richard W. Stewart  
Chief of Military History*



We are not exactly strangers, having been with the Center since 1998, but I wanted to send out a quick message to all of you to announce that I am now serving as the Acting Director of the Center and Acting Chief of Military History while continuing to perform my duties as Chief Historian.

I don't have to say much more than to let you know that I am as committed to the important mission of the Center as are all of you. And having known many of you for all these years, I think you know the worth of that statement. Your unselfish dedication to advancing the cause of Army history I have noted over the past 16 years is exemplary and fills me with confidence that, working together, we can achieve great things.

I ask only that you recommit yourself to performing our important mission of providing the Army with its usable past (history, museums, and archives) and I will do the same. Whether I am the Acting Director for two months or six or more, I want to let each of you know how proud I am to assume these duties and how much I am determined to protect and advance the Center's interests as a critical part of the U.S. Army. I look forward to working with you.

## NEW LEADERSHIP FOR FIELD MUSEUMS

*By Dr. Charles H. Cureton,  
Chief, Museum Division*



As many of you witnessed at the Advanced Curatorial Course, Museum Division is undergoing a great deal of change in an effort to position itself for optimal support to the Army Museum System and specifically to the Warfighter Museums.

In light of this, Mike Knapp is shifting to full support of commemorative activities as a subject matter expert to OSD and other governmental agencies who lean on CMH for this expertise.

Ginger Shaw will fill his vacated spot in charge of Field Museum Branch. Ginger will continue to manage the budget until such time as we fill her vacated operations slot.

Additionally, Ephriam Dickson joined this branch as the liaison to the National Guard and IMCOM museums and serves as the dedicated POC for Warfighter Museums to the Collections Committee.

Thank you for all that you do in preserving the Army's heritage and in communicating the Army's story to Soldiers and Civilians.

**Paul Miller** joined the staff of the Museum Support Center –Fort Belvoir as a curator in July, having served previous as a museum technician at the U.S. Army Heritage and Education Center (AHEC) since 2010. Paul has also worked for the Maryland Department of Natural Resources–Maryland Park Service and the National Park Service. He holds a B.A. in History, an M.A. in American Studies, and is currently working on his Ph.D. in U.S. History at George Mason University.

**Adam K. Elia** is the new curator at the U. S. Army Museum of Hawaii. Starting here as a volunteer in 1998, he later worked at the Tropic Lightning Museum and then as Command Historian of the 25th Infantry Division, with whom he deployed three times to Iraq. Adam has now come full circle, returning to the museum where he first volunteered.

**Melissa Cooper**, director/curator of the NCO Museum at Fort Bliss, Texas, retired on 1 August 2014.

**Kevin Sullivan** has joined the staff at Museum Support Center – Anniston, Alabama.

**Alice M. Hart** has been named as the new director at George Patton Museum of Leadership at Fort Knox, Kentucky.

**Edward E. Turner** has retired as museum specialist at the 10th Mountain Division and Fort Drum Museum.

**Stanley Byers**, collections manager at the U.S. Army Field Artillery Museum at Fort Sill, OK, has also retired.

---

## STAFF PROFILE

---

### QUARTERMASTER MUSEUM

Fort Lee, Virginia

**Paul Morando** became the Director of the U.S Army Quartermaster Museum in October 2011. Prior to coming on board, he worked as the Director of the Casemate Museum at Fort Monroe, Virginia, and at the Harbor Defense Museum at Fort Hamilton, New York. He graduated from the City University of New York with a Master's degree in history and completed courses in museums studies at Seton Hall University. Paul and his wife Holly have three daughters, Violet, Sofia, and Norah. He enjoys biking, reading, photography, and taking it easy by his outdoor fire pit.

**Luther Hanson** began working at the Quartermaster Museum in 1984. He has degrees in anthropology and archaeology from the University of Pennsylvania and London University. He really enjoys working with one of the most diverse material culture collections in the U.S. Army and supporting Soldiers and veterans by telling the story of the Quartermaster Corps. He has contributed information to more than 50 books related to Quartermaster history and Army topics as well as worked on several movies including *Lincoln* and *The Monuments Men*. Outside the museum he enjoys traveling with his wife Carol.

**Patrick Fisher** joined the Quartermaster Museum staff in 1986 as the Exhibit Specialist after spending seven years in the Ordnance Corps and two previous years as the Museum's NCOIC. Pat and his wife Becky have three children and one grandchild and spend their time traveling, going on disaster relief and mission trips, volunteering with their local rails-to-trails organization, but most of all doting on their granddaughter at every opportunity.



**Laura Baghetti** joined the U.S. Army Quartermaster Museum as the curator of education (contractor) in August 2009. Before the Quartermaster Museum, she worked at Petersburg National Battlefield as a seasonal education park ranger and in Chesterfield County Schools as a para-professional. She graduated from East Tennessee State University with a bachelor's degree in sport and leisure management and a master's degree in teaching. Laura enjoys spending time with her husband, Adam, and their three year old daughter, Zahava. She also likes going to see live music whenever she gets the chance.

**Phil Shindler** joined the staff of the U.S. Army Quartermaster Museum as a contractor in December of 2010, working primarily with collections, as well as providing research assistance and Soldier tours. His education includes a B.A. in history as well as an Master's in Public Policy from the College of William and Mary. Previous to entering the museum field, he worked with high school exceptional education students and in the wholesale mortgage loan business. Outside the museum, he enjoys spending time with his wife, daughter, and friends in the City of Richmond, playing various musical instruments, and operating his backyard smoker.



## ADVANCED MUSEUM TRAINING COURSE CONDUCTED

*By Dr. James C. Kelly  
Chief, Museum Programs Branch*

The CMH Advanced Museum Training Course was held at the Museum Support Center—Fort Belvoir, Virginia, 21–25 July. The thirty-one museum professionals in attendance represented 28 Army museums and the National Guard Bureau. I served as course director.

Some sessions were delivered by CMH staff and others were panels composed of field museum directors. Some were chaired by CMH staff and others by field museum directors. Class participants were especially interested in hearing from their peers, but care was taken to emphasize lessons learned.

The Day One topics were: an *Overview of the Army Museum System*, *Collecting Theory*, *Preparing Mission and Scope of Collections Statements*, and *Collections Management*. Day One concluded with a tour of the Museum Support Center facility.

Day Two covered: *Management of Macro Artifacts*, *Management of Micro Artifacts*, *the Storyline Approval Process*, *New and Renovated Exhibits*, a tour of the Teaching Gallery titled “Making Army Exhibits Better,” and *Preparing for Inspection*.

Day Three began offsite with a visit to the National Museum of the Marine Corps. Course attendees were sent out in pairs to critique the exhibit followed by reassembly of the group and reports from the pairs. After lunch at the museum’s Devil Dog Diner, we returned to Fort Belvoir. The afternoon was comprised of sessions on *Soldier Education*, *Museum Archives Management*, and Dr. Cureton’s analysis of the current implications of the 1997 and subsequent audits of the

Army Museum System. After a group photo unnecessary but to accompany this article, we adjourned quite late after passionate discussion of the last topic.

On Day Four, the group divided into two groups. Ten, who serve as evaluators in the Certification Program, went off for team training, while the balance of the class heard about *Disaster Planning*. *Legal and Ethical Issues*, followed by the closely related topic of *Working with Support Groups*, which might have gone on much longer and, in the future, probably will. The day’s last session, *Budgeting and POM Planning*, likewise will be lengthened the next time the course is given. We could not continue indefinitely because we had a group reservation at 1800 at the nearby Mount Vernon Inn, where we indulged according to taste in either petite salmon filet with Hollandaise sauce, turkey and cornbread dressing, or vegetarian lasagna. Frequent trips were made to the adjacent (cash) bar.

Day 5 began with a session on *Facility Management* followed by *Career Program 61* for Historians, Museum Professionals, and Archivists—a program that not only funded this course but may be supportive of some of our staff members getting tuition assistance. An hour was given over to evaluating the course itself, supplemented by an online Survey Monkey document completed by most class members after they had returned home. The presentation of certificates was followed by almost immediate departure to Reagan National Airport for those catching Friday afternoon flights. Some, fortunately, were able to stay over and so some sightseeing, which our intensive schedule precluded.

---

## TRAINING SCHEDULE

<u>Dates</u>	<u>Course</u>	<u>Attendance</u>
9-13 Feb 2015	New Historians, Archivists, Museum Orientation Course	15
13-17 Apr 2015	Basic Museum Training Course	20
15-19 June 2015	Advanced Museum Training Course (changed from 22-26)	30
27-30 July 2015	Army Historians Training Symposium	50
9-13 Nov. 2015	Intermediate Museum Training Course	20
Feb. 2016	New Historians, Archivists, Museum Orientation	15
Apr. 2016	Basic Museum Training Course	20
June 2016	Advanced Museum Training Course	30

---

### **CP-61 Competitive Professional Development (CPD)**

#### **Announcement for the**

#### **Army Basic Museum Training Course**

Museum Support Center, Fort Belvoir, VA.

