

Fall 2020

PB 20-20-4 (No. 117) Washington, D.C.

In This Issue

"Our Army will hut this Winter at Valley forge"

George Washington, Decision Making, and the Councils of War By Ricardo A. Herrera

Feathers of Honor

U.S. Army Signal Corps Pigeon Service in World War I, 1917–1918 By Frank A. Blazich Jr. **32**

NMUSA Feature 28 Artifact Spotlight 30

The Professional Bulletin of Army History

RMYHISTC

The Professional Bulletin of Army History

By Order of the Secretary of the Army:

JAMES C. MCCONVILLE General, United States Army Chief of Staff

Official



KATHLEEN S. MILLER istrative Assistant to the Secretary of the Army 2024010

PAUL E. FUNK II General, United States Army Training and Doctrine Command

Chief of Military History Charles R. Bowery Jr.

Managing Editor Bryan J. Hockensmith

Editor Margaret J. McGarry **Book Review Editor** Sarah Castle

Layout and Design Gene Snyder

Cartography Matt Boan

The U.S. Army Center of Military History publishes Army History (ISSN 1546-5330) quarterly for the professional development of Army historians and as Army educational and training literature. The bulletin is available at no cost to interested Army officers, noncommissioned officers, soldiers, and civilian employees, as well as to individuals and offices that directly support Army historical work or Army educational and training programs.

Correspondence, including requests to be added to the distribution of free copies or to submit articles, should be addressed to Managing Editor, Army History, U.S. Army Center of Military History, 102 Fourth Ave., Fort Lesley J. McNair, DC 20319-5060, or sent by e-mail to usarmy.mcnair.cmh.mbx.army-history@ mail.mil.

Those individuals and institutions that do not qualify for free copies may opt for paid subscriptions from the U.S. Government Publishing Office. The cost of a subscription is \$20 per year. Order by title and enter List ID as ARHIS. To order online, go to http:// bookstore.gpo.gov. To order by phone, call toll free 866-512-1800, or in the Washington, D.C., metropolitan area, 202-512-1800; by fax, 202-512-2104; or by e-mail, contactcenter@gpo.gov. Send mail orders to U.S. Government Publishing Office, P.O. Box 979050, St. Louis, MO 63197-9000.

The opinions expressed in Army History are those of the authors, not the Department of Defense or its constituent elements. The bulletin's contents do not necessarily reflect official Army positions and do not supersede information in other official Army publications or Army regulations. The bulletin is approved for official dissemination of material to keep the Army knowledgeable of developments in Army history and to enhance professional development. The Department of the Army approved the use of funds for printing this publication on 7 September 1983.

The reproduction of images not obtained from federal sources is prohibited.

Issue cover: General George Washington at Trenton by John Trumbull

/Yale University Art Gallery Opposite page top right: *Die Helden der Revolution* by Frederick Girsch /Library of Congress

EDITOR'SJOURNAL

The Fall 2020 issue of Army History offers up a couple of intriguing articles, an interesting Army artifact, a look at the National Museum of the United States Army's Medal of Honor garden, a varied selection of book reviews, and words from both the Center's executive director and chief historian.

The first article, by Ricardo Herrera, examines George Washington's decision to winter the Continental Army at Valley Forge. Utilizing an impressive amount of primary research, Herrera shows that cantoning anywhere for the winter, let alone at Valley Forge specifically, was not a forgone conclusion. Struggling with these decisions, Washington consulted his senior leaders. Many of these generals lobbied for numerous different locations for cantonment-all with their own drawbacks and advantages-while others instead called for a continuation of the fighting during the winter months. This article provides an in-depth look at Washington's decision-making process and how his councils of war shaped his thinking.

The second article, by Frank Blazich Jr., tells the story of U.S. Army homing pigeons during the First World War. This engaging article documents the U.S. Army Signal Corps' Pigeon Service from its inception and early struggles to its effective use on the battlefield. With the help of British and French pigeoneers, the U.S. Army established numerous lofts in France; deployed mobile lofts to the front lines; and sent baskets of pigeons into battle strapped to doughboys, who used them to send back important messages and intelligence. Most famously, one of these Army-trained pigeons helped save the Lost Battalion when that unit was trapped behind enemy lines. This episode skyrocketed awareness of the Pigeon Service in the minds and imaginations of the American public back home.

The last few months have been a difficult and trying time. During this period, the folks who work on this publication with me have been performing their duties largely from home. Teleworking has presented its own unique obstacles to the production of this journal, but the small team of dedicated staff that produces it has overcome all impediments. We have, so far, produced two issues while dealing with the challenges of the pandemic outbreak. I commend my teammates for their diligence and dedication and I assure Army History's readers that we will continue to provide them with original and thoughtprovoking content in the months to come.

While I usually end by asking for your submissions and critiques, I will instead mention that our book review program is currently suspended and will remain so for at least the next few months, due to the pandemic. I hope you enjoy this issue and know that we are already hard at work on the next one.

> Bryan J. Hockensmith Managing Editor





Features

4	Chief's Corner
5	News Notes
28	NMUSA Feature
30	U.S. Army Artifact Spotlight
52	Book Reviews
63	Chief Historian's Footnote

Articles



George Washington, Decision Making, and the Councils of War

By Ricardo A. Herrera

32 Feathers of Honor

U.S. Army Signal Corps Pigeon Service in World War I, 1917–1918

By Frank A. Blazich Jr.



THE CHIEF'S CORNER CHARLES R. BOWERY JR.

In the wake of the deaths of George Floyd and other people of color, America continues to undergo a reckoning with our nation's original sin: racism and white supremacy. Recent events have laid bare the brutal truth that systemic inequalities and state-sanctioned violence have continued to oppress people of color in our country. In the midst of this national conversation, the history of the United States Army has come front and center, largely because of the Army's experience in the American Civil War. By May 1861, sixty-five of eighty-six southern West Point cadets had followed their seceded home states out of the Union. At the start of the war, there were 824 officers on the Army's active list. Of the 296 who resigned their commissions out of sympathy for their southern home states, 184 fought for the Confederacy as officers. Out of some nine hundred West Point graduates then in civilian life, ninety-nine joined the Confederate Army as well.

After the Civil War, the nation's embrace of the myth of the Lost Cause, widely seen by white people to be the consummation of national reconciliation, led the Army to celebrate the Confederacy in both formal and informal ways. During the Jim Crow era, as the nation mobilized for two world wars, the Army named a number of new posts for Confederates. Some of these men served in the antebellum U.S. Army, while some did not. In 1929, the Army authorized units to trace lineages to Confederate forces and allowed those units to depict Confederate names for certain campaigns on their battle streamers. It is perhaps the strongest evidence of the deep hold of the Lost Cause on the American imagination that the Army's leadership saw nothing wrong with celebrating people who resigned and took up arms against the Constitution.

As we prepare to open the National Museum of the United States Army (NMUSA), the Center of Military History (CMH) has considered very carefully how we interpret the stories of the thousands of Americans who, from 1860 to 1865, chose to fight against this country in the service of a new country that promised to preserve chattel slavery. We are confident that all of our exhibit areas address the complexity of the Civil War and our nation's other conflicts, highlighting the stories of all Americans who have served, without glorifying or celebrating the accomplishments of our enemies. In another important step toward a more honest understanding of our past, the Secretary of Defense has banned the display of Confederate symbols across the military services, but much more remains to be done. It is vital that we continually remind ourselves of the cause for which white Southerners fought in the Civil War.

The Army has a laudable record of expanding diversity and inclusion in many respects, especially over the past thirty years, yet it would be a mistake to think that racism and inequality have been eradicated from our ranks. We have ended exclusions of LGBTQ citizens from serving openly, and we have opened combat roles to women, but this work is not done. Our community of historians, museum professionals, and archivists must be leaders in a new campaign in the ongoing battle for civil rights and social justice. We can lead in two ways. First, we must continue to strive to diversify our community so that we can amplify the voices of women, people of color, and LGBTQ colleagues in a field that has been dominated by straight white men. As the rest of the Army becomes more diverse, we must keep pace so that our products and services speak to all who serve. In this way, we can continue to educate and inspire our force and allow them not only to take strength from the best of our history and heritage, but also to continue to ask hard questions about our past.

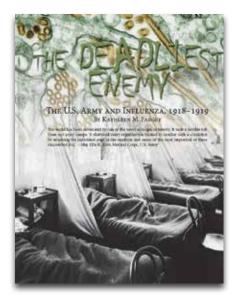
Second, we must continue to innovate in our published historical products, historical programs, and museums in order to educate the rest of the federal government and the nation about its Army. CMH occupies a powerful position of influence in this space, especially in the digital age. Visitors to our museums and readers of our products, both in print and online, will expect to see how we deal with these aspects of the Army's past. By confronting difficult topics in our history, and telling the stories of *all* who have served, we serve the nation by strengthening civil-military relations at all levels.

My recent conversations with our work force and with members of Career Program 61 leave me inspired and confident that we will continue to move the Army History Program in the right direction. In 1968, American author James Baldwin remarked, "The great force of history comes from the fact that we carry it within us, are unconsciously controlled by it in many ways, and history is literally present in all that we do." In no community is this statement truer than in the profession of arms—including our fellow citizens in uniform and the dedicated civilian employees who support them. In these difficult times, I am reminded daily that practitioners of history have an immense responsibility to help our society understand our shared past. We can best do that through rigor, subjectmatter and technical expertise, and an emphasis on inclusion.

AH

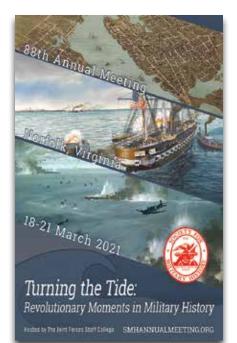
4





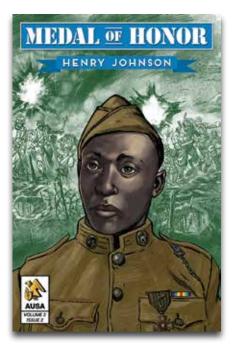
ARMY HISTORY ARTICLE WINS WRITING AWARD

In June, the Army Historical Foundation announced the winners of its 2019 Distinguished Writing Awards. Kathleen M. Fargey's article, "The Deadliest Enemy: The U.S. Army and Influenza, 1918–1919," was the winner in the Academic Journals category. This article was published in the Spring 2019 issue of *Army History*. A PDF version of this issue can be found at https://history.army.mil/armyhistory/ AH-Magazine/2019AH_spring/AH111(W). pdf.



SOCIETY FOR MILITARY HISTORY 2021 ANNUAL MEETING

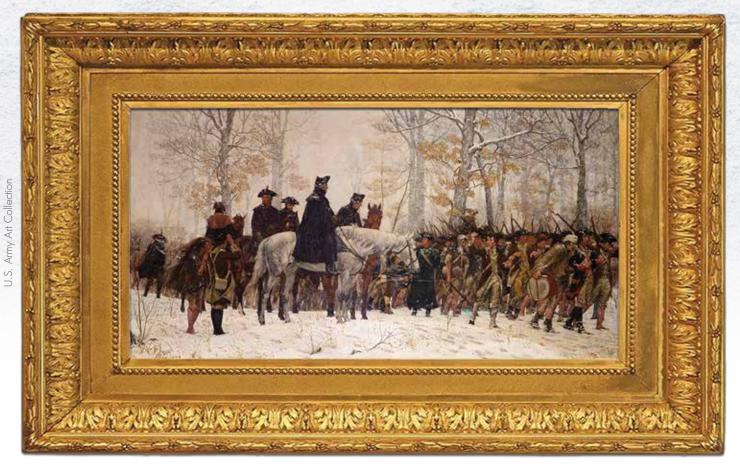
The Society for Military History's 2021 Annual Meeting will take place in Norfolk, Virginia, on 18–21 March. The conference will be hosted by the Joint Advanced Warfighting School, National Defense University, with the theme of "Turning the Tide: Revolutionary Moments in Military History." For more information, please visit www.smhannualmeeting.org.