**13–17 April 2015**

(Application Deadline is 30 January 2015)

The Basic Museum Training Course draws from the latest research on museum and leadership development, which shows core competencies are best enhanced through an ongoing cycle of assessment, challenging work, learning opportunities, and support from mentors and coaches. The classroom component consists of five in-residence day sessions, Monday morning through midday Friday. The curriculum includes lectures, hands-on experiences, and visits.

The Course introduces museum professionals to the provisions of AR 870-20 (Army Museums, Historical Artifacts, and Art) and covers the different responsibilities, duties, procedures, and competencies of entry-level museum professionals and their role within an Army Museum. It introduces the technical competencies needed by GS-1010 (Exhibits Specialists), GS-1016 (Museum Specialists), and GS-1016 (Museum Curators). Instruction will be provided in:

- a. Career Program 61
- b. Museum Division Overview
- c. Certification Overview
- d. Artifact Accountability Overview
- e. Collections Branch Overview
- f. Basic Army Material Culture
- g. Life Cycle of Artifact Transaction Requests
- h. Collections Accountability
- i. Handling and Preserving Historic Artifacts
- j. Storing and Shipping Art
- k. Storing and Shipping Arms and Ordnance
- l. Storage Practicum
- m. Legal and Ethical Issues
- n. Educational Programs
- o. Exhibit Interpretation
- p. Exhibit Design

#### **COST:**

Tuition, transportation, lodging, and meals will be funded for those with at least three years' federal civilian experience in these categories: 0170 Historians, 1420 and 1421 Archivists, and 1010, 1015 and 1016 Museum Professionals. Staff of National Guard Museums and other entities interested in participating, but not in the CP-61 program, may apply to attend but must use their own organization funds.

Important note: CP 61 does NOT fund rental cars. Anyone wishing to have a rental car must arrange for it separately and use their command's funds. If driving one's private vehicle, daily mileage to and from Ft. Belvoir daily is not reimbursed. We recommend the IMG Hotel on post, from which shuttle transport to the MSC is provided

#### **WHO MAY APPLY:**

We are seeking an exemption, but currently CP-61 only funds those with at least three years of federal civilian experience. Those with less than three years may apply and, if accepted, attend, but their organization must pay TDY. *Applicants must have taken the Army Civilian Education System (CES) Foundation Course.* National Guard Museum staff and museum staff of other agencies are eligible, but must rely on their own organizational funds.

The Basic Course is mainly for those rated GS-07 or GS-09 or GS-11 who have not had previous training. Those who attended either the Basic or Advanced Course in 2014 are ineligible.

#### **SELECTION PROCEDURE:**

Please send the following to be considered for this course to [james.c.kelly84.civ@mail.mil](mailto:james.c.kelly84.civ@mail.mil) **no later than 30 January 2014.**

*continued on next page.*

---

## Army Basic Museum Training Course

*continued from previous page*

1. Supervisor endorsement letter to the CP61 Functional Chief, which includes:

- Name of recommended employee,
- Title/Series/ Grade of recommended employee (Exhibit Specialists are 1010, Curators are 1015, Museum Specialists are 1016),
- Length of service of recommended employee in current position,
- Length of service of recommended employee (all positions) in your museum,
- Length of recommended employee's museum career (any museum).

2. Statement that you and the employee have taken the Competency Management Survey.

3. Personal Letter of Interest from the applicant (not to exceed one page) with these enclosures:

- Civilian Record Brief

<http://www.youtube.com/watch?v=wI6l6Emo8DE>

- Individual Development Plan
- Resumé
- Position Description

This is a competitive training announcement and not all applicants may be selected. All eligible

applicants will be reviewed by a three-person competitive selection panel, which will review application packets and rate the applicants based on selected criteria. There will be *no more than twenty slots available*. This class may fill up quickly, so talk to your supervisor and get the application in without delay.

Once candidates have been selected for the course, instructions will follow on how to establish an account in ACTNOW, in GoArmyEd, and preparing a draft travel authorization in DTS, and other important details of course management.

### **EQUAL EMPLOYMENT OPPORTUNITY:**

All eligible candidates will receive consideration without regard to race, religion, color, national origin, age, sex, disability, political affiliation or any other non-merit factor.

### **POINT OF CONTACT:**

For further information contact, James C. Kelly, Ph.D., Chief, Museum Programs Branch/Museum Basic, Intermediate, and Advance Courses Director, CMH at 202.685.2472/DSN 325.2472 or via email at [james.c.kelly84.civ@mail.mil](mailto:james.c.kelly84.civ@mail.mil).

---

## Exhibits

### New Core Exhibits at War Fighter Museums

CMH's Museum Division received funding to contract with commercial design firms to replace the long-term exhibits at the following Warfighter Museums administered by CMH:

- 1st Infantry Division Museum, Fort Riley, Kansas (4,139 square feet)
- U.S. Cavalry Museum, Fort Riley, Kansas (16,000 square feet)
- 82d Airborne Division Museum, Fort Bragg, North Carolina (5,673 square feet)
- Don F. Pratt Museum (101st Airborne Division), Fort Campbell, Kentucky (9,000 square feet)
- 4th Infantry Division and Fort Carson Museum, Colorado (2,600 square feet)
- Fort Lewis Museum, Joint Base Lewis-McChord, Washington State (11,000 square feet)

Museum Division also received funding to contract fabrication of these exhibits designed by

CMH staff during the past year:

- 10th Mountain Division and Fort Drum Museum, New York (3,200 square feet)
- 3d Infantry Division and Fort Stewart Museum, Georgia (Gallery A)
- 3d U.S. Infantry Regiment (The Old Guard), Conmy Hall Lobby, Fort Myer, Virginia
- Soldier-Signers of the Constitution, Pentagon, Arlington, Virginia (Corridor 4, Floor 2)

The design contracts begin 1 October 2014 and work will be complete by 30 June 2015. The fabrication contracts end either in January or March 2015.

**NOMINATIONS FOR THE  
JOHN WESLEY POWELL PRIZE  
For Exhibits in Federal Agencies  
opened in 2013 or 2014**

*Due by November 30, 2014.*

For details, go to:

<http://shfg.org/shfg/awards/awards-requirements/>

## STYROFOAM

*By Jane Smith-Stewart  
Chief Conservator, Museum Support Center*

Recently, I received an inquiry from Russell Ronspies at the Frontier Army Museum about the use of Styrofoam in collections storage. “We are currently using Styrofoam heads covered with cotton stockinette as storage mounts for our headwear,” he explained. “My question is: Does Styrofoam off-gas to the extent that we should consider using ethafoam instead to construct our storage mounts?”

This is a common question, the answer for which curators and conservators may not always agree. Yes, Styrofoam (polystyrene) does indeed off-gas as it breaks down. The stockingette is porous and offers no protection to the artifact from the off-gassing of the

polystyrene. The reason for disagreement about its use in museum storage is because it does take a long time to breakdown. The rate of its deterioration is dependent on a host of variables associated with your storage environment.

I do not recommend the use of Styrofoam for long-term storage because of the off-gassing (regardless of when it happens) and the fact that it is also extremely flammable. Of course paper (used for our boxes, etc) in storage will catch on fire as well, but polystyrene will react quicker and cause much damage.

If you have any other conservation questions, please do not hesitate to contact me.

## MALIGNANT PLASTICS: A Case Study

*By Cynthia L. Riley  
Curator of Collections  
U.S. Army Chemical Corps Museum*

Plastics have been with us for a very long time. Meso-Americans constructed “plastic” figurines and balls from natural rubber long before Europeans arrived in the Americas. Many modern plastics were synthetic or semi-synthetic compounds manipulated to form films, fibers, foams or three-dimensional objects. Early plastic objects common to military museum collections are late nineteenth century handles, hilts, or grips on edged weapons or small arms often made from gutta-percha, an early semi-synthetic plastic (vulcanized rubber). Perhaps more common are the many buttons which adorned shirts, jackets and other garments, frequently made from casein (a very simple milk-protein-based plastic).



By 1918, when the Chemical Warfare Service was formed, plastics were already commonplace. From the celluloid-acetate lenses of World War I gas masks to “Bakelite” personal hygiene items and equipment, soldiers made daily use of plastics. The number of uses and types of plastics multiplied dramatically through the twentieth century and have become omnipresent today.



*Example of a Bakelite galvanometer.*

A large percentage of the objects in the Chemical Corps Museum’s collection consists of one or more types of plastic. As with most individual items of military purpose, these plastics were intended for single, or limited-time use and immediate replacement; in the museum setting this is not the case. Storing plastic items is not the same as storing textiles or mortar tubes. The aging processes of plastics are just now being determined, and some results are surprising.

Chemically, modern plastics are a combination of polymers (the base materials) and plasticizers (the additives) that help the polymers remain either strong or pliable, or both. While one may be chemically stable, the other likely is not. In some cases, neither is stable. The result of this instability is, initially, an off-gassing and migration of chemical components to the surface of an object (for instance, Hydrogen Chloride [HCl]).