New Publication from AUSA

On 30 June 2020, the Association of the United States Army (AUSA) released the latest in its series of graphic novels highlighting Medal of Honor recipients, titled Medal of Honor: Henry Johnson. Johnson served on the Western Front during World War I as a member of the 369th Infantry Regiment, an African American unit that later became famous as the Harlem Hellfighters. While on sentry duty, Johnson fought off a German raiding party in handto-hand combat, despite being seriously injured. As the first American to receive a Croix de Guerre with a golden palm, France's highest award for bravery, Johnson became a national hero back home. To read Medal of Honor: Henry Johnson online or download a free copy, please visit www. ausa.org/johnson.





"Our Army will hut this Winter at Valley forge"

George Washington, Decision Making, and the Councils of War

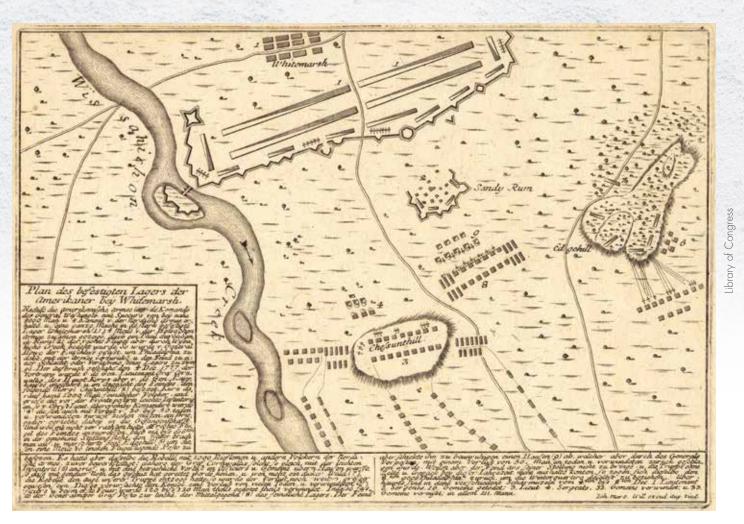
By Ricardo A. Herrera

The choice for the Continental Army to winter at Valley Forge was not a foregone conclusion. It came after a series of deliberations between General George Washington, the governors of Pennsylvania and New Jersey, the Continental Congress, and the army's generals. The considerations behind that choice reveal the complexities involved in the decision, and the compromises and calculations that measured and balanced political concerns, military needs, and even popular perceptions. In all wars, no decision or action can take place in a vacuum. Warfare exists within military, political, social, cultural, economic, and environmental realms. Some wartime decisions and actions are certainly far less consequential than others; some may reverberate beyond the theater of war to the highest councils. War is a political act, and Washington and his generals were all cognizant of the army's place within those other spheres. Whether the army should wage a winter campaign or take up winter quarters was as much a political decision as it was a military matter. Thus, in deciding what the army would do over the winter of 1777–1778, Washington weighed political considerations at the continental, state, and local levels against military needs and the concerns of the populations most directly affected by the army's proximity.

WASHINGTON'S DECISION-MAKING METHODS

Many historians have debated the arguments and analyzed the factions behind Washington's decision to canton at Valley Forge. The most penetrating analyses are found in Benjamin H. Newcomb's "Washington's Generals and the Decision to Quarter at Valley Forge" and Wayne K. Bodle's *The Valley Forge Winter: Civilians and Soldiers in War.* Newcomb credits Washington with a process of logical elimination after having considered the views of his generals,

Above: The March to Valley Forge by William Trego



A plan of the defenses of Whitemarsh

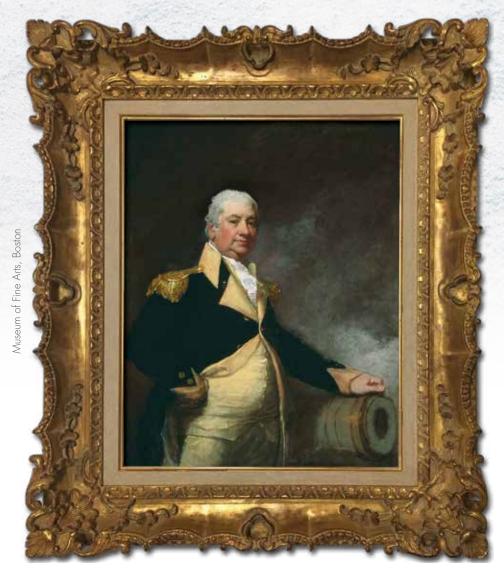
the Congress, and Pennsylvania's Supreme Executive Council (the commonwealth's governing body). In the end, Newcomb concludes, military necessity outweighed political considerations. Bodle, by contrast, argues that Washington's choice represented a compromise between the needs and interests of various parties. In this compromise, each party-Congress, Pennsylvania, New Jersey, and the army-surrendered and gained something. Though the compromise was not perfect, it satisfied most of the vital interests and needs of the participants. While encamped at Valley Forge, Bodle explains, the army represented the national government and at the same time acted as a "proxy for the police functions of civil government." In return, Pennsylvania promised to assist with the army's material needs, and Congress agreed to look seriously at a thorough reform of the army.1

In these and other examinations of the factors contributing to Washington's choice to winter at Valley Forge, an analysis of Washington's own decision-making process is nevertheless missing. Most recently, Lindsay M. Chervinsky has examined how Washington "used his experience as commander in chief as a template for governing, creating social environments, and managing complex personalities" when he instituted the cabinet system within the executive branch of government. She argues that Washington "modeled cabinet meetings after his councils of war." Moreover, Chervinsky emphasizes Washington's style of leadership as collaborative, advisory, and predicated upon consensus. In order to minimize acrimony, temper more querulous personalities, and determine the disposition of his generals, Washington habitually submitted to them in writing the questions for discussion. He required written responses before convening a council. In this way, Washington managed the conduct but not the outcome of the process. With his generals' written opinions in hand, Washington knew their views, what the majority opinions were, and whose views were not in the majority. Knowing their

minds, Washington guided the discussion, and used their views to inform his final decision. A decision once arrived at had withstood the scrutiny of others and now had general acceptance. Washington was the general and commander in chief, but his leadership style in council was thoroughly democratic.²

THE PROBLEM OF PHILADELPHIA

Following victory at Brandywine on 11 September 1777, the British Army occupied Philadelphia, the capital of the American confederation. Located on the Delaware River, Philadelphia was the largest city in the United States and a major port. Its possession by the British was symbolic and geographically and economically important. Not wanting to surrender the city without a fight, Washington attacked at Germantown on 4 October, but failed to retake the city. Following this failure, the army withdrew to the northwest, but soon marched southeast, and then occupied and fortified a ridgeline at Whitemarsh on 3 November.



A portrait of General Knox by Gilbert Stuart

Shortly before occupying Whitemarsh, Washington had reassessed the army's situation. He evaluated the risks and opportunities, gave thought to the evolving operational and strategic environment, and reconsidered potential courses of action. As early as 26 October, Washington had weighed the risks and benefits of two options: extending offensive operations into the winter or entering quarters for the season. That day, in a "Circular to the General Officers," Washington queried his generals about the possibility of launching another attack against the British Army. Were the army to do so, and were that attack not successful, where, he asked, "shall [we] retreat to?" In subsequent questions, Washington asked, "Where and in what manner supposing the Enemy to keep possession of Philadelphia, had the Continental Troops best be Cantoned after they can no longer keep the Feild?" And next, "What measures

can be adopted to cover the country near the City, and prevent the Enemy from drawing Supplies therefrom, during the Winter?" He was keenly aware of the need to maintain a significant presence near Philadelphia, but also to deny the British Army the ability to sustain itself from the region.

The only surviving responses to this circular come from undated drafts by Brig. Gen. Henry Knox and Brig. Gen. Anthony Wayne.³ Knox opposed renewing the effort against Philadelphia. Expressing little faith in the ability of the Continentals after a hard campaign or in the militia in general, he demurred without the advantage of overwhelming strength. Taking the offensive in an open field fight was one thing, but storming fortifications were an altogether more challenging one that depended on "the best discipline, the firmest spirit, and good officers, to storm works or to make an impression on British troops." Even if an attack were successful, Knox predicted it would be of little benefit. Americans would only gain "an empty, city for winter quarters," while the British withdrew to their ships in the Delaware River. Knox counseled patience instead. He believed the surrender of Lt. Gen. John Burgoyne's army at Saratoga, New York, that October would "enable America to terminate the war almost on her own terms," but he did not offer a timetable. In the meantime, Whitemarsh, if properly fortified, would enable the army to maintain an advantageous position until forced to withdraw into winter quarters. As for winter quarters, Knox was of the view that "Reading ought to be fortified and made the principal cantonment," with Allentown, Bethlehem, and Easton serving as subsidiary posts, "all of which ought to be fortified by redoubts, with which and the stone houses they would be impregnable to any surprize or siege in the winter."4

In Knox's judgment, large numbers of cavalry and mounted infantry would be needed to forestall British foraging. Mounted troops, with their superior mobility, would prevent "The evils of the enemies drawing supplies." The cavalry, however, would have little staying power. For that, he believed infantry mounted on "Waggon horses may very well answer this purpose in conjunction with the light horse." Each of the dray animals, "as they are strong and hardy, will answer very well to carry two footmen, who must be well equipped with each two blankets, a warm jacket and overalls." Knox's solution was predicated on the availability of good horseflesh and adequate clothingboth of which the army lacked.⁵



A portrait of General Wayne by James Sharples Sr.

8

Brown University

Wayne restricted his answer to the matter of attacking Philadelphia. He was confident in the army's ability and in its chances of success. Should an attack fail, "we have every Road and the Whole Country open to favour our Retreat," he wrote. Conversely, attempting to keep the field and deny the British supplies would hasten the destruction of the Continental Army, for "when they [the British] are once in Possession of the River will Answer no Other end than to fatigue and Distroy our own Soldiers." Wayne believed it was imperative that Washington attack. Washington did not let the matter rest there. He returned to it several times, each time probing the generals for their opinions, while also corresponding with Congress and the governors of Pennsylvania and New Jersey.6

Proceeding this way, Washington used his councils of war in a manner that resembled a primitive staff system. Through the councils, Washington could suggest, solicit, and discuss possible courses of action with his senior commanders. While not exactly corresponding to a modern staff, the councils functioned as a forum for hashing out tactical, operational, and strategic matters. Washington received and weighed input from officers, politicians, and trusted advisers. Moreover, he and his officers incorporated assessments of the natural and manmade environments. Indeed, they treated aspects of the environment as silent but omnipresent participants whose voices should be heard and heeded: trees for fuel and shelter; water for drinking, cooking, and bathing; terrain for defensive works and drainage; road networks for transportation; river and stream courses as obstacles; farms for sustenance; meadows for grazing horses and cattle; cities, towns, and villages for housing troops and local populations who might compete with the army for basic needs.