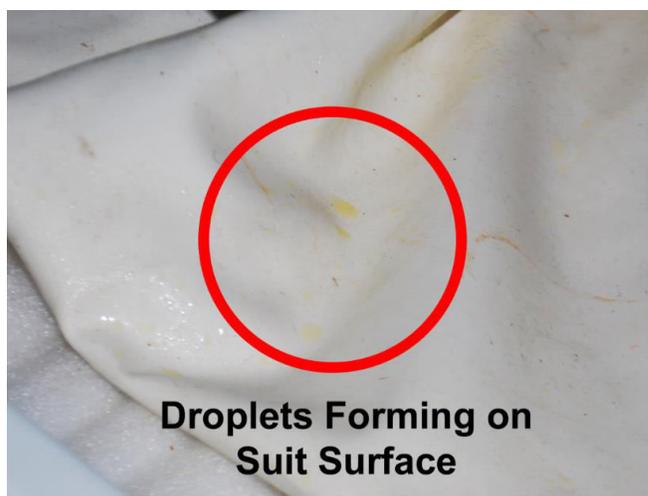
The migrating chemicals can collect on the surface and through interaction with the air, form secondary and tertiary compounds, based on the original plastic formulation. Some of the most common compounds are acids: acetic, nitric, hydrochloric, and sulfuric. These acids then begin to consume the base plastic, steadily increasing the pace at which the object breaks down. Some “plastic” objects will show surprisingly rapid deterioration due to acidification. This process will be hastened by exposure to light, high temperatures and high relative humidity. The presence of acid in a drawer or cabinet also acts to accelerate the breakdown of other objects stored nearby, hence “Malignant Plastics.”

Using human senses, it is often a simple matter to determine if acidification is taking place, because the acid will give the object specific characteristics discernible through smell, sight and/or touch. Some of these acids (even in small quantities) give off an easily recognizable odor; often the odor is one of vinegar, or of chlorine, or “rotten egg.” Vinegar is itself simply weak acetic acid. Opening the doors to a storage cabinet can result in a concentrated “whiff” of the acidic scent. It may also be the case that there is no noticeable scent. An individual object may appear damp, or even wet when it had previously had a matte finish, while others that may have had a slick, shiny surface now appear dull and may develop a tacky/sticky surface. Because off-gassing can occur without human detection, it is a good idea to test plastics for possible acidification using acid detection (A-D) strips or other means. If acidification is detected in a cabinet with many drawers, or many artifacts, placement of an A-D strip in each drawer of a closed cabinet, and then limiting access to that cabinet, over a period of weeks, can help in the detection of the offending drawer. Then, individual objects within drawer can be surface-tested for acidic pH. Once the culprit has been identified, the object must be treated to mitigate the break-down and save other artifacts.

A dramatic lesson can be learned from an item in the Chemical Corps’ collection. For a number of years, approximately 8,000 items were stored in shipping crates on Aberdeen Proving Ground, Maryland, and then at Fort McClellan, Alabama. These objects were not protected from temperature or humidity fluctuations. The exact conditions of storage cannot be determined as there were no environmental controls. It

these objects were exposed to dramatic fluctuations in both temperature and humidity, which can be as devastating to synthetic plastics as to natural materials.

Object CHEM 3815 was a Demilitarization Protective Ensemble (DPE), or fully-encapsulating chemical protective suit manufactured for use at chemical weapons’ demilitarization facilities. During a cyclic inventory in December 2011, this object was found to be extruding a “residue” which appeared “as an oily, semi-solid/viscous liquid.” The object was wiped clean, placed on an inert, “etha-foam” mat, and interleaved with unbuffered, inert tissue paper. In March 2013, just over a year later, the object was again observed to be extruding an oily residue, with no apparent odor, but in such quantities that the residue was “pooling” and forming droplets.



The object was removed from the collection cabinet, and a sample of the residue was wiped onto a pH neutral artifact tag, which was then tested with a pH testing pen. The test showed a positive reaction for acidity. Later testing confirmed the acidity of the residue, and upon very close inspection, there was a faint odor of chlorine. The manufacturer of the suit, ILC Dover, confirmed that the suit is made from Chlorinated Polyethylene (CPE). A quick internet search produced a Material Safety Data Sheet (MSDS) for CPE, revealing that routine decomposition hazards include: “Hazardous gases or vapors can be released, including carbon monoxide, hydrogen chloride (HCl), hydrocarbon oxidation products including organic acids, aldehydes and alcohols.”

The size of the object (approximately 26” x 84” x 3”), along with its advanced deterioration, precluded either freezing, or vacuum sealing in its intended configuration (it could, however, be folded or rolled but would likely result in hastening damage). The object in this condition was in fact a hazard to other artifacts in the vicinity and possibly to museum staff handling it. The decision was made to request

disposition, and until such time that permission for destruction was granted by CMH, the suit was double-bagged in transparent garbage bags and frozen.

Interestingly enough, another version of the DPE is also in the collection. The second object, though fabricated by another manufacturer, was fabricated within a few years of the first and meets the same manufacturing specifications, meaning that it is of the same design and materials. The second was never exposed to the extremes of temperature and humidity as was the offending DPE. The second object is pliable and smooth, showing none of the excretions characteristic of the first. This second object will be carefully monitored in the future (as will all items made of CPE) in an effort to prevent the level of degradation experienced by the damaged DPE.

The obvious question at this point is, “How can I keep my collection from experiencing similar problems?” Not surprisingly, the same practices which preserve other artifacts can help to preserve plastics.

- Maintain environmental (light, temperature, humidity) conditions within accepted standards. If possible, plastics should have sufficient air circulation to carry away off-gassed compounds (open shelving), but should be kept away from light.
- Store like objects together.
- Do not allow artifacts to come into contact with one another.
- Activated charcoal may help to collect off-gassed compounds.

There are additional actions you should take if you detect acidification.

- Confirm cabinets with areas of acidic vapor using A-D Strips (or other methods).
- Narrow your search to individual objects experiencing acidification.
- Remove acid-emitting objects from the remainder of collection; take care NOT to come into direct contact (do NOT wear cotton gloves or use tissue paper, both will leave lint and adhere to sticky/damp plastics, while acid will pass through cotton gloves onto skin).
- Determine if deterioration of offending objects is beyond mitigation. Take action to mitigate acidification. Determine type of acid(s) extruded (if possible). Freeze objects temporarily if mitigation cannot be accomplished immediately. Clean and air objects OR Clean and vacuum seal objects. Closely monitor the deterioration of offending objects. Deaccession objects which are beyond conservation.

Cleaning should be accomplished with baking soda, or other (weak) mildly basic solution, making certain to remove all residue and moisture before returning the object to storage. You can vacuum-seal a cleaned artifact with an oxygen absorber, desiccant packet, and A-D strip inside a polyester bag. Aluminum-polyester bags are an alternative that will help to keep out light, but will make it impossible to check for color changes in the A-D strip.

It was counterintuitive to the museum staff that a plastic protective suit, designed to keep people safe in a chemically-contaminated environment would be hazardous. The problem was discovered only because of the gross level of disintegration of the materials. Since the discovery of the malignant DPE suit, we have become better at detecting problems in the collection and are researching further steps to halt the deterioration of our plastics.

As with other conservation challenges, the earlier the problem is detected, the more likely it is that the artifact can be saved and damage to other objects avoided. Curators are the subject-matter experts in their respective collections and must balance familiarity with the collection and maintenance of a consistent micro-environment. We must use inventory opportunities to carefully survey the condition of artifacts; thorough inspections can absolutely make the difference between preservation of an artifact or its loss.

### **Additional resources/reading:**

- National Parks Service. “Care and Identification of Objects Made from Plastic.” *Conserve O Gram* 8, no. 4 (2010).
- Plastics Historial Society. Caring for Plastics. <http://www.plastiquarian.com> (accessed July 25, 2014).
- Shashoua, Yvonne. *Conservation of Plastics: Materials Science, Degradation and Preservation*. Burlington, MA: Elsevier Ltd., 2008.
- Tsang, Jai-Sun. “Safe Handling of Plastics in a Museum Environment.” *Western Association for Art Conservation (WAAC) Newsletter* 32, no. 2 (May 2010): 16-22.

### **Looking for online resources regarding conservation?**

The American Institute for Conservation of Historic and Artistic Works has a very informative website on many issues and processes at:

<http://www.conservation-us.org/education/conservation-science-tutorials>



*Wooden double bunks were used in enlisted barracks through the 1860s, as reconstructed at Fort Larned National Historic Site in Kansas. Photo by E. Dickson.*

## **FROM BUNK TO BEDSTEAD: The Army's Search for a New Barrack Bed**

*By Ephriam D. Dickson III*

For the U.S. Army, the interwar years were often periods of important innovation. Between the Mexican War and the Civil War, for example, the Ordnance Department perfected the percussion ignition system, Minié ball, and rifled barrels for its muskets. Meanwhile the Quartermaster Department redesigned the Army's uniforms and experimented with new materials such as vulcanized rubber and gutta-percha. Among the less well known innovations during the 1850s was the introduction of the Army's first iron bedsteads for use in enlisted barracks.

When Pvt. George Balletine enlisted in the Army in 1845, he was surprised to find wooden double bunks still in use in the barracks. A veteran of the British Army, Balletine complained of "the exceedingly disagreeable custom, still universal in the United States service, of sleeping two men in a bed – a custom which has been abolished in every barracks in Great Britain, and the Colonies, to the infinite comfort of the soldier, for the last twenty years."

For the U. S. Army, modernizing the sleeping accommodations for enlisted Soldiers took several decades as the Quartermaster Department sought an approved design and struggled to secure the necessary funding. Even after introducing its first pattern iron bedstead in 1855 and another in 1858, this process

took until the late-1870s to rid all barracks of these last "vile wooden things", as one officer called them. The slow evolution of barracks furnishings from wooden double bunks to single iron bedsteads illustrates the Army's on-going effort to improve the enlisted experience.

SINCE THE ESTABLISHMENT of the U.S. Army in 1776, enlisted Soldiers have been provided with their bed and bedding. Initially, the men received wool blankets and an allowance of straw upon which to sleep. By 1817, they were also issued a simple cloth bedsack that could be stuffed with straw and by 1821 Soldiers were provided with wood and other materials to construct their bunks.

Despite calls by the Inspector General for enlisted bunks to be built on a standardized plan, the actual design of these beds varied considerably, depending upon the materials available locally and the skills of the enlisted men who constructed them. Two rare examples of the Army's original double bunks are preserved at CMH's Museum Support Center at Fort Belvoir, Virginia. Discovered in a cache of bunks at Fort Mifflin, Pennsylvania, these beds are probably typical of what was generally used in most barracks during the early nineteenth century.

One example, probably dating from the 1840s, is composed of corner posts of turned walnut and four side rails that fit together by mortise and tenon joints. The second example, presumably made during the Civil War when Confederate prisoners were housed at Fort Mifflin, is similar in structure and size, though built with simple four-inch square corner posts that still show evidence of being whitewashed. Both of these double bunks could be easily disassembled for cleaning, part of the weekly routine in barracks of the period.

These wooden double bunks drew considerable criticism. "In all climates they are objectionable on the score of health, comfort and cleanliness," complained one officer. Others noted that the wood harbored bedbugs while still others protested the custom of sleeping two soldiers together in the same bed.

Efforts at reform began as early as 1837 when the Army's Surgeon General urged the adoption of iron bedsteads for all Army hospitals. Secretary of War Joel R. Poinsett was so impressed with the example bunk that he proposed expanding their use to include all enlisted barracks as well. Congress, however, provided only sufficient funding for 300 hospital bedsteads. Three years later, a board of Ordnance officers toured various arsenals in Europe and were particularly impressed by the modern barracks they observed in Berlin, complete with iron bedsteads. In his annual report for Congress that year, the Secretary of War again urged the adoption of single iron bedsteads for all enlisted soldiers, but without effect. The Quartermaster Department imported a number of British and French examples of military bedsteads to study but further attempts at reform stalled as the Mexican War erupted in 1846.



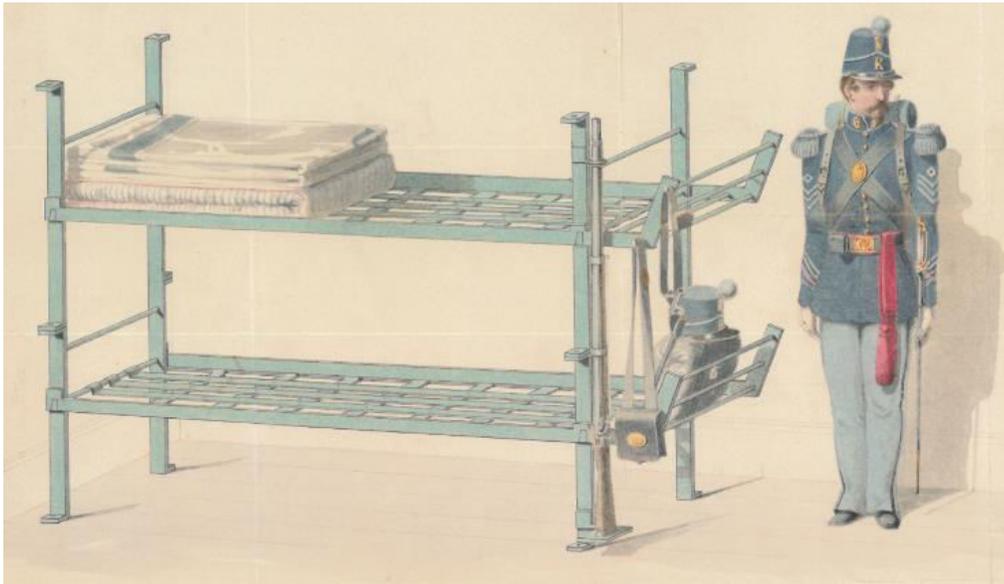
*George H. Crosman (1798-1882) was considered among the most knowledgeable Quartermaster officers in the service. Courtesy Army Heritage and Education Center.*



*Probably dating from the 1860s, this wooden double bunk from the Army historical collection was one of nine disassembled sets found sealed up in a casemate at Fort Mifflin, Pennsylvania. Photo by Pablo Jimenez, CMH Museum Support Center.*

After the war, the development of the Army's first pattern iron barrack bedstead fell to Maj. George H. Crosman. An 1823 graduate of West Point, Crosman had served for more than two decades as an infantry officer before being transferred to the Quartermaster Department. In October 1850, he assumed charge of the Office of Clothing and Equipage in Philadelphia, which included supervising the operations of the Schuylkill Arsenal, located several miles away on the edge of the city near Grey's Ferry. On that 12 acre complex, all uniforms, underclothing, footwear and headgear were made or received for the Army, as well as tents, musical instruments, flags, and a wide range of other needed equipage.

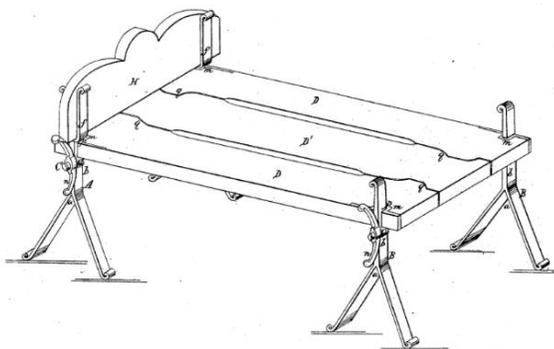
Within a month of beginning his new assignment in Philadelphia, Maj. Crosman was instructed to investigate the various proposed designs for a new bed. "These iron bedsteads have long since attracted my attention as a most desirable article for our troops," Crosman wrote, "and there can be no doubt of their great superiority over the present wooden bunks." The quartermaster officer met with various commercial manufacturers in Philadelphia and recommended several improvements to existing designs. Finally in December 1854, Secretary of War Jefferson Davis ordered the official change from double wooden bunks to single iron bunks.



*Proposed iron bunk design, submitted by 2d Lt. Robert E. Patterson, 6th Infantry, in 1855. Patterson's design provided shelf space at the end of each bed for the soldier's knapsack and had hooks from which to hang his cartridge box, belt and rifled musket. Courtesy National Archives.*

A number of design proposals were submitted from commercial manufacturers and even a few Army officers. In February 1855, Major Crosman was appointed president of a board of officers to review the various models and sketches and they ultimately recommended an official design for the Army. In April, the first two thousand of these Pattern 1855 iron bedsteads were ordered and distributed to posts throughout the northeast including Fort Columbus, the famous recruiting depot on Governor's Island.

But this first design did not stand up well to the rigors of barracks use. By early 1858, nearly every iron bunk at Fort Columbus had broken and, according to one of the recruiting officers, 1st Lt. William B. Johns, the recruits were now sleeping on the floor. An inventor himself, Lt. Johns proposed a new bedstead design that he believed would be stronger and less expensive. A second board of officers met in March 1858 to review a sample of Johns' new bunk and recommended that it be adopted for "its lightness, cheapness and durability." Over the next two years, just over 5,000 of these new Pattern 1858 bunks were manufactured and widely distributed throughout the Army, including at frontier posts in Kansas, New Mexico, and California.



*The Pattern 1858 bedstead (also known as Johns' bunk) for use in Army barracks. Courtesy U.S. Patent Office.*

While iron bedsteads were beginning to make their appearance in many barracks, the hated wooden double bunks also continued to be used. Efforts to finally replace this outdated furniture again stalled in 1861 as the country entered the Civil War. As a short-term expediency, the Quartermaster Department approved the use of these double wooden bunks in temporary barracks during the war.