In the aftermath of Germantown, the army's next moves had been anything but fixed. Washington's responsibilities increased. As commander in chief of all Continental forces, Washington commanded not just the Continental Army, but also what remained of the Continental Navy and the militia serving with the army. The decentralized nature of the American confederation, the wide-ranging operations of the army, and the disjointed and ever-faltering supply system demanded that Washington and other field-army commanders communicate with members of Congress and the states'



A print of General Howe by John Morris

governors. The autumn of 1777 was a time of soliciting and receiving advice, weighing options, and negotiating with continental and state authorities. The complexity of war could not be escaped, but due to the nature and organization of the eighteenth-century military—despite having many aides-decamp and secretaries—Washington had to shoulder many of the responsibilities that today would be handled by larger, dedicated staffs.⁷

Through the winter of 1777–1778, Washington's close military circle numbered about nine officers who were either aidesde-camp or secretaries. They generally copied and delivered orders and served as Washington's eyes and ears. The chief officers and civilians of the army's staff departments numbered another twelve to fifteen or so. Their experiences, abilities, and talents varied. Many ably oversaw their duties, whereas others fell short. Often, this variance in ability compelled Washington to address minor matters that others should have handled. In modern military parlance, Washington acted as his own chief of staff, as well as his own chiefs of intelligence, plans, current operations, and future operations. He dealt with clothing and feeding the army, its transportation, and its finances, but also with the minutiae that in modern armies is the province of subordinate and even noncommissioned officers. Faced with an assortment of responsibilities, Washington relied upon his generals' counsel for major decisions, particularly in councils of war.⁸

Washington listened to, reflected on, and weighed the arguments made in council. His decisions often were faulty, his focus even blinkered, but more often than not, Washington demonstrated commendable flexibility and adaptability. Thus, as British General Sir William Howe acted and as Washington's understanding developed, he

Courtesy of Age of Revolutions

adjusted his plan, such as it was, to meet the changing circumstances. From his original intent of defending Philadelphia, Washington's concept of the campaign evolved. Following the capture of the city by Howe's forces, Washington had decided to retake it, but in the aftermath of Germantown, Washington drew upon the counsel of others to reframe his understanding of what he faced and recast his immediate intentions.

On 29 October, Washington posed another set of questions, similar to those asked on 26 October, to his council of war. In attendance at this council were Washington, major generals Nathanael Greene, the Marquis de Lafayette, Alexander McDougall, Adam Stephen, and John Sullivan, and brigadier generals Thomas Conway, Jedediah Huntington, Henry Knox, William Maxwell, Peter Muhlenberg, Casimir Pulaski, William Smallwood, James M. Varnum, Anthony Wayne, and George Weedon. On the whole, the council did not believe it prudent to attack Philadelphia. Instead, the council proposed that some of



A cigar box depicting Washington and his council of war

the army should reinforce Forts Mercer and Mifflin (which defended the underwater obstacles, known as *chevaux-de-frise*, that



General Sullivan

choked British shipping on the Delaware River) while the largest portion of the army would "post on the ground a little to our left [at Whitemarsh], which [had] been reconnoitred and reported by the Engineers." The council deferred its answers about where the army should winter, though the deferment did not equal indecision or an end to the matter. Washington continued to mull over the decision, to seek others' advice, and to accept input from unsolicited sources. Throughout the decision-making process, he maintained a steady flow of communications with all of the interested parties.⁹

One such interested party was General Sullivan, who rejected "A General Action" against the British and emphasized to Washington that it "is by all means to be avoided by us at present." However, if their forces were to attack Howe's but were unsuccessful, Sullivan argued that the army should concentrate at Reading. As for winter quarters, Sullivan, like Knox, thought that fortifying Germantown would give the army an advantageous advanced position from which to limit British freedom of maneuver. This, of course, ignored the crossing sites over the Schuylkill River. Sullivan further recommended using Bristol, Burlington, Bordentown, and Trenton, New Jersey, as locations to "Refresh & Discipline our Troops." While encamped, Sullivan advised calling upon Pennsylvania to "Furnish Scouting parties" that would act in conjunction with the army in their "measures . . . to Cover the Country near the City and prevent the Enemy from Drawing Supplies

ibrary of Congress



Governor Livingston

Therefrom During the winter." He suggested short tours of duty and frequent rotations to avoid burdening the militia. In many ways, Sullivan's thoughts paralleled the broader direction of thought among the generals. He diverged, however, in suggesting New Jersey, something that undoubtedly would have pleased Governor William Livingston.¹⁰

When the army had advanced to Whitemarsh, one of Washington's objectives was to provoke the British into attacking it. But when Howe declined the temptation, Washington once again had to reassess what he faced and what he wanted to accomplish. He had to balance his desires against the wishes of Congress, local politicians, and the army's capabilities.

WEIGHING THE RISKS OF A WINTER OFFENSIVE

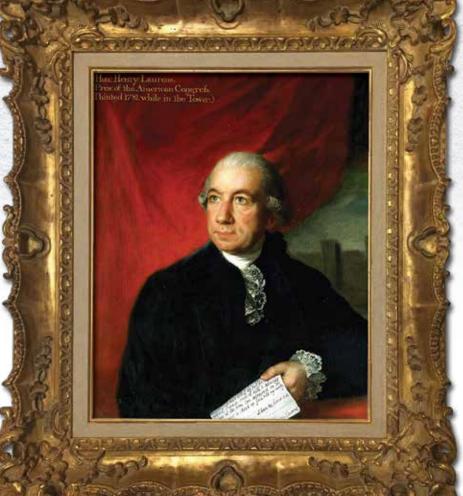
Following the late October councils, Washington informed the president of the Continental Congress, Henry Laurens of South Carolina, that he had "not yet come to any determination respecting the disposition of our Troops for the Winter." Because of the matter's "great importance," Washington suggested that they "be silent upon it." He had yet to decide about continuing the campaign or entering winter quarters. Each course of action had much to recommend it, and Washington still seemed to be looking for an opportunity to fight. Writing in generalities, Washington thought that the army might wrest "many salutary if not decisive advantages" by continuing the fight into the winter. That, however, depended upon properly clothing the army. Without uniforms and shoes, Washington foresaw the possible "destruction" of the army. Aggressive, and ever the risk taker, and

willing to put aside the council's advice, Washington looked favorably at the prospects of a winter campaign, provided that the army was properly prepared.¹¹

The previous year's winter campaign may have given Washington hope. He had, after all, won small but significant victories in the winter of 1776-1777 at Trenton and Princeton. Those victories had trounced a Hessian brigade, mauled a British brigade, and forced Howe to virtually abandon New Jersey. What General Howe had gained by the end of 1776, he lost by the beginning of 1777. Washington's army and its officers had possessed less experience then, yet had been successful. The militia had fought a forage war against the British Army, attacking small parties in skirmishes and removing possible sources of supplies from the New Jersey countryside. Militiamen, often operating in conjunction with Continental soldiers, had forced the British to send out

ever larger formations to gather food for their troops and animals. The army Washington now commanded had ample experience; it performed well under trying circumstances and, even when bested in battle—a not infrequent occurrence—it held together in retreat and came back to fight again. Under these circumstances, a second winter campaign was worth serious deliberation. However, despite these legitimate considerations, the army's poor material condition, as well as its ever-present commissary problems, hampered the possibilities of winter battle.¹²

Still, the deliberations regarding a winter offensive proceeded apace, even with scant provisions and clothing. Burgoyne's surrender to Maj. Gen. Horatio L. Gates at Saratoga was a "glorious turn" in the war, which buoyed Washington's hopes. Sharing his enthusiasm and renewed spirit with Brig. Gen. Thomas Nelson Jr. of the Virginia Militia, Washington wrote that he believed



A portrait of Henry Laurens by Lemuel Francis Abbott



a winter campaign, "(if we can get our poor ragged & half naked Soldiers cloathed) indispensably necessary." With some 5,000 British, Hessian, and Loyalist soldiers taken off the board, Washington implied that Gates's Northern Army would shift southward and join with the Main Army. Combined, their forces might compel Howe to abandon Philadelphia, or, at the very least, become "greatly distressed" if they "could draw a large body of Troops round the City." By challenging Howe's ability to project his reach, extend British control, and subsist off the nearby counties, Washington believed that he could draw the redcoats into battle.13

In a 24 November council, Washington once more posed the question about a winter campaign to his generals. That evening, Brig. Gen. John Cadwalader of the Pennsylvania Militia submitted a "Plan for Attacking Philadelphia." Although there are no known minutes of the meeting, several generals submitted their views to Washington over the following days. Nathanael Greene and Henry Knox voiced their opposition in wide-ranging arguments that considered the temper of the people, flagging support for the army, intelligence about the enemy, and even Continental currency. Greene, for example, recognized "An excess of caution which councils of War are generally productive of," but upon careful reflection did not believe that the "probability of the attempts succeeding" warranted an attack. Ever the good soldier, Greene was nonetheless "very willing to lay aside [his] own private Judgment and second the attempt" if Washington deemed it necessary. This attitude was not uncommon among the generals.14

Knox was worried that Washington might be considering the attack out of concern for his reputation, so the Boston-born artilleryman did his best to allay any such apprehension. Knox went on to link such an attack with stabilizing continental currency. "The state of the depreciation of our Currency," he noted, "has also been urg'd as a principal inducement to some desperate attack." Without naming names, Knox suggested that certain people believed that military success would help slow or even stop the dollar's fall. Knox addressed the inflationary pressures induced by "large emisions and some other causes," including the low taxes in some states that failed to restrict circulation. By raising taxes, Knox reasoned, the states would help stabilize or drive up the value of continental dollars, but he conceded that continental and state economic policies, even "in a time of profound peace and flourishing Commerce . . . would be equally depreciated as at present." Knox concluded by suggesting that the army concentrate and "take post at and Fortify Germantown, considering it as [their] Winter Quarters." Only after the army had put its defenses into good order should it consider battle, and if Howe then "declin'd" to fight, it would give proof of American "Superiority in point of Strength." However, Knox noted, "if [the British] should come out fight and defeat us, we have a secure retreat and Winter Quarters."15

Brigadier generals Enoch Poor, John Sullivan, and William Smallwood also opposed an attack. Poor's laconic response was a mere three sentences. While he was "Sencuble" about the need for an attack, he feared an "atact upon the lines Round the City of Philidelphia will be unsucesful therefore dont advize to it." Sullivan, by contrast, gave the matter a lengthy weighing of every "probable Consequence. . . . That occurred to [him.]" He considered the condition and placement of British fortifications, the enemy's readiness, the army's experiences, historical precedent, public sentiment, the potential effect upon continental currency, and the state of and risk to his "Excellenceys Character." In the end, Sullivan brooded that an attack "would be Hazardous & must End in Ruin to the Army & to the American Cause." In more compact prose, Smallwood "revolved in [his] Mind the Subject." He examined the proposition of an attack from a variety of views and ended by stating, "[I] must confess I am much embarrassed, I see the Propriety and Necessity of an Attack." Once again, popular



Ocherar i oor

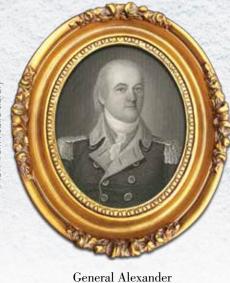
"Expectations," the army's reputation, and the sinking value of continental currency came into play, and drove Smallwood to see the need for an attack. Understanding this need logically, however, did not equate to supporting it. Smallwood foresaw disaster "from an Impression that our Troops are not equal to it" without overwhelming force. He preferred trying to draw Howe out of his fortifications into an open fight, the prospects of which Smallwood saw as "both Practicable, and probable."¹⁶

Five generals opposed attacking, while five were in favor. In addition to Cadwalader, who had proposed the action, Anthony Wayne, Brig. Gen. William Woodford, Brig. Gen. Charles Scott, and Maj. Gen. William Alexander, Lord Stirling (New Jersey's would-be Scottish nobleman)



A portrait of General Smallwood by Robert Edge Pine





argued for an offensive. Wayne prefaced his reasoning by telling Washington that he had given the question "the most Dispationate & Deliberate Consideration." Winter's approach made an attack urgent, but more than military necessity impelled Wayne to argue for an attempt against Philadelphia. He cited "the Credit of the Army under your Command, the Safety of the Country-the Honor of the American Arms ..., and above all the Depreciation of the Currency of these States" as justifications for battle. Everything, he wrote, "Points out the Immediate necessity of giving the enemy Battle." Even so, Wayne, like Greene, was not adamant in his argument. He offered an alternative that echoed in some measure Knox's suggestion for fortifying Germantown and using it to lure Howe into an attack. Still, Wayne preferred to attack Philadelphia. Appealing to Washington's sense of honor

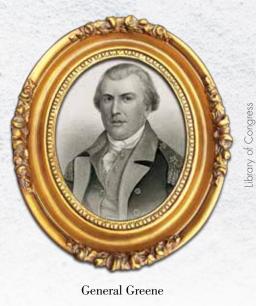


and his reputation, and forgoing any sense of subtlety, Wayne reminded Washington that "The eyes of all America are fixed on you."¹⁷

Part of Cadwalader's plan included a crossriver assault, and for that he proposed using elements of Greene's division, described by Charles Scott as the "Flower of the armey." In further support of the proposed attack plan, Alexander pointed out that Maj. Gen. Charles, Second Earl Cornwallis, was absent in New Jersey, which presented "a favorable opertunity," and that other unstated "Circumstances render this Measure absolutely necessary." Both Scott and Alexander limited their analyses to strictly tactical matters such as the disposition of assaulting columns; they never ventured beyond tactics into operational or strategic considerations.¹⁸

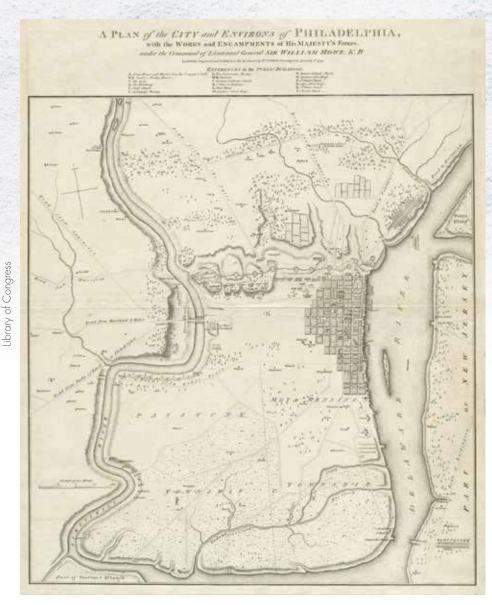
These five men were not alone in their desire to attack. Indeed, more than a few congressional delegates were sympathetic to the idea. Some representatives, like Cornelius Harnett of North Carolina, believed a "Strong reinforcement from [General] Gates' Army [would] be at head Quarters" soon and, once reinforced, Washington should launch an immediate attack. Were the attack to succeed, he wrote, "we shall be on our Legs again." Harnett dearly wished that all of the states would join in the attempt, believing that "One bold push may yet retrieve all." Striking a similar chord, Rhode Island's William Ellery thought the army, joined by "the hardy Sons of New England and the Militia that might be collected in this Quarter and from the Southward, might intirely destroy Mr Howe's Army this Winter," much as the militias of New York, New Hampshire, Massachusetts, and Connecticut, and the Continentals under Gates had done to Burgoyne's army. Ellery, like Harnett, wished for a truly continental effort, but in his enthusiasm he neglected to regard the limited potential of a republic that was not yet fully formed. The delegates' desires were noble and spoke to their higher aspirations, but when weighed against reality-the evidence of undermanned regiments, indifferent support from the states, and the reluctance of volunteers to enlist-they seemed fanciful.19

As generals and delegates offered their views and opinions, Washington reconnoitered the British lines from the west side of the Schuylkill River. What he saw on the morning of 25 November gave him pause. The British works were "much stronger than [he] had reason to expect." Reflecting on the condition of the army and the state of British



defenses, Washington concluded that an attack on Philadelphia was unfeasible, even irrational. Confiding in Greene, Washington wrote that he found the army's condition "distressing." He believed no "military principles" could justify his risking the army in an attack against the city, no matter the "expectations of the world." Were the attack to fail, the defeat could "prove the ruin of our cause," he wrote. Instead, Washington determined that "patience, and a steady perseverance in such measures as appear warranted by sound reason and policy" had to guide his decisions. Having solicited input from his most senior military leaders on multiple occasions and weighed their counsel against his own assessment of his enemy's strength, he had come to his own conclusions. Confident that Greene shared this point of view, Washington declared that it was time for the army to enter winter quarters.20

Washington foresaw the troubles that lay ahead of him in taking such a course of action. By 26 November, he had decided to concentrate the army in Pennsylvania. Washington anticipated more than a little discontent arising from Governor Livingston in deciding to withdraw forces from the "Jerseys. But how," he asked Greene rhetorically, "is it to be avoided? We cannot be divided when the Enemy are collected." Washington anticipated "evils . . . from throwing troops into the Jersey's." Suspecting that Howe intended to attack, Washington called upon Greene to return with his division, which was then across the river from Philadelphia in Haddonfield, New Jersey. If he had specific thoughts at that time on where to put the army, Washington did not disclose



them. However, "as far as I can Collect it," he wrote, the generals' "Current sentiment" was for "taking Post" on the west side of the Schuylkill, which would separate their forces from the bulk of the British contingent in Philadelphia. Washington did not reveal his thoughts for another four days. His silence was typical. While Washington had habitually kept his own counsel, in this case he was torn on where to canton the army. By keeping mum, he maintained his ability to influence the choice of winter quarters.²¹

Congress was in the dark about Washington's thoughts, but it was not about to let rest the idea of a winter offensive. On 28 November, unhappy about Washington's inaction and worried that he intended to take the army into winter quarters, a delegation repaired "forthwith . . . to the army" at Whitemarsh. The Continental Congress's Camp Committee—Robert Morris of Pennsylvania, Elbridge Gerry of Massachusetts, and Joseph Jones of Virginia-was to confer with Washington "in a private confidential consultation . . . to consider the best and most practicable means for carrying on a winter's campaign ..., an object which Congress have very much at heart." Congress had no intention of looking into winter quarters. Indeed, part of the committee's charge was to quash any thoughts of retiring for the season. After having arrived at Whitemarsh on 3 December, Gerry took up his pen and wrote to John Adams about his mission. He stated that Congress was opposed to the "Desire of going into Winter Quarters . . . unanimously." Moreover, Gerry, Morris, and Jones were "not disposed to come to Camp for the purpose of promoting this plan." Should Washington be averse to Congress's desires, Gerry reminded Adams of the committee's "large Powers" and its willingness "in exercising them so far as shall appear necessary to accomplish something



ndependence National Historical Parl

Monmouth College

Art Institute of Chicago

A portrait of Robert Morris by Charles Willson Peale



A portrait of Elbridge Gerry by James Bogle



A portrait of Henry Dearborn, shown here as a major general, by Gilbert Stuart decisive." This congressional delegation was not on a fact-finding mission; its purpose was to spur the army into action. Civilian control and oversight of the military was supreme, and Gerry, it seemed, was more than ready to exercise that authority.²²

The scene that greeted the delegates at Whitemarsh could not have inspired confidence. They entered the encampment of an army that had been in frequent contact with the enemy and on the move since the summer. It was an army "half in Rags & half of them without Blankets," wrote Henry Laurens. They had but "Huts of sticks & leaves," noted Dr. Albigence Waldo, surgeon of the 1st Connecticut, that "shelter'd [them] from the inclementcy of the Weather." The 3d New Hampshire's Lt. Col. Henry Dearborn deemed it "very Poor Living." Yet, despite this dismal picture, Laurens had "hope"-an often unacknowledged but critical element of military and political planning—"that reenforcements of Clothing & Men [would] enable [the army] soon to drive [the British] into their Ships." Hope aside, this was not the picture of an army prepared for a winter campaign, no matter Congress's insistence or authority, and Washington recognized it.23

THE DEBATE OVER THE ARMY'S WINTER QUARTERS

On 30 November, a few days before the delegation's arrival, Washington assembled another council, and revealed his intention to lead the army into winter quarters. The army was in no state to resume the offensive; it needed time to rest, recover, recruit, and prepare for the spring campaign. Washington solicited thoughts from his generals on where to winter and "required" them to submit their views to him by 1000 the next day.

John Cadwalader, who shared Washington's sentiment that the army should canton for the winter, relayed the most recent developments in the army to Joseph Reed, a former colonel and onetime aide-de-camp to Washington. Reed had left the army in January 1777, but he continued to serve Washington as a volunteer aide-withoutrank. Cadwalader, who earlier had presented a plan of attack, now reported that "Many of the officers are for going into winter quarters on the line from Lancaster towards Easton," though this was something he himself did not recommend. He was sure the army would be "disappointed" in its quest for quarters because of the overcrowding by

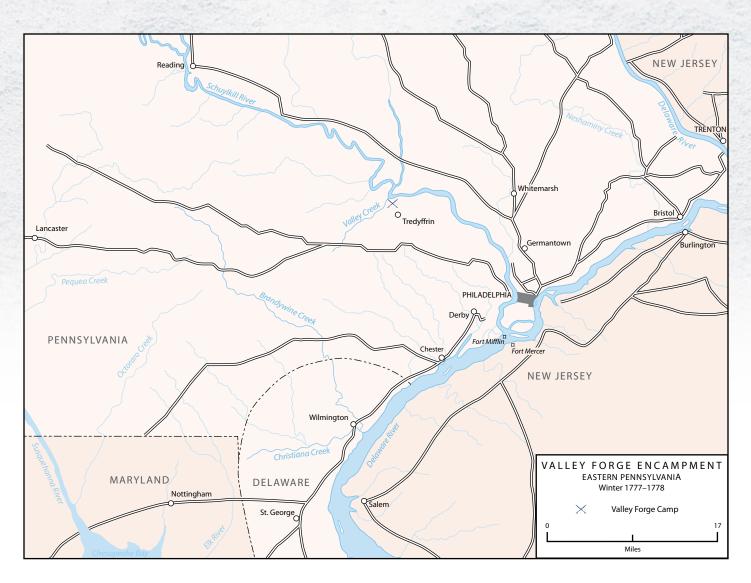


Joseph Reed

refugees from Philadelphia. Moreover, Cadwalader feared the generals would set a poor example by "going home" for the winter and that soon "The field officers will follow their example. Captains and subalterns will expect the same indulgence, and the soldiers will apply for furloughs, and if refused will desert."²⁴

As for the spring campaign, General Cadwalader judged it "impossible" for a geographically dispersed army to concentrate quickly in response to a threat. In the meantime, British forces would have complete freedom to range through the Delaware River Valley. In turn, he predicted "vast numbers [of people] will apply for protection" to the British so as to be spared their depredations. Without the Continental Army to challenge the British Army and protect the population, Cadwalader foresaw a "dispirited" population, the collapse of the currency, and an end to recruiting. "Inevitable ruin must follow," he concluded.25

What to do? Cadwalader noted, but did not name, the member of the council who recommended that the army occupy "Wilmington and the little towns in that neighbourhood." This met with Cadwalader's approbation, as did the suggestion that the army "build huts for those who cannot be provided with quarters." Moreover, he continued, "If we do not do this, the enemy may take possession of that post with 2000 men," which would provide the British with a range of offensive options. From Wilmington, the British could extend their operational reach and recruit from a more extensive base of undecided or Loyalleaning Americans, feed off of Delaware and Maryland, and interdict continental supplies arriving at the head of the Chesapeake Bay. However, if the Continental Army possessed Wilmington, it could use the city as a base for attacking British shipping with "gondolas" while providing security to Delaware, Maryland, and supplies arriving from the Chesapeake. Come spring, the



army would be ready to fight and could "take such measures as may oblige the enemy to come out and attack us in the field."²⁶

Cadwalader was not alone in arguing for Wilmington. Maj. Gen. John Armstrong, along with generals Scott, Greene, Lafayette, Smallwood, and Wayne also favored it. General Armstrong, like his fellow Pennsylvanian Cadwalader, thought the Reading to Lancaster line running through the "back Villiages of this State" a poor choice. The sites along this line were too distant from Philadelphia to challenge the British and therefore afforded Howe's army "large latitude" to range freely through the spring. Armstrong cautioned Washington that "every doleful & pernitious consequence must be expected." Therefore, Armstrong suggested that the army establish its main base of operations in Wilmington and then extend its line northward through Downington, Pennsylvania, on the Brandywine battlefield where they had fought a few months before, with the "residue." Smaller outposts, such as "the White Horse [Tavern]

on the Lancaster road," could provide "Some Cover" for the soldiers. Meanwhile, General Scott spoke "Fully" at the council, and was in agreement "that Wilmington and its Neighbouring Villages [were] the Most Elligable" for the winter.²⁷