Every Soldier today owes a small debt of gratitude to the efforts of Capt. John S. Billings, a surgeon in the Medical Department. After the Civil War, he successfully renewed the campaign to abolish the two-tier double bunks – these "relics of barbarism" as he called them. In 1870, Capt. Billings compiled a detailed study of living conditions at Army posts across the country. Focusing on hygiene, he successfully argued that traditional wood bunks promoted overcrowding and affected Soldier's health and readiness.

Congress soon funded several new designs of single iron bedsteads and they were produced and distributed to all army forts. "I am very glad to say that the double and two-story wooden bunks are now very nearly abolished," Capt. Billings wrote in his follow-up report in 1875. In the decade that followed, sheets and pillows were also added to the authorized allowance and the original straw-filled bed sacks were soon replaced by spring mattresses.

This evolution in design from the wooden double bunks to the single iron bedsteads reflects the larger trend occurring within the service to improve the overall quality of the enlisted experience. The addition of furniture, lighting, and running water, along with recreational amenities such as pool tables and reading rooms, fundamentally changed the enlisted life in the barracks. This was part of a larger effort to attract a better quality recruit and to retain qualified personnel, an important trend in the continued professionalization of the U.S. Army.

## **4TH INFANTRY DIVISION MUSEUM**

**Fort Carson, CO**

*By Scott Daubert, Director*

Passion, it's something every good museum professional should have—passion for history, for Army material culture and to serve our Soldiers, but this passion isn't only found in our museums' professional staff. It's also found in our volunteers and borrowed military manpower, which many of us rely on daily. This is certainly true for the 4th Infantry Division Museum.

Thomas Silvis, Joe Trujillo, and Megan Kerr are perfect examples of how passionate volunteers are a force multiplier at our museums. Tom Silvis works at the museum Monday –Thursday open-to-close giving tours and greeting museum patrons. Joe Trujillo volunteers one day a week and works in the museum's research holdings stabilizing and preserving documents used on a regular basis by the museum and our Division alike, and Megan Kerr has recently assisted the museum's director in processing and packing de-accessioned artifacts for shipment, and with little supervision designed, fabricated and installed a temporary 10th Group, Special Forces exhibit.

Staff Sergeant Martian and Sergeant Taylor are borrowed military manpower. Staff Sergeant Martian provides physical security to the museum during the day and spot checks the museum gallery after every patron, wiping cases and making sure every exhibit is clean and orderly. Sergeant Taylor, who has been assigned to the museum for the past six months, started out as a temporary duty Soldier, but loved working at the museum so much that he requested to stay as he navigates a medical discharge. Sergeant Taylor has become the museum's NCOIC and his passion only grows as he has recently been accepted into the museums studies program at Denver University. He wants to come back to OUR museum system when he graduates.

These are just five examples of passionate volunteers and Soldiers, who live and work in the community we serve. The 4th Infantry Division Museum is a much more robust and successful organization because of them.

To all the Volunteers and Borrowed Military Manpower who serve in the Army museum system....THANK YOU!!

## **DON F. PRATT MUSEUM**

**Fort Campbell, KY**

*By Dan Peterson, Director*

In early July, the Pratt Museum in conjunction with Cultural Resource Division, Department of Public Works, has put up a new temporary exhibit in the Pratt Museum about "Clarksville Base." Clarksville Base was a portion of Camp Campbell that was allocated to be a nuclear storage facility. At first run by the U.S. Air Force, it was taken over by the U.S. Navy and became a naval base guarded by a battalion of Marines. About this time, Camp Campbell was designated as Fort Campbell concurrent with the arrival of the 11th Airborne Division fresh from occupation duty in Japan. At the same time, Campbell Army Airfield was re-designated "Campbell Air Force Base," so that about 1949 you had three services—Army, Navy and Air Force—with separate bases all in the Fort Campbell footprint.

The Navy is now gone from Fort Campbell, the airfield is again designated "Campbell Army Airfield" with a small detachment from the USAF permanently stationed here, the 101st Airborne has replaced the 11th Airborne Division, and there are no more nukes here. The bunkers and the memories remain of an important chapter of the Cold War at Fort Campbell.

In addition to the portable exhibit seen in the accompanying photograph, a series of interpretive signs were installed in August at the major points of interest in the Clarksville Base complex. A brochure is available at the museum which provides additional information and directs visitors to the starting point of the self-guided automobile tour of the once Top Secret facility.

The museum supported numerous activities during July, including tours and briefings every Friday for all new Soldiers coming to Fort Campbell. An MOS specific tour was also given to the personnel of the 101st Airborne Division's Staff Judge Advocate Division as well as one for the family of SP/4 Peter Guenette, a Vietnam War Medal of Honor recipient. Tours were given to various school and church groups as well as the local chapter of the Daughters of the American Revolution.

July also saw the Pratt Museum Director and Installation Historian travel to Fort Belvoir, Virginia, to attend the first Advanced Museum Training Course conducted by the U.S. Army Center of Military History.

*continued on next page.*

*Continued from Don F. Pratt Museum, p. 17*

Highlights for August included a Foreign Weapons Training Session for the NCOs of the 101st Airborne's 2d Brigade Combat Team, who then will train the unit's Soldiers. There was also tour and briefing for professors of the History Department of Lipscomb University in Nashville, as well as the usual weekly briefings for all incoming soldiers to Fort Campbell. Coordination meetings were also made with the staff of the Clarksville City Museum to develop a joint program to commemorate the 50th Anniversary of the Battle of the Bulge this coming December and January. Additional community outreach during this period included offsite lectures by the Installation Historian for the Sons and Daughters of the American Revolution and the Clarksville Presbyterian Church.

On 13 September, the Saturday closest to the beginning of the historic event, the Pratt Museum staff, in cooperation with local Living History reenactors (including active duty Soldiers), held our annual Operation Market Garden commemoration, this year being particularly significant as it marks the 70th anniversary of that famous battle.

Throughout the Summer, the Pratt Museum was fortunate to have the services of a graduate student intern, Mrs. Sarah Fry, in a successful Internship Program that has been going on several years with Middle Tennessee State University. Sarah received a paid internship courtesy of the Fort Campbell Historical Foundation, and after a lengthy process of background checks and coordination with CMH, she was issued a CAC card and access to AHCAS. Sarah also worked on new exhibits, worked in the Archives, and now is back at school. We miss her!



---

## U.S. CAVALRY MUSEUM

### Fort Riley, Kansas

*By Dr. Bob Smith, Director*

To commemorate the centennial of the beginning of World War I, the U.S. Cavalry Museum, Fort Riley, created an exhibit focusing on establishment of Camp Funston, one of the sixteen major Army cantonments preparing soldiers for combat in World War I. The large 7' x 21' exhibit was created by Dylan Carr, a Kansas State University history major who worked on the project in conjunction with the Fort Riley Museum staff. Dylan working with the museum staff wrote narrative and captions; and selected photos for the exhibit after conducting extensive research that included a number of primary sources.

Working closely with Debbie Clark, Fort Riley Museum Artifact Technician, artifacts were chosen that included two complete uniforms (an enlisted man's and an officer's) of the 89th Division. The 89th Division trained at Camp Funston and deployed to the Western Front in 1918. The exhibit also includes an original wooden training rifle and numerous Camp Funston souvenirs and memorabilia purchased by the soldiers while posted at the camp. A portion of the exhibit



relates to the Spanish Flu pandemic that originated at Fort Riley in the spring of 1918. Museum Division Exhibit Specialist Ron Doyle constructed a frame for a full size tent complete with a recumbent mannequin inside the exhibit along with narrative discussing the impact of the disease on Fort Riley and the war effort.

The exhibit has received good reviews by our patrons and is the Cavalry Museum's commemoration of the post's contribution to the World War I war effort.

### Fort Riley Museum Division Fort Riley, KS

*By Dr. Bob Smith, Director*

After two years in the planning, the Fort Riley Museum Division, working in conjunction with Kansas State University's Textile Museum, Kansas State University's Hale Library Rare Book and Archives, and the Riley County Historical Museum in Manhattan, Kansas, unveiled the second portion of a three-part joint exhibit focusing on the contributions made these local institutions.

The exhibit at Manhattan Kansas' Flint Hills Discovery Center traces the history of the area from 1917–1963. Fort Riley Museum Division's contribution to the exhibit features the building of Camp Funston and the training and deployment of troops during World War; the Cavalry School's curriculum and Colonel George Patton's tenure at the school as an instructor in the 1930s; the organization and deployment of the 9th Armored Division at Fort Riley and its subsequent fame as the unit that seized the Remagen Bridge in 1945; and the creation of the Army's Aggressor Force during the 1950s.

The joint temporary exhibit runs until the first of the year and is expected to draw more than 30,000 visitors. This exhibit showcases the historical development of Fort Riley, the city of Manhattan, and Kansas State University. Furthermore, the exhibit encourages outreach, advertises our facilities, and creates a greater public awareness of Fort Riley's significant contributions to the community, the state, and to the nation.