Nathanael Greene, Washington's most trusted subordinate, rendered his opinion following a lengthy disquisition on the purpose and nature of winter quarters. Waxing philosophically, he said, "An army without a country is like an infant incapable of feeding or cloathing itself." He noted, too, the advantages of withdrawing a distance from the enemy. It would afford "a total relaxation . . . [for] the good of the army" and enable recruiting. The problem, however, was that by taking the army "out of danger, pleasure and dissipation will be the consequence." Greene believed that a position closer to the British would maintain and perhaps improve the army's "health and discipline . . . by constant attention and exercise," as it patrolled and exposed itself in some measure to the British threat. Moreover, a closer position would enable the army to protect well-disposed "Inhabitants" living between the armies. Never one to mince words, Greene bluntly stated "Mankind will only be subservient to your purposes in proportion as they conceive their interest and happiness connected with your measures." It was, therefore, not so much the physical location itself that mattered, but rather what the location offered the army and what the army could do while there. The army had to "afford as much cover to the country as possible" while still "prevent[ing] the disagreeable influence" that British troops would have if given free range.28

After further reflection on the army's requirements, human nature, and history, Greene— an autodidact with a vengeance made his point. Wilmington was the "proper medium between these two extremes" of relaxation and constant readiness. The line from Bethlehem to Lancaster was "a great distance back in the country" and therefore not a good option. Besides giving the "Enemy

American Battlefield Trust

a great range in front and upon each flank," the army's wintering in that area would "distress the back inhabitants" through its continuous need for food. Wilmington would afford a measure of security to the army, and forage and provisions would be more easily and cheaply obtained than from the line in Pennsylvania. In Greene's mind, this would enable the army to "protect the lower Jersey, and not less the upper," and by doing so the army would "distress" British foragers while extending the Continental presence over a "greater extent of country than any other." In closing, Greene suggested posting a "brigade of continental Troops in the Jerseys and about one thousand militia between the Delaware & Schuylkill, and about a thousand more at or near the Gulph-and an advance post at Chester of continental troops."

Generals Lafayette, Wayne, and Smallwood made similar points in their views on Wilmington, with Smallwood adding "I wou'd chearfully resign myself to a Den the ensuing & many other Seasons if found necessary." The generals stressed a number of like-minded arguments for Wilmington, including keeping a position close to Philadelphia so that the army might challenge the British for control of the region, deny them the ability to subsist from the countryside, protect the population, project power on behalf of the continental and Pennsylvania governments, and prepare the army for the upcoming campaign season.²⁹

Despite all of its advantages, Wilmington was still indefensible. Its housing stock; its proximity to Philadelphia, New Jersey, Maryland, and the Chesapeake, with the rich surrounding countryside; and more recommended it. Yet, save as an outpost for the Main Army, it simply would not do. Situated between the confluence of the Brandywine Creek to the north and the Christiana River to the south, Wilmington sat in the long, low floodplain of the Delaware River Valley, only a few feet above sea level. The flat terrain would "expose this Army" and invite an attack, cautioned General Weedon. In order to defend the cantonment, the army would need to erect extensive field fortifications, but they, too, would suffer from Wilmington's hydrographic profile. (Current scientific data suggest that the water table was but six to seven feet below the surface and subject to seasonal and tidal variations.) Whatever fortifications the army could erect would be minimal and unable to withstand a bombardment or determined

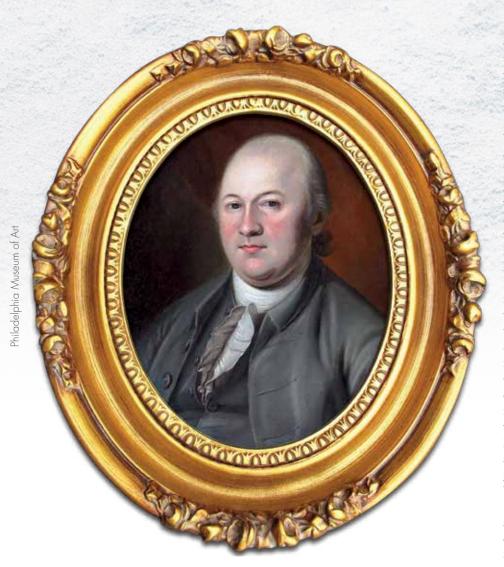
assault. Furthermore, Wilmington's situation as a water-bound cul-de-sac, amid two considerable watercourses, would make it a potential trap. The linear defenses of the Brandywine and Christiana looked inviting, but they also inhibited the army's ability to maneuver and retire from the enemy should that be necessary. If that were not enough to discourage encampment at Wilmington, the town's nearness to the Delaware also exposed it to the possibility of amphibious assault by the Royal Navy, whom Weedon called the "masters of the River."30

General Weedon considered and then dismissed Wilmington. Its location was too near Philadelphia for comfort; the army needed distance between itself and the British. Furthermore, he found "Cantoning by Detachment . . . a dangerous experiment." Weedon looked "on this Army as the Herculean hinge, on which American Independance turns," and thus strove to shield the army. Concentration in the face of the enemy was good, but distance was better. With Wilmington out of consideration, Weedon proposed that the army should winter somewhere along the line of Reading to Lancaster.31

Other advisers shared Weedon's viewpoint. Maj. Gen. Johannes de Kalb, a veteran Bavarian officer of the French army, opined that what the army needed most was "Rest, Recruiting & Cloathing" to prepare it for the next season. He agreed that distance was the answer and that Wilmington was too near and too exposed to the enemy. Without "very Strong reasons" to continue considering Wilmington, de Kalb determined it was out of the running. Wintering "between Lancaster & Reading," however, would give the army the respite, "tranquility & safety" it so desperately needed. The army's chief artillerist, Henry Knox, was similarly disposed and "concise" in giving his "opinion." Like de Kalb, Knox believed "rest and refreshment" were imperative for the regiments, whose



A portrait of General de Kalb by Charles Willson Peale



A portrait of Thomas Wharton by Charles Willson Peale

ranks were in dire need of rebuilding. The army's infantry battalions were not the only formations in need of recruits. The artillery, the cavalry, and the trains need reinforcements and horseflesh, too. In addition, the "Carriages of various kinds," needed repair.³²

Knox would have preferred "a place . . . about 30 miles distant from & North or N.W. of Philadelphia" over "taking post at Wilmington or retiring so far back as Lancaster & Reading." Being closer to Philadelphia would enable the army "to cover a greater extent of Country." Although the Reading to Lancaster line was not an optimal location, he reasoned it would suffice if there were quarters enough for the army. Despite the distance, Knox did not envision surrendering the countryside to the British. He advocated "parties of 500 or 600 to be kept out on command advanc'd 30 or 40 Miles, under the command of active partizan officers who should be directed to be constantly moving about to prevent the enemy making

any disposition to surprize them." These roving formations would provide security for the army as they challenged the British for control of the area.³³

Like so many others, the Ulster-born William Maxwell agreed that rest, recovery, and "recruiting" in preparation for the next campaign were of the foremost importance. Thus, he believed it was imperative "to ly at such a distance from the Enemy that they were not liable to be harrased by them during the winter." If his "Excellencys chiefest object" that winter was "covering the Country," then Maxwell suggested taking position somewhere on the west bank of the Schuylkill about thirty miles from Philadelphia, with the army's left along the river and "a party of observation on the East side." If, however, "refreshing and recruiting our Armey be your Excellencys chief object," Maxwell continued, then Reading to Lancaster was the answer. Maxwell still counseled stationing "a party of observation"

on either side of the Schuylkill to "prevent the Enemys partys from penetrating far into the Country" and another in New Jersey to relieve the militia in his adopted home state. Maj. Gen. John Armstrong of the Pennsylvania Militia was of a similar mind. Writing to President Thomas Wharton of Pennsylvania, Armstrong shared that "General Washington must now without loss of time take some new Position" on the west bank of the Schuylkill and "occasionally annoy the Enemy." It seemed as if the winter would be an active one for the army, whether it retired or not, especially if the generals had their way.³⁴

"The Several places proposed in Councill," noted General Sullivan, "have their Advantages and Disadvantages but that which has the Least objections ought to be fixed upon." Sullivan reiterated the by-now familiar list of intentions behind taking up winter quarters. Covering the countryside, resting and drilling the army, recruiting volunteers to reconstitute the depleted ranks, and "otherways prepare it to take the field with vigour Early in the Spring." He listed the various advantages and disadvantages of "The great valley on the other Side Schulkill ..., Wilmington & its Neighbourhood . . . , [and] from Lancaster to Reading." Were the army to winter in either the "great valley" or "Wilmington & its Neighbourhood," Sullivan believed "a Winters Campaign must be the Consequence," which was an event "to be Avoided." Thus, Sullivan opted for the more distant, but safer location in the interior. While his arguments did not offer very much new insight, Sullivan's mention of the "great valley" did suggest an alternative to both nearby Wilmington and the far-removed Pennsylvania backcountry. As it would turn out, Sullivan was not alone in mentioning Pennsylvania's Great Valley as an option for the Continental Army.35

After considering the three choices, General Alexander expressed his doubts about Wilmington, too. Alexander thought its stock of buildings too few and incapable of quartering "above one third part of the Army." Moreover, Wilmington was too close to Philadelphia and "one of the Most dangerous Scituations that I know of." Noting the terrain, Alexander foresaw trouble should the British descend upon the town, for "our Army would have no Retreat, [and] we should be reduced to the Necessity of fighting them, with the Delaware and two Other Impassable Waters on our flanks and Rear." Instead, Alexander gave his approval of "The third proposeal . . . , to Cantoon the Army in the Towns of Reading & Lancaster and the Villages between them or in their Vicinity," but only "if practicable," he qualified. Not surprisingly, Alexander's principal concerns were rest, recruiting, and security, and if that line proved impracticable, the army could shift to the "Towns in New Jersey which are in a great Measure deserted by the Inhabitants."³⁶

"Upon the Whole," Alexander preferred "hutting the Army somewhere in or Near Tryduffrin especially if it is so fine and Rich a Country as has been represented" by unnamed individuals. Certainly, both the British and the Continental armies were familiar with Tredyffrin Township. It sat along the Lancaster to Philadelphia and Swedesford roads in eastern Chester County, south of an east-west bend in the Schuylkill River, which ran in a generally northwest to southeast direction. Valley Creek, along the western edge of the township, flowed northward into the Schuylkill River. About eighteen miles northwest of Philadelphia, the township had witnessed the passage of British, Hessian, and American soldiers earlier in the year.37

By taking a "possition in the Valley," Alexander noted, the army could "Cover as much or more of the Country than any other that can be pointed out." Alexander used the word "Country" expansively, referring to "Chester & Lancaster Counties" and more. The position would be useful for interdicting British movements into or "against Maryland & the Lower Counties on the one Side and a Great part of the Country between the Schuylkill and delaware on the other." Furthermore, he added, the position would secure the army's vital lines of communication with New Jersey, New York, and New England. These constituted key elements in the larger contest for the peoples' support, the region's resources, and the army's supply lines. If the army extended its reach southeastward from Tredyffrin, "by takeing post at Darby," opposite Philadelphia on the west bank of the Schuylkill, Alexander predicted (rather optimistically) that Howe's forces would "never Venture out as far as Chester." The road network would enable Continental forces and the militia to extend their reach, despite operating on exterior lines of communications. Moreover, those roads would allow Washington to "pass a body of troops over between" the British and Philadelphia, prevent British penetration "Northward," and keep the



encampment secure. There was, after all, "but one way to Approach [the valley] from Philadelphia." The Great Valley's terrain, watercourses, road networks, proximity to Philadelphia, forage, and woods all recommended the location to Alexander, although its manmade environs left much to be desired.³⁸

Alexander praised Tredyffrin as he did no other location, yet he acknowledged that for all of the advantages the Great Valley offered it was "Still only an Encampment." Tredyffrin did not have enough housing stock to accommodate the army, which meant its soldiers would not enter proper "Winter Quarters." He was concerned over "not procureing for the Officers and Men that Comfort and Oppertunity of recruiting which they richly deserve after a long and fatigueing Campaign." The lack of such comforts meant that the army would have to build its own huts, housing more suitable for a short-term bivouac than a winter encampment. Proper winter quarters might "not [be] in our power to give them," he noted, "and should that be the Case, this may be as good a Scituation to hut in as any." Alexander was confident that the army could obtain provisions, "handily brought in from all Quarters," but "I know not," he admitted, about forage. Despite the area's limitations, Alexander's letter suggested a clear preference for Tredyffrin and the Great Valley. He had weighed the risks and advantages of the three choices, and came down squarely in favor of taking post closer to Philadelphia.³⁹

Two choices, Wilmington or the line from Reading to Lancaster, dominated the discussion among the army's senior leaders, yet even within the general officer corps there was an outlier. If Washington had not yet discovered that Brig. Gen. Casimir Pulaski, commander of the army's cavalry, was single-minded in the pursuit of his own priorities, he soon would. Rather than responding to Washington's query, Pulaski chose to ignore the question put before him, stating, characteristically, that he had decided to "leave the choice of Ground to those who are well acquainted with the Country." Instead, Pulaski considered the "advantages which will attend a continuance of the Campaign, and the Inconveniences which will flow from retiring to Winter Quarters." It was of no matter to Pulaski that the time to consider a winter offensive had passed; he pushed for action, believing it would "give courage to our Friends, be an antidote to the Effeminacy of young Soldiers, and enure them to the fatigues which veterans undergo." Pulaski's remarks were rudely dismissive of his commander's queries and the soldiers he desired to lead. There certainly were young soldiers in the army, so Pulaski may have had cause for concern regarding their experience, but after having spent the preceding four or more months in active campaigning, these troops were more than used to the realities of warfare. This did not matter to Pulaski. Should the army enter winter quarters, the "inactivity" of which would surely "ruin" it and "discourage the Country," according to Pulaski, he would "solicit His Excellency to allow [him] a body of Cavalry and Infantry to remain near the Enemys Lines." In this way, Pulaski would show the Americans how to wage war, prevent "effeminacy" within the ranks, and condition the younger soldiers to the realities of soldiering they had avoided that summer and autumn while on campaign.40

One last opinion had yet to be rendered. In Washington's request for his generals' counsel he had included Deputy Quartermaster General Col. Henry Emanuel Lutterloh. A one-time aide-de-camp to Prince Ferdinand of Brunswick, and formerly a major in the Brunswick Army, the German-born Lutterloh suggested establishing a "Line between the Two Rivers Shuylkill & Delavar." While Lutterloh's thoughts did not contribute much new insight, he was the only officer who explicitly mentioned "Wolley forge"-albeit only in passing, as a bridge site "over [the] Shuylkill . . . to get quik Communications." Rather than a simple cordon perpendicular to any British axis of advance, Lutterloh proposed something resembling a defense in depth, an arrangement designed to absorb the power of a British attack even as it forced that power to dissipate. Otherwise, Lutterloh's observations wove together a number of previous threads of thought offered by the generals. He advocated for "Wood & other comfords for the Men, in this Severe Weather" along with defensible terrain. The location had to be situated so as to allow the army to "Cover our Country, Stores, & provide the Necessary Supplyes easy, as allso prevent the Enemy from doing our Army any Material hurt." Rather than withdrawing too far into the country, Lutterloh recommended placing the army's forward elements at Germantown, with the army's right along the Schuylkill and its left on the "delavar." He proposed setting up Washington's headquarters at Pottsgrove, siting "The great Magazin" rearward at Reading, and maintaining the "Mooving Magazins & Backerys" in the vicinity of Trappe and Hickorytown.41

SETTLING THE QUESTION

On 2 December, after all of these viewpoints had been submitted, Washington confessed to Joseph Reed that he now found himself "exceedingly embarrassed" by the quantity and diversity of his senior officers' advice and the "capitol objections to each mode proposed." The "general Sentiment," Washington shared, was in favor of the "Reading to Lancaster" line, although Wilmington had "powerful advocates." While he neither endorsed nor dismissed the Reading to Lancaster line, Washington clearly preferred Wilmington, if for no other reason than he thought "that if the enemy believed we had this place in contemplation they would possess themselves of it immediately." So concerned about this was Washington, that he only "mentiond [it] under the rose" (that is to say, confidentially) to Reed. He hoped that Reed would be able to meet with him that day to discuss the matter of winter quarters, and Reed did not disappoint Washington.42

Reed had "every Reason to wish" for a winter campaign, but, he confessed, "the State & Condition of our Army" precluded it. Leveraging history in support of his argument, Reed hammered home the point that "every Winters Campaign made in Europe clearly evinces how destructive they have ever proved," even to the victors. Woe be to the Continentals if they failed in their endeavors. "Nay," wrote Reed, "the Experience of the Enemy last Winter confirms the Observation-a great Mortality-Discontent among Officers & Men, & considerable Desertions." Howe's forces were concentrated and far better supplied than Washington's. Quartering for the winter was the only answer, and it had to be nearby. Reed reiterated the familiar list of reasons—short supplies, a loss of popular support, "Distress to the Whigs," enabling British rest and recruiting, "a general Despondency & above all, a Depreciation of the Currency"— that stared him "in the Face as the Consequences of Retirement to distant Quarters." It was imperative that the army select a location much closer to Philadelphia than the Reading to Lancaster line. The choice, in this case, came down to a matter of "select[ing] that Plan which will be attended with the least" difficulties.⁴³

Like many of the generals, Reed advised "passing the Schuylkill" with the army's main body and taking post in Wilmington. From there, it might extend its line northwestward through "Downing-town." He advocated dividing the army into "Classes" of readiness, with those of the first class (the "most robust, healthy & well cloath'd") establishing a series of early warning posts near Philadelphia so "as not to risque a Surprize" by British forces. Between them and Philadelphia, a line of militia extending toward the Delaware River would provide additional security and depth in defense. These dispositions, Reed believed, would enable the army to cover southeast Pennsylvania, Delaware, and northeastern Maryland. Moreover, they would deny or challenge the British Army's access to the land's bounty; they would prevent the officers from "entring into Scenes of Dissipation, & Amusement;" and they would ease the army's supply shortages by drawing subsistence from counties to the west. Importantly, the more active and vigilant the army was, the greater its "Appearances of Success" would be, increasing the likelihood that the "Opinion & Spirits of the People" would be supportive.44

On 3 December, despite the fact that the majority of his advisers agreed with his original decision to not attack Philadelphia, Washington once more posed the question about a winter campaign to his generals. It is not entirely clear why he persisted in doing so. He may have experienced doubts about his decision to enter winter quarters, or perhaps he wanted to have one last go at the British. Always sensitive to political pressure, he also may have wanted to ensure a unified front among the generals when the delegation visited. It likely was some combination of these considerations, but the political aspects may have been the deciding factor (or "Particular reason") Washington reopened the question. With the congres-

National Park Service

sional delegation about to arrive and determine for itself the army's condition and suitability for active operations, Washington needed unity of purpose and thought. Once more, he solicited his generals' opinions on the "Advisieability of a Winters Campaign," including the "practicability of an attempt upon Philada," with massive reinforcements from the local militia. He required their "sentiments on this matter" the following morning.⁴⁵

Responses came quickly. Whereas some of the generals had previously called for a winter offensive and had even offered broad plans, this time they were nearly unanimous in their desire to quit the field for the season. Even the most aggressive among them had reconciled themselves to the reality facing the army and the American cause. It was imperative that the army retire from active operations so as to prepare for the spring campaign. History, past "practice," and theoretical "rules laid down in books" may have called for a continued exertion, but, as General Cadwalader pointedly observed, "precedents may justify us to military pedants, but as not the sensible Citizen."46

Brig. Gen. Louis le Bègue de Presle Duportail and General de Kalb opposed renewing the campaign, although under particularly favorable circumstances they were willing to risk attacking across the Schuylkill. Duportail found the proposition of assaulting Philadelphia's landward defenses altogether "too dangerous." The Continentals and militia were not up to the task of carrying the British fortifications, an undertaking that would challenge even the "best Troops in the world." If fortune cast favor upon the army by freezing over the Schuylkill, the army could attack across the river, Duportail conceded. Otherwise, he counseled concentrating the army and militia across the Schuylkill to "wait for the favorable moment." De Kalb, too, thought "The Passage over Schuylkill" might be attempted, but only with a large force. His preference was for winter quarters, noting that a winter campaign would "ruin the army by Sickness and discontent perhaps too by desertion." Should that happen, he questioned how "another almost new one [could] be raised."47

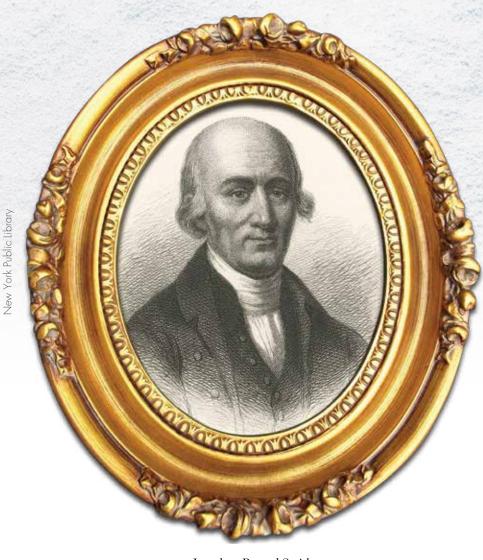
Even firmer in opposition to an attack stood generals Greene, Knox, Lafayette, Alexander, Varnum, Armstrong, Maxwell, Muhlenberg, John Paterson, Poor, Scott, Smallwood, Sullivan, Wayne, Weedon, and Woodford. Greene reflected on the ties A portrait of General Duportail by Charles Willson Peale

between public sentiment and the army's performance. As much as some Americans might want the army to continue the fight, and "however impatient the public may be for this desireable event," he wrote, "I cannot recommend the measure." Greene's fellow New Englander Henry Knox believed a winter campaign "under the present circumstances, [would] be the inevitable destruction, if not of the Liberties of the Country, yet of the present Army." To launch an offensive would, in the words of Lafayette, appear not as a wise and considered action, but rather an "almost desesperate enterprize." Tempting as an attack might be, "our hopes will be deceived," wrote Alexander. He predicted that "the Army [would] be totally ruined," and that they would find themselves "without one in the Spring." Mustering as much tact as he could, Alexander judged the idea "extreemly Unadviseable."48

Thus, Washington's most trusted commanders opposed continuing offensive

actions. Military necessity informed all of their opinions, but General Varnum reminded Washington of their collective responsibility for their soldiers and to their families. These were not hirelings or subjects, but the citizens of thirteen newborn republics, fellow Americans to whom they had a moral obligation. Varnum spoke to the nature of the republican experiment, writing with great passion that "The Soldiers, their nearest connections, the country at large, nay, God himself has commited them to our charge! We are answerable for their safety, their health, their comfort & their lives-If unnecessarily we deprive them of either, a consciousness thereof will plant daggers in our breasts that time cannot remove!"49

Moral considerations aside, more practical matters, such as preserving the army for the spring campaigning season, informed many others' views. General Weedon was emphatic that the Army was "the Bullwark of America and should be nursed and



Jonathan Bayard Smith

Cherished as the salvator of her Liberties. The Troops that compose it are not more than Mortal, and cannot worke maricles." John Sullivan was even less subtle, declaring that he thought "it much better to give them all Pensyvania for the Winter than to Ruin That Army which must Save America, if Saved at all."⁵⁰