### 10th Mountain Division & Fort Drum Museum Fort Drum, NY

*By Kent A. Bolke*

Have you thought about what to expect when you are facing a remodel of your museum? Here are a few lessons learned from the 10th Mountain Division and Fort Drum Museum in regards to what to do before the construction dust begins to fly. Right now, no matter if you are remodeling or never planning to, you should have a storyline. I mean a for real storyline. You will save a considerable amount of pain and heartache if you have one. Next, the exhibit designers at CMH are artists and thus think differently. They are great to work with and the more you bring to the table the more you will get what you want. It is with the designers that the hard work occurs, so be nice to them.

When the time comes to close the doors, make sure you know well in advance when the work will actually start. You will need to set a date for closing your doors and you will need to advertise that you are closing. Most importantly, you have to have a plan for where you will place all of your artifacts now on display. If your storage is full, you have a problem. The last issue to worry about is where are you going to work in your building? Is your office on the other side of the construction zone? Of course, you still need to advertise and conduct outreach. Construction updates look great on Social Media and there are lots of locations on your post that would be willing to host temporary exhibits. Search for us on Facebook, Fort Drum Museum; we will keep you updated

---

### FORT POLK MUSEUM Fort Polk, Louisiana

*By Fred Adolphus, Director*

Bit by bit, the museum is enhancing its exhibits. This summer's accomplishments include an Award for Excellence from the Army Historical Foundation for the new exhibit case honoring Vietnam War veterans and a major upgrade to our museum grounds.

The project for the museum grounds will include concrete pads and canopies for the macro artifact exhibits, and a bollard and chain fence that will prevent cars from driving on the museum's lawn. The concrete pad project will allow the museum to exhibit its macros in a dignified manner while protecting them from the elements. This project will begin with year-end funds this fall. Inclement, winter weather may hinder execution somewhat, but we expect completion



by the spring. For the first time in years, visitors will be able to view macros directly adjacent to the museum. Given their proximity to building, a staff member might easily include the macros as part of the museum's tour. The canopies will also extend the life of the macros' paint and enhance their overall conservation.

## THIRD INFANTRY DIVISION & FORT STEWART MUSEUM Fort Stewart, GA



### A Road Runs Through It: The Odyssey of Relocating and Reinventing Fort Stewart Museum

*By Walter W. Meeks, III, Director*

In 1998, I saw a fellow with a measuring wheel and paint marker device carefully painting lines on the gravel parking lot of Fort Stewart Museum. I approached him and struck up a conversation and he informed me that the street fronting the museum would be widened to four lanes and there would be a turn lane at the intersection on the corner. I asked where the turn lane would be and he pointed to our building and replied: “about there.” The turn lane would intersect the building and run straight through our collection storage wing. “But, don’t worry” he said. “This won’t happen for a long time and you will be gone by then.”

2013: “You are going to have to get out of this building in the next 45 days. . . .” Words like these are not pleasant for anyone in the Army museum business to hear. With these words, a chain of events was set in motion that has been both enlightening and frustrating and though great progress has been made, these changes are not over yet. Fortunately, when the order to move came we had a soft place to land. The new museum would be housed in the former 3d Squadron, 7th Cavalry headquarters building. At 14,000 square feet, it almost tripled our public space and with the inclusion of the adjacent headquarters troop orderly room, an additional 5,000 square feet of office and storage space meant that a move was within our capability. The new building was not perfect. It would take a great deal of cosmetic improvement to make it into a museum space.

limitations meant that radical structural changes would be limited only to access ports in a couple of exterior walls to allow macro artifacts inside. New HVAC would have to wait and we would make do with the original equipment and add auxiliary dehumidifiers. But, the building was solid. It was constructed of masonry, insulated and had a new metal roof and was in a good location only two blocks away from our old one.

Since then the crew at Fort Stewart Museum has been on a steep learning curve and has dealt with myriad issues: The Sequester jeopardized the remodeling project for a time and dictated that the move of the collection would take place with a borrowed truck (thanks, GA National Guard) and scrounged packing materials. My able deputy, Scott Daubert, was selected for the director’s position at the Fort Carson Museum and graciously delayed his arrival at his new job to see the collection safely packed and shipped. Our colleagues at the National Infantry Museum were equally gracious in allowing us to store our sealed collection cabinets at their facility, even though it was no doubt an inconvenience. The old Fort Stewart Museum was completely dismantled and moved with any non-reusable furniture and equipment either re-homed or discarded. All this was accomplished by two staff members, one volunteer and three detailed soldiers.



Planning the new exhibits has been a completely new experience for this curator. In the past, every exhibit at Fort Stewart Museum was created in-house while working face-to-face with everyone involved in the project. Working with a real graphic designer and exhibit contractors who are remotely located was challenging and enlightening. One key thing that I learned is that all of those photos that we scanned at 300 dpi back in 1996 are unusable to a modern designer.

Along the way I met some really fine people who are good at their jobs. The Fort Stewart DPW architects and engineers were top flight. They listened carefully to our needs and the proof appeared when the plans were drawn. Roxann Showers and Dr. Jim Kelly both know their stuff and their talent is evident in the work they produce. The Fort Stewart DOL guys were always quick

---

## War Fighter Museums

---

to lend a hand, even when that hand meant bringing over the giant forklift to move our macro collection away from the old museum site so the building could be demolished.

In the mean time, Fort Stewart Museum continues to serve its Third Division community by making its archival and library holdings available to interested parties and responding to public inquiry. Soldier training events continue as they always have and the first gallery finished in our new building will facilitate our Heritage Awareness training that was started in 2006. Staff rides and graphic support round out our current offerings and business is brisk, even without a visiting public. Social Media has been a key to staying connected with our patrons and keeping the public abreast of the museum's progress. We hope to cut a ribbon in the near future.



*Fort Stewart Museum Director Walter Meeks leads soldiers of 1/41 FA in an exploration of the forts and artillery of Savannah's Eastern Defenses.*

---

## IMCOM Museums

---



*Exhibit of European Army uniforms, 1914.*

### WEST POINT MUSEUM

U.S. Military Academy, West Point, NY

*By David Reel, Director*

The West Point Museum is pleased to announce the opening of its initial exhibit to commemorate the 100th anniversary of the First World War.

The display features uniforms worn by armies of the major European nations in 1914. Central to the display is a Field Marshal's tunic worn by Emperor Franz Joseph of Austria, the leader of the Austro-Hungarian Empire in 1914. It was the assassination of his nephew and heir to the throne, Archduke Franz Ferdinand that sparked the global war.

This uniform coat is flanked to its right by a German 4th Hussar coat of purple wool with yellow trim. The hussars (light cavalry) of all nations were among the most colorfully-uniformed of soldiers. To the right of the hussar uniform is an overcoat and service cap of the Imperial Russian Army. Poorly-led

and equipped the Russian soldiers suffered serious defeats at the hands of Germany. With the collapse of the Romanoff dynasty as a result of revolution Russian forces were withdrawn from the war.

To the left of the Franz Joseph tunic is the dress coat and cap of an officer of the British Royal Rifle Corps. This regiment had its origins in colonial North America and was numbered as the 60th regiment of Foot. Unlike most British dress uniforms in 1914, this coat is the distinctive "bottle green" of the rifles regiments. On the far left of the display is a French infantryman's overcoat and kepi as worn into the war in 1914. Many French soldiers retained the traditional red trousers and caps of the nineteenth century, which were soon to be replaced with the more subdued "horizon blue" service uniforms.

As the four years of the war's commemoration proceed this and other displays will change, making use of the extensive collections of First World War artifacts. Of special note in the museum collection are complete uniforms of all the major warring nations which were assembled by the U.S. Army at the war's conclusion. The next uniform display, planned for 2016, will feature enlisted soldiers' field uniforms. It will be followed by a display of uniforms of women auxiliaries whose support was crucial to the war effort. Additionally, exhibits in other galleries of the museum will have new artifacts from the war added as a continuing part of the war's anniversary.



*SIMINI, New Guinea, 2 January 1943: from left, Major Hawkins, Phil Ishio and Arthur Ushiro Castle of the 32nd Infantry Division question a prisoner taken in the Buna campaign. Information from POW interrogations produced vital tactical information. National Archives photo*

**U.S. ARMY MUSEUM OF HAWAII**  
**Fort Derussy, Hawaii**

*By Judi Bowman, Director*

“America’s Secret Weapon: Japanese Americans in the Military Intelligence Service,” a fascinating new exhibit, opens in October in the Changing Gallery.

The exhibit reveals the little-known story of thousands of Americans of Japanese ancestry who waged war against their parents’ homeland in World War II as members of the U.S. Army’s Military Intelligence Service. These “Nisei”—second generation Japanese Americans—used their knowledge of the enemy’s language and culture to give America a priceless edge that shortened the war and saved countless lives.

Produced by three Baby Boomers from Hawaii, the exhibit uses scores of photos and artifacts and a local perspective to tell the story of the 6,000 Nisei who served in the MIS.