And on it continued: voices that counseled caution, restraint, and patience; voices that foresaw waste, ruin, and disaster; and voices that varied in temperament, learning, and vision—but all of which were united in their opposition to another effort against Howe's army. The Continentals needed to enter winter quarters.⁵¹

THE FINAL MANEUVERS

Eighteen voices had spoken in near unanimity, but two advised Washington to take the field yet again. Brig. Gen. James Irvine thought a renewed offensive was "not only adviseable, but absolutely necessary." In his view, quartering for the winter "and leaving the country uncovered" would most assuredly result in "the ruin of our friends, give ease and plenty to our enemies, and do an irreparable injury to the cause we are ingaged to defend." Less adamant was Brig. Gen. James Potter, who thought the effort "Practable" if the Schuylkill was frozen through with "Ise." He had little faith, however, in a direct assault upon Philadelphia, even with a large "Bodey of Militia." If, however, the "Enjineers are Confidant that they can set the City on fier" from across either the Delaware or Schuylkill, then that was an altogether different matter. Were neither option to arise, then he advised quartering in Wilmington or nearby Newport, Delaware, or someplace "Conveneant" in Chester County. Potter was persistent, holding fast to his belief that they "must have a Winters Campaign" for at least another week.52

If wrestling with the opinions and objections of his generals were not enough, Washington now had to address the congressional committee and its agenda. On 3 December, shortly after the delegation arrived at the army's position at Whitemarsh, Elbridge Gerry had signaled to John Adams his desire for a winter campaign and his intention to exercise Congress's authority over the army to make it happen. It was not long, however, before the cold water of the military reality doused the fire of Gerry's congressional passion. There was more than enough to witness at Whitemarsh to cool even the most ardent desires of the congressional committee.

Robert Morris soon took pen in hand to summarize the committee's "Objections to a Winters Campaigne." The enemy was simply too formidable, he wrote, and no number of militiamen would suffice to make an attack against redcoats and Hessians in "Redoubts, lines & abbetties impregnable to any but a Superiour Number of Veteran Troops." Howe's advantage in possessing interior lines would allow him to adjust his defenses should the Americans attack across the frozen Schuylkill River. Moreover, he noted that the "Season [was] so far spent" that calling upon the local militias would be an act of futility. The local states would be unable to muster sufficient numbers until January, and even if they could embody a large number of militiamen, they would be even more poorly equipped than the wanting Continentals. Under such circumstances, patience was all that could be expected. Washington's troops would have to wait for the British Army to emerge from behind its fortifications, and then strike. Until such an opportunity presented itself, they would cover the country from winter quarters.53

As the committee members observed the condition of the army, listened to Washington's summary of the generals' opinions, and read several of the generals' letters, they found themselves unable to resolve the matter, thanks to one more voice that, though unsolicited, clamored to be heard. General Howe and the British Army had decided to express their views. Howe advanced from Philadelphia around midnight on the night of 4–5 December and took position before Whitemarsh around 0500, which "prevented [the delegation] from forming any Resolution

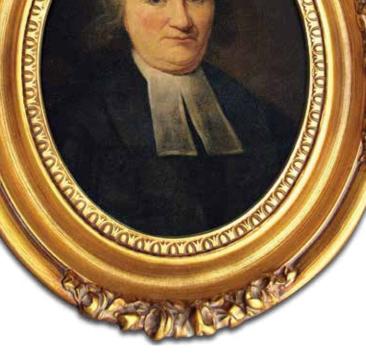
Princeton University Art Museum

thereon." The committee believed that a "general Engagement [would] take place; the Consequences of which must be very important," and they delayed making any recommendations or decisions until after the anticipated battle.⁵⁴

Even though Washington was prepared to do battle, Howe chose not to engage him. In anticipation of Howe's advance on Whitemarsh, the Continentals occupied and built strong fortifications along the ridgeline and prepared to receive the redcoats and Hessians. Aside from some skirmishing, however, no action took place. Howe likely demurred because of the American fortifications, his own memories of Bunker Hill, the season's lateness, and the need to preserve his army. With no prospect of coming to blows with Washington in the open field, Howe returned to Philadelphia for the winter. Thomas Wharton celebrated the "precipitate retreat of the enemy, after so much Gasconading." He deemed it "a convincing proof that their army is not so formidable as they would wish us to believe."55

The Continentals' spirit impressed the delegates. They found the army "much stronger than it [had] (been this Campaign)" and "desirous of engaging the Enemy," despite Gerry's carping to John Adams about the officers' lack of an "enterprizing Spirit." Yet, they had no idea as to Washington's intentions. Never one to tip his hand, Washington kept his thoughts to himself as he continued to mull over his generals' opinions, Congress' wishes, the states' calls, and his own preferences. Washington's silence frustrated the delegation and others, but it also masked one of his great strengths-his ability to weigh and consider difficult choices while maintaining a calm demeanor. Drawing upon his life's experience, his natural inclinations, and his profound self-discipline, Washington pondered the potential risks, advantages, and implications before him. Not wanting to shift responsibility onto others, Washington recognized that whatever the decision, it was now his to make alone.56

"I'm this moment call'd to Headquarters," wrote John Armstrong to Pennsylvania's Supreme Executive Council, "& suppose our next movement is the subject, & perhaps the much heavier point—a dispossission of this Army for the Winter, a point this of utmost importance



John Witherspoon

to Pennsylvaa." Armstrong's sense of the moment was prescient. Washington had not yet formally announced his decision, yet it was all too apparent to Armstrong and the army that the moment of decision had arrived.⁵⁷

At first, Washington had faced a seemingly clear and deceptively simple choice: renew offensive operations or enter winter quarters. Simplicity and clarity, however, were but surface deep. Evolving circumstances narrowed the possibilities, constrained Washington's options, and set the stage for the campaign's next act. Winter's onset and the army's condition, no matter its spirit, demanded an immediate decision. The Continentals had kept the field as long as humanly possible. Officers and soldiers had endured months of active service, had tented or hutted in the field throughout the year, and had repeatedly fought the British in skirmishes and major actions. Rarely victorious, the

army had nevertheless acquitted itself well.

Finally, on 10 December, Washington gave orders for the "army to march" out of Whitemarsh at 0400 the next morning. In response, Sullivan, Greene, and others prepared the recommended "Order of March from Whitemarsh," which they delivered that same day. The following week, Congress would learn that "our Army will hut this Winter at Valley forge."⁵⁸

As the new orders circulated throughout the command, the delegation, which had remained at Whitemarsh with the army, drafted a report to Congress. The committee acknowledged the army's perilous physical state, and noted Washington's "forbearance" and "delicacy in exerting military authority on the citizens" of Delaware, New Jersey, and Pennsylvania. Rather than risk alienating people or depriving them of their property, Washington had chosen to allow his soldiers to suffer. This, however, did not sit well



Washington at Valley Forge by E. Percy Moran

with the committee or Congress. Though its fear of military power was profound, the committee obliquely chided the general's "highly laudable" conduct, emphasizing that such "delicacy ... may, on critical exigencies, prove destructive to the army and prejudicial to the general liberties of America." In short, Washington was to draw from the local economy whatever his army needed, particularly from areas that favored the British. Rank or political loyalties mattered not. Washington's quartermasters, commissaries, and foraging parties were to use or destroy all the supplies they needed, "leaving such quantities only as he shall judge necessary for the maintenance of their families."59

Over the course of their week's sojourn, Morris, Gerry, and Jones had come to realize that serious issues affected the army's spirit and physical condition, despite its temperament. Writing to Washington, it noted a "general discontent in the army and especially among the Officers." The committee ascribed the "discontents" to "various causes," and found "many of them . . . well founded." It promised, upon returning to York, to address needed reforms, including those dearest to the officers-half pay, pensions, "a New regulation of Rank," and compensation for "back rations." Within a week, Congress heard a formal report on the army's condition, and learned its "Officers and Soldiers were badly cloathed, the former in general discontented with the service, and averse to a Winter's Campaign." Mustering the full fury of its muted and bureaucratic voice, the committee noted "That it would be most advisable [for the army] to retire to Winter Quarters." On

Christmas Eve, Elbridge Gerry, Jonathan Bayard Smith, and John Witherspoon began looking into the various matters laid out by the committee. On 5 January 1778, they recommended a number of reforms, but Congress postponed the matter until some future date.⁶⁰

INTO THE WINTER CAMP

The decision to winter at Valley Forge resulted from a series of careful deliberations and negotiations between Washington, the generals of the Continental Army, the Continental Congress, and the governors of Pennsylvania and New Jersey. It also involved considerations of the omnipresent natural and manmade environmental elements: weather, terrain, hydrography, towns, cities, farms, pastures, and roads. Washington gave due deference and serious consideration to all of the participants and elements framing the army's operational environment. Thus, with profound contemplation and consideration he made the best possible strategic and operational choice, before setting the army in motion again.

Despite Washington's orders to march at 0400 on 11 December, that morning "the Whole Army was Paraded . . . but did not start 'till Sun-rise" at 0713. Soldiers had likely been awake since at least 0300. Tardy start notwithstanding, the army set out on its slow march toward Valley Forge.⁶¹

AUTHOR'S NOTE

Many thanks to Bryan Hockensmith, Don Wright, Tony Carlson, Margaret McGarry, and Reviewer 2 for their reviews and suggestions.

Ricardo A. Herrera is professor of military history at the School of Advanced Military Studies, U.S. Army Command and General Staff College. He is the author of For Liberty and the Republic: The American Citizen as Soldier, 1775– 1861 (New York: New York University Press, 2015), Feeding Valley Forge: The Fatal Crisis of 1778 (Chapel Hill: University of North Carolina Press, 2022), and the forthcoming (tentatively entitled) An American Soldier in Mexico: The Letters of Edward Ashley Bowen Phelps, 1846-1848 (Lawrence: University Press of Kansas).

NOTES

1. Benjamin H. Newcomb, "Washington's Generals and the Decision to Quarter at Valley Forge," Pennsylvania Magazine of History and Biography 117, no. 4 (Oct 1993): 311-29 (hereinafter PMHB); Wayne K. Bodle, "Generals and 'Gentlemen': Pennsylvania Politics and the Decision for Valley Forge," Pennsylvania History 62, no. 1 (Winter 1995): 59-89; Bodle, The Valley Forge Winter: Civilians and Soldiers in War (University Park: The Pennsylvania State University Press, 2002), pp. 11-12. The Supreme Executive Council of the Commonwealth of Pennsylvania was the executive branch of Pennsylvania's government. It consisted of the president (analogous to governor), vice-president (analogous to lieutenant governor), and twelve councilors. It was in effect from 1776 to 1790. See Penn. Const. of 1776, sec. 3, 19, and 20.

2. Lindsay M. Chervinsky, The Cabinet: George Washington and the Creation of an American Institution (Cambridge, Mass.: Harvard University Press, 2020), pp. 16–18.

3. Cir to Gen Ofcrs, 26 Oct 1777, in *The Papers of George Washington: Revolutionary War Series*, ed. Philander D. Chase et al., vol. 12, Oct-Dec 1777 (Charlottesville: University of Virginia Press, 2002), pp. 2–3 (hereinafter *PGW*).

4. Ibid., pp. 3-4.

5. Ibid., p. 4.

6. Ibid., p. 5.

7. Arthur S. Lefkowitz, George Washington's Indispensable Men: The 32 Aides-de-Camp Who Helped Win American Independence (Mechanicsburg, Pa.: Stackpole, 2003), pp. 133–57.

8. Robert K. Wright Jr., The Continental Army (Washington, D.C.: U.S. Army Center of Military History, 1983), pp. 36, 432; Gerald Edward Kahler, "Gentlemen of the Family: General George Washington's Aides-de-Camp and Military Secretaries" (Master's thesis, University of Richmond, 1997); "Continental Army Staff-Valley Forge," Valley Forge Legacy: The Muster Roll Project, accessed 8 Jul 2017, http://valleyforgemusterroll.org/army.asp. By way of an inexact equivalent, a U.S. Army Infantry Brigade Combat Team in 2019 numbered over 4,000 soldiers; its staff sections within the headquarters element have over two dozen officers and noncommissioned officers in various planning and staff functions. "Infantry Brigade Combat Team" in Maneuver Center of Excellence (MCoE) Supplemental Manual 3-90, Force Structure Reference Data, Brigade Combat Teams (Fort Benning, Ga.: MCoE, Sep 2012), an. A.

9. Opinion, Maj Gen John Sullivan to Council of War, 29 Oct 1777, *PGW*, pp. 47, 54–56.

10. Ibid., pp. 54-56.

11. Gen George Washington to Henry Laurens, 1[-3] Nov 1777, *PGW*, p. 82.

12. See David Hackett Fischer, *Washington's Crossing* (New York: Oxford University Press, 2004) for an authoritative study of the 1776–1777 winter campaign.

13. Washington to Brig Gen Thomas Nelson Jr., 8 Nov 1777, *PGW*, p. 170.

14. Brig Gen John Cadwalader, "Plan for Attacking Philadelphia," ca. 24 Nov 1777; Maj Gen Nathanael Greene to Washington, 24 Nov 1777; Brig Gen Henry Knox to Washington, 26 Nov 1777, *PGW*, pp. 371–73, 379–80.

15. Knox to Washington, 26 Nov 1777, *PGW*, pp. 414–17.

16.Brig Gen Enoch Poor to Washington, 25 Nov 1777; Brig Gen William Smallwood to Washington, 25 Nov 1777; Sullivan to Washington, 25 Nov 1777, PGW, pp. 394, 397-402.

17. Brig Gen Anthony Wayne to Washington, 25 Nov 1777; Brig Gen William Woodford to Washington, 25 Nov 1777, *PGW*, pp. 403–04.

18. Cadwalader, Plan for Attacking Philadelphia, ca. 24 Nov 1777; Brig Gen Charles Scott to Washington, 25 Nov 1777; Maj Gen William Alexander to Washington, 25 Nov 1777, *PGW*, pp. 371, 396–98.

19. Cornelius Harnett to Thomas Burke, 20 Nov 1777; Harnett to William Wilkinson, 30 Nov 1777; William Ellery to Nicholas Cooke, 30 Nov 1777; all in *Letters of Delegates to Congress*, 1774–1789, ed. Paul H. Smith et al., vol. 8, 18 Sep 1777–31 Jan 1778 (Washington, D.C.: Library of Congress, 1981), pp. 290, 347–48 (hereinafter *LDC*).

20. Washington to Greene, 25 Nov 1777; Washington to Greene, 26 Nov 1777, in *The Papers of Nathanael Greene*, ed. Richard K. Showman, Robert E. McCarthy, and Margaret Cobb, vol. 2, 1 Jan 1777–16 Oct 1778 (Chapel Hill: University of North Carolina Press for the Rhode Island Historical Society, 1980), pp. 217, 220 (hereinafter *PNG*).

21. Ibid.

22.28 Nov 1777, Journals of the Continental Congress, 1774–1789, ed. Worthington C. Ford et al., vol. 9, 3 Oct–31 Dec 1777 (Washington, D.C.: Government Printing Office, 1907), p. 972 (hereinafter JCC); Robert Morris to Thomas Wharton, 1 Dec 1777; Elbridge Gerry to John Adams, 3 Dec 1777, LDC, pp. 353, 373–74. The committee's arrival is noted in Cir to Gen Ofcrs of the Continental Army, 3 Dec 1777, PGW, p. 506.

23. Laurens to John Rutledge, 1 Dec 1777, LDC, p. 358; Diary entry, Dr. Albigence Waldo, 1 Dec 1777, "Valley Forge, 1777-1778: Diary of Surgeon Albigence Waldo, of the Connecticut Line," PMHB 21, no. 3 (1897), p. 303; Jnl entry, Lt Col Henry Dearborn, 1 Dec 1777, in Revolutionary War Journals of Henry Dearborn, 1775-1783, ed. Lloyd A. Brown and Howard H. Peckham (Chicago: Caxton Club, 1939), p. 114. 24. Francis B. Heitman, Historical Register of Officers of the Continental Army during the War of the Revolution, April 1775 to December 1783, rev. ed. (Washington, D.C.: Rare Book Shop, 1914), p. 342; Cadwalader to Joseph Reed, 30 Nov 1777, in Life and Correspondence of Joseph Reed: Military Secretary of Washington, at Cambridge, Adjutant-general of the Continental Army, Member of the Congress of the United States, and President of the Executive Council of the State of Pennsylvania, ed. William B. Reed, vol. 1 (Philadelphia: Lindsay & Blakiston, 1847), p. 348.

25. Reed, Life and Correspondence of Joseph Reed, p. 348.

26. Ibid., p. 349.

27. Maj Gen John Armstrong to Washington, 1 Dec 1777; Scott to Washington, 1 Dec 1777, *PGW*, pp. 455, 482.

28. Greene to Washington, 1 Dec 1777, *PGW*, pp. 459–61.

29. Greene to Washington, 1 Dec 1777; Maj Gen Marie-Joseph Paul Yves Roch Gilbert du Motier, Marquis de Lafayette to Washington, 1 Dec 1777; Wayne to Washington, 1 Dec 1777; Smallwood to Washington, 1 Dec 1777, PGW, pp. 459–63, 466–68, 482–83, 488–90.

30.Brig Gen George Weedon to Washington, 1 Dec 1777, PGW, p. 491; U.S. Geological Survey Groundwater Historical Instantaneous Data for Delaware, accessed 17 Sep 2017, https://waterdata.usgs.gov/de/nwis/uv/ ?site_no=391933075435001&agency_cd= USGS&referred_module=gw.

31. Weedon to Washington, 1 Dec 1777, *PGW*, p. 491.

32. Maj Gen Johannes de Kalb to Washington, 1 Dec 1777; Knox to Washington, 1 Dec 1777, *PGW*, pp. 464–65.

33. Knox to Washington, 1 Dec 1777, *PGW*, pp. 465–66.

34. Brig Gen William Maxwell to Washington, 1 Dec 1777, PGW, pp. 473–74; Armstrong to Wharton, 29 Nov 1777, Samuel Hazard, ed., Pennsylvania Archives. Selected and Arranged from Original Documents in the Office of the Secretary of the Commonwealth, Conformably to Acts of the General Assembly, February 15, 1851, & March 1, 1852: Commencing 1777, vol. 6 (Philadelphia: Joseph Severns, 1853), p. 43 (hereinafter, PA).

35. Sullivan to Washington, 1 Dec 1777, *PGW*, pp. 485–88.

36. Alexander to Washington, 1 Dec 1777, *PGW*, pp. 483–84; Newcomb, "Washington's Generals and the Decision to Quarter at Valley Forge," pp. 314–16.

37. Alexander to Washington, 1 Dec 1777, *PGW*, p. 484.

38. Ibid.

39. Ibid.

40. Brig Gen Casimir Pulaski to Washington, 1 Dec 1777, *PGW*, pp. 476–77.

41. Col Henry Emanuel Lutterloh to Washington, 1 Dec 1777, *PGW*, pp. 472–73; Lutterloh to Benjamin Franklin, 3 Jan 1777, in *The Papers of Benjamin Franklin*, ed. William B. Willcox et al., vol. 23, 27 Oct 1776–30 Apr 1777 (New Haven, Conn.: Yale University Press, 1983), p. 110; Klaus Wust, *The Virginia Germans*, rev. ed. (Charlottesville: University Press of Virginia, 1989), pp. 33, 43.

42. Washington to Reed, 2 Dec 1777, *PGW*, p. 500.

43. Reed to Washington, [4 Dec 1777,] *PGW*, pp. 548-49.

44. Ibid., pp. 550-51.

45. Washington to Greene, 25 Nov 1777; Washington to Greene, 26 Nov 1777, *PNG*, pp. 217, 220.

46. Cadwalader to Washington, 3 Dec 1777, PGW, p. 507.

47. Brig Gen Louis le Bègue de Presle Duportail to Washington, 3 Dec 1777; De Kalb to Washington, 3 Dec 1777, *PGW*, pp. 515–16, 523.

48. Greene to Washington, 3 Dec 1777; Knox to Washington, 3 Dec 1777; Lafayette to Washington, 3 Dec 1777; Alexander to Washington, 3 Dec 1777, *PGW*, pp. 516, 524–25, 529.

49. Brig Gen James M. Varnum to Washington, 3–4 Dec 1777, *PGW*, pp. 530–33.

50. Weedon to Washington, 4 Dec 1777; Sullivan to Washington, 4 Dec 1777, *PGW*, pp. 556–57, 560.

51. Armstrong to Washington, 4 Dec 1777; Maxwell to Washington, 4 Dec 1777; Brig Gen Peter Muhlenberg to Washington, 4 Dec 1777; Maj Gen John Paterson to Washington, 4 Dec 1777; Poor to Washington, 4 Dec 1777; Scott to Washington, 4 Dec 1777; Smallwood to Washington, 4 Dec 1777; Wayne to Washington, 4 Dec 1777; Woodford to Washington, 4 Dec 1777, PGW, pp. 536–37, 544–45, 553–54, 558, 561.

52. Brig Gen James Irvine to Washington, 4 Dec 1777; Brig Gen James Potter to Washington, 4 Dec 1777, *PGW*, pp. 542, 546– 47; Potter to Wharton, 11 Dec 1777, *PA*, p. 83. 53. Committee Notes, 4 Dec 1777, *LDC*, p.

377-78.

54. Committee to Laurens, 6, Dec 1777, *LDC*, pp. 380–81.

55. Wharton to Armstrong, 12 Dec 1777, *PA*, p. 85.

56. Committee to Laurens, 6 Dec 1777; Gerry to Adams, 8 Dec 1777, *LDC*, pp. 380–81, 388 (italics in original); Bodle, *Valley Forge Winter*, pp. 55–58, 60, 67, 70.

57. Armstrong to Council of War, 9 Dec 1777, *PA*, pp. 71–72.

58. General Orders, 10 Dec 1777, sub: "Order of March from Whitemarsh, Pennsylvania," *PGW*, pp. 585–87; Ellery to Cooke, 17 Dec 1777, *LDC*, p. 430.

59. 10 Dec 1777, JCC, vol. 9, pp. 1013–15; Lucille E. Horgan, Forged in War: The Continental Congress and the Origin of Military Supply and Acquisition Policy (Westport, Conn.: Greenwood, 2002), pp. 4, 6.

60. Continental Cong. Camp Committee to Washington, 10 Dec 1777, *PGW*, pp. 588–89, emphasis in original; 16 Dec 1777, Rpt of the Camp Committee, 24 Dec 1777, *JCC*, vol. 9, pp. 1029–31, 1052–53; 5 Jan 1778, *JCC*, vol. 10, pp. 18–21.

61. "Complete Sun and Moon Data for One Day," U.S. Naval Observatory, accessed 15 Jun 2017, http://aa.usno.navy.mil/rstt/onedaytable ?ID=AA&year=1777&month=12&day=19&sta te=PA&place=Philadelphia; Diary entry, Lt Samuel Armstrong, 11 Dec 1777, "From Saratoga to Valley Forge: The Diary of Lt. Samuel Armstrong," ed. Joseph Lee Boyle, *PMHB* 121, no. 3 (Jul 1997), p. 256; Diary entry, Capt Paul Brigham, 11 Dec 1777, in "A Revolutionary Diary of Captain Paul Brigham, November 19, 1777–September 4, 1778," ed. Edward A. Hoyt, *Vermont History* 34, no. 1 (Jan 1966), p. 15.

AH



The Center of Military