From the Aleutians and Guadalcanal to Okinawa and Philippines, MIS Nisei served in every major battle and campaign of the war against Japan, gleaning vital information from prisoners and documents, flushing caves, fighting as infantrymen. After the war, they were vital to the rebuilding of Japan as a modern democracy and staunch U.S. ally.

The MIS Nisei’s feats are largely unknown because they were classified for years. And the Nisei intelligence specialists usually served in small groups on temporary duty, so their work often went unrecorded.



**TROPIC LIGHTNING MUSEUM**  
**Schofield Barracks, Hawaii**

*By Kathleen H. Ramsden, Director*

This year the Tropic Lightning Museum staff has lined up a slew of activities, participants, and scheduled demonstrations for Living History Day, 11 October 2014. The day celebrates the 73d birthday of the 25th Infantry Division’s formation on 1 October 1941 at Schofield Barracks, Territory of Hawaii.

The family focused day provides activities and interactions for the whole family. Swing Dancers will be twirling with children to a Big Band ensemble and military K9s will be tackling obstacle courses while demonstrating their fierce skills. At ‘Open Camp,’ Civil War, WWII, Korea, and Vietnam reenactors will sport equipment, vehicles, and firearms with ‘Drill Calls’ and games.

In the past, museum staff has enlisted the help of various volunteer support organizations and groups. This year is no different—an array of active military units, reenactors, musical performers, historical organizations and enthusiasts come together to help illustrate the life of an U.S. Army Soldier from the Civil War to the present.



## ROCK ISLAND MUSEUM

Rock Island, Illinois

*By Kris G. Leinicke, Director*

The Rock Island Arsenal Museum was one of four U.S. Army Museums to receive the Army Historical Foundation 2014 Award for Excellence. The award was presented for the museum’s project to preserve weapon covers in its collection. Many of the vinyl covers were Rock Island Arsenal products produced by Pliable Materials during the Vietnam era. They were important to the museum’s mission of the history of Rock Island Arsenal.

Two Western Illinois University—Quad Cities museum studies graduate students, Amanda Elliff and Sarah Blevins, were involved in the project to sew custom-fitted, Mylar bags used for storing the artifacts in a walk-in freezer. A total of 96 covers were fabricated for 48 artifacts.

The Rock Island Arsenal Museum was the only U.S. Army Museum to receive a 2014 grant from the Army Historical Foundation. The grant was to purchase three iPad minis for museum visitors to view interactive iBooks that are under development by museum staff and volunteers. A grant to purchase one iPad mini was also obtained from the Rock Island Arsenal Welcome Club. The iBooks feature components of the museum’s small arms collection, such as General Officer pistols and U.S. experimental and SPIW-Special Purpose Individualized Weapons.



From May to August 2014, two local students completed summer internships and volunteered a total of 136 hours. As an undergraduate studying history and classics at Monmouth College, Monmouth, Illinois, Kyle Dickson worked on two projects to learn more about archival management. He processed photographs and paper memorabilia recently obtained upon the retirement of the USAG-RIA Protocol Officer, Charles Cervantes. He completed an iBook on General Officer pistols in the collection.

As an undergraduate studying art history at St. Ambrose University, Davenport, Iowa, Tessa Pozzi also worked on the iBook project. She completed three iBooks (U.S. experimental and SPIW weapons, U.S. grenade launchers, and U.S. submachine guns) including manipulation of photographs taken with Curator of Collections Bill Johnson; created a one page guide on creating iBooks; and coached two volunteers and staff members on the construction of iBooks.

---

## TRADOC Museums

---

## ARMY HERITAGE MUSEUM

Carlisle Barracks, Pennsylvania

*By Jack Leighow, Director*

“Veterans,” the latest art exhibit at the Army Heritage Museum at the U.S. Army Heritage and Education Center, opened on 17 July 2014 and will be on display until 5 April 2015. The show contains 14 paintings in the Veterans Series of 23 by artist Nina Talbot. Ms. Talbot interviewed veterans from various time periods (WWII through the Global War on Terror). Based on these interviews, she created paintings that capture images of the veteran and their experiences in the military. The featured paintings will be 13 veterans of the United States Army displayed in the General Omar N. Bradley Memorial Art Gallery. The Army Heritage Center Foundation is sponsoring the exhibit. Ms. Talbot and selected veterans were on hand for the opening to share their experiences.



*“You can't unknow what you know” (2012).  
By Sarah Mess,  
Somalia, U.S. Army,  
Physician's Assistant.*

“These paintings are the unseen and rarely told personal stories of American veterans,” explained Ms. Talbot. “They are portraits of vets that show the individual and the war they served in to create an image that shows how a soldier’s identity becomes enmeshed with their wartime experience... the paintings reveal how each individual veteran forever lives in the shadow of war; in this way, a veteran never stops being a soldier.”

## U.S. ARMY TRANSPORTATION MUSEUM

Fort Eustis, Virginia

By Marc W. Sammis, Curator

Two new exhibit galleries showing Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) opened 24 July in an official ceremony and ribbon cutting. The galleries occupy what had previously been an open back porch area that was enclosed in 2012, adding an additional 5,000 square feet of exhibit space. Plans for expanding the two exhibits had been discussed for several years and this seemed like the perfect match. The staff, interns, volunteers and Soldier details spent the next eighteen months rebuilding the space into the new galleries. New artifacts, both macro and minor, were donated or otherwise acquired, which allowed a more complete and in-depth explanation of both operations.

Visitors enter the galleries and walk past graphics, cases and dioramas showing operations in Kuwait and Iraq. These include the build-up of forces, the initial invasion, hazards of the road, weld shop, watercraft/port operations, convoys, cargo transfer and movement control. Operation New Dawn is included in the gallery as well as a study of the evolution of uniforms worn during the decade long struggle.

Leaving the OIF gallery the visitor enters the Operation Enduring Freedom (OEF) gallery. Here are detailed such things as supply hubs, air resupply, ring routes, hazards of the road, the adoption of MRAPs and m-gators, cold weather uniforms and operations in mountainous areas. Also included are exhibits on the Afghan Rail Advisory Team (ARAT) which has helped the Afghan government to create its first ever railroad and an exhibit about retrograde operations out of Afghanistan which are currently still active.

The opening was conducted to coincide with the 72d Anniversary of the establishment of the Transportation Corps (31 July 1942). Other events included inductees into the Transportation Corps Hall of Fame, the TC picnic, raffle and TC Ball.

## U.S. ARMY CHEMICAL CORPS MUSEUM

Fort Leonard Wood, Missouri

By David S. Franklin, Director

The U.S. Army Chemical Corps museum at Fort Leonard Wood, Missouri, recently installed a temporary exhibit detailing the elimination of our nation's chemical weapons stockpile, giving visitors the opportunity to learn about this historic accomplishment.

Since World War I, the U.S. Army Chemical Corps has been responsible for the production and storage of a stockpile of offensive chemical weapons. This mission was reversed in 1997, when the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on Their Destruction, otherwise known as the Chemical Weapons Convention (CWC), was ratified by the United States and 86 other nations. Signatory nations pledged not only to cease production of chemical weapons, but they were also obligated to safely eliminate their chemical agent and chemical weapons stockpiles.

Because of concerns about safety shipping bulk agents and munitions to a single location for destruction, individual demilitarization plants were constructed at the nine storage locations across the United States. Under scrutiny of environmental agencies, and subject to inspection by international compliance teams, site personnel have safely demilled over 2.3 million chemical munitions and bulk storage containers, eliminating over 54 million pounds of chemical agents, some dating back to World War I. The liquid agents are neutralized by chemical hydrolysis and/or incineration, while the munitions and storage containers, once drained, undergo high-temperature decontamination, which allows the metal to be recycled.

Of the nine storage sites that had chemical weapons or materiel, seven have completed the safe destruction of their stockpiles. The only two remaining sites, located at Pueblo Chemical Depot, Colorado, and Bluegrass Army Depot, Kentucky, are currently in the process of destroying the remaining stockpile.

The exhibit combines images and maps with interpretive panels, identifying the storage and demil locations, along with models of the storage and demil facilities, to explain the complicated process of agent destruction. In addition, protective suits and inert munitions are exhibited. By the end of their visit, museum patrons should leave with appreciation of the enormity that was the United States inventory of chemical weapons, the variety of chemical munitions and the special technology to destroy them, and how the demil program has maintained such an impeccable safety record throughout this delicate process.



**Lucius D. Clay Kaserne  
Wiesbaden, Germany**



**DIY D-DAY:  
Discovering Army Capabilities  
In a Time of Fiscal Austerity**

*By Molly Bompane  
Chief Curator, U.S. Army Europe*

In 2013, I joined the staff of the U.S. Army Europe (USAREUR) Military History Office as curator. The challenges posed by the fiscal environment and sequestration in FY13 and FY14 were felt here in USAREUR. The fiscal austerity that resulted however, afforded me a unique opportunity to discover Army resources and capabilities while implementing my exhibit plan. This year we are celebrating some of the significant anniversaries of WWII through a series of temporary exhibits. The first exhibit in the rotation was D-Day. With a limited budget and just two a half months to design, create, draft and install; I needed to find existing assets I could refurbish and cost effective resources within the Army that could turn work around quickly.

First I wanted to build a set of hedgehogs as part of the landing beach. I had found the plans on the Web with step by step instructions and soon discovered the Romer Arts and Crafts Center on post. Among the many services they provide is a fully equipped wood shop and the expertise of the woodshop supervisor/

carpenter, John Gardner-Brown. We built the hedgehogs together in a day. After painting and faux finishing them, people were amazed that they were not iron. They ended up being the stars of the exhibit and were used as décor at the USAREUR Ball, and in two golf tournaments.

The other Army capabilities that I utilized for the exhibit included: the Base Movement Control Team and the Relocation Task Force, which assisted in moving a jeep; USAHEC, which provided images and audiovisual material; the expertise of my colleague Ryan Meyer—Curator of the 2d Cavalry Regiment’s Reed Museum in Vilseck, Germany; graphic support from Vise Media in Kaiserslautern, which printed my 30’ x 10’ adhesive vinyl backdrop; proofreading support from the Document Management Branch-IMCOM-Europe; and the amazing craftsmen at the Maintenance Activity at Vilseck, who designed and built a stunning, contemporary and modular exhibit railing system with existing materials and turned it around in a week. It was because of these capabilities and resources, I only required 12% of the original budget and was able to get the exhibit installed in time for both the D-Day anniversary as well as the Secretary of the Army’s May visit to USAREUR. Next on the schedule is the Battle of Bulge and I am thinking of trees. . . .



*ABOVE: The Secretary of the Army discussing the exhibit with Molly Bompane and Dave Fulton.*

*FAR LEFT: Carpenter John Gardner-Brown assists with mounts for exhibit.*

*LEFT: Example of one of the completed hedgehogs.*





## FLORIDA NATIONAL GUARD St. Augustine, FL

The Florida National Guard celebrated nearly four-and-a-half centuries of military tradition in Florida on 12 September as Soldiers, Airmen and civilians gathered for the annual First Muster ceremony at the St. Francis Barracks with a command retreat and traditional Spanish firing detail by historical re-enactors from Florida Living History. “As the first National Guard in the United States, with roots dating back to 1565, we take immense pride in all that has been sacrificed and accomplished by all our men and women in uniform over the past four-and-a-half centuries,” Florida National Guard historian Allison Simpson said during the ceremony.

The ceremony also served as a dedication of the parade field in front of the Florida National Guard headquarters, officially naming the field “Patriot Field” in honor of all military members who have served Florida since the 16th century. Last September the Florida National Guard placed soil samples on the parade field from battlefields around the world where the Florida National Guard—or its militia predecessors—served and fought. These 19 different soil samples represented National Guard militia traditions dating back to the 1560s, continuing through the wars in the 19th and 20th centuries, and ending with recent deployments to Southwest Asia. This year special markers commemorating the soil were placed along the western edge of the field by the Florida Army National Guard’s Staff Sgt. Jared Papesh and a re-enactor from Florida Living History representing a Spanish militia member.

Volunteers from Florida Living History of St. Augustine also performed a “Load and Fire” battle drill with replica 1700s cannon and muskets. Adjutant General of Florida Maj. Gen. Emmett Titshaw Jr. and Florida Army National Guard State Command Sgt. Maj. Robert Hosford joined the re-enactors by firing the replica-cannon alongside the elaborately garbed “Spanish militia” during the ceremony.

## ILLINOIS STATE MILITARY MUSEUM Springfield, IL

*By Bill Lear, Curator*

On 15 March 1916, Major General John Pershing launched the year-long Border Campaign into Mexico to pursue Pancho Villa. A week earlier the Mexican revolutionary had raided Columbus, N.M., killing eight Soldiers and 10 civilians and wounding six Soldiers and two civilians. Illinois National Guardsmen were mobilized and deployed to the Texas border to support Pershing’s operation. The 1916 expedition was the first time the Army used airplanes, motorcycles and trucks and served as a dress rehearsal for the mobilization of U.S. forces for World War I. On Saturday, 6 September, the Illinois State Military Museum Living Historians displayed equipment, uniforms and weapons used by the 10,000 Illinois National Guard troops who deployed to Texas in the 1916 Border Campaign. Many of the Illinois Soldiers who returned from Texas had only a few months at home before deploying to Texas again in 1917 to train for World War I.



*Members of the Illinois State Military Museum Living Historians interacted with the public in period uniform.*

## MARYLAND MUSEUM OF MILITARY HISTORY Baltimore, MD

By Maj. Rick Breitenfeldt

As the city of Baltimore celebrates the 200th Anniversary of the National Anthem, the Maryland National Guard is commemorating the occasion with the grand opening of its War of 1812 museum display. The new display, “When Free Men Shall Stand,” was unveiled to the public during a ribbon cutting ceremony at the 5th Regiment Armory on 3 September 2014.

Joe Balkoski, historian and author of several books on the history of the Maryland National Guard, said the new display shows the unchanging nature of the American defense of the homeland, a mission familiar to the Maryland National Guard. “It was a perfect storm,” said Balkoski. “The 200th anniversary of the defense of Baltimore was a perfect time for people to say ‘hey this is our history; we saved our city from complete destruction; it changed all our lives; and we’re living that legacy today.’”

The museum exhibit was funded through a series of generous donations and grants from many military organizations and supporters of the Maryland National Guard and is the culmination of three decades of dedicated work from retired Soldiers and Airmen from the Maryland National Guard.



*A visitor examines one of the manikins during the new exhibit open house.*

“We started out with a grain of sand and due to the dedication of so many people we kept it going when we had no money. Finally, now, we have reached a point where people understand that the history is of such profound value to young Soldiers and to the families that it’s an integral part of our story,” said Balkoski.

The interactive display focuses on the real life stories of both British and American Soldiers from the War of 1812 and portrays the time period through their personal experiences.

## MONTANA MILITARY MUSEUM Fort Harrison, MT

By Maj. Lori Chamberlin and David Cole



From 7–9 August, fourteen original members of the First Special Service Force of World War II fame gathered together in Helena, Montana, for their 68th Reunion. In July 2013, President Obama signed the law awarding the Congressional Gold Medal to these members of the Force, recognizing their significant contributions in the European Theatre from December 1943 to December 1944.

During World War II, Germany was developing advanced ‘super bomb’ systems, which required heavy water hydroelectric plants, located in Norway. To take out those plants, the U.S. and Canadian Armies recruited volunteers to form the top secret First Special Service Force, which trained at Fort Harrison, five miles west of Helena, from 20 July 1942 through April 1943. Simultaneously, the top secret Camp Rimini Dog Sled Training Center, 10 miles west of Helena, trained dogs to pull snow sleds laden heavy with equipment to keep the men supplied in the ice fields of Norway. Training merely five miles apart, neither Camp Rimini nor the FSSF were aware of the other.

After the British commandos and the Norwegian Underground took over the original operation for which they trained, the Unit was given a new European mission. In December 1943, they scaled the unguarded cliffs at Monte la Difensa on the German Winter Line with packs and weapons, assaulting surprised Panzer-grenadiers in a bitter two hour battle. After two days of tough fighting, the Germans were driven off, with the Force suffering 30% losses. But the Force had broken through the German defenses and 5th Army resumed the push north toward Rome.

The FSSF conducted an aggressive campaign of night-patrolling and deception for 99 days at Anzio and were the first Allied unit to enter occupied Rome. They then had a key mission in Operation Dragoon, the invasion of southern France. Deactivated in December 1944, the Canadian element returned to their army in England while the bulk of the Americans became 474th Infantry Regiment, which later fought through Germany to liberate Norway.

The Force experienced 251 days of combat as a unit, and its contributions are legendary, as reflected through the awarding of the Congressional Gold Medal in 2015. With only 153 original Force members still living, hopefully more than a few will survive to receive the well deserved honor.



**U.S. ARMY CENTER OF MILITARY HISTORY  
MUSEUM DIVISION**  
102 Fourth Avenue  
Fort McNair, DC 20319-5060

**Charles H. Cureton, Ph.D.**  
Director, Museum Division

**Ginger Shaw**  
Chief, Field Museums Branch

**James C. Kelly, Ph.D.**  
Chief, Museum Programs Branch

**Chris Semancik**  
Chief, Collections Branch

The *Army Museum Memo* is distributed to all activities that comprise the Army Museum System. The primary objective of the memo is to inform Army museums and museum activities of recent developments and operations that may affect the Army Museum Program. The information contained in this publication is provided only for the edification of the reader. In no way shall any information contained herein be construed as a recommendation or endorsement of any product, program or service.

**General Editor:**  
Dr. James C. Kelly  
Chief, Museum Programs Branch

**Managing Editor:**  
Ephriam D. Dickson III  
Curator, Field Museums Branch

Inquiries: [ephriam.d.dickson.civ@mail.mil](mailto:ephriam.d.dickson.civ@mail.mil)  
(703) 805-9794

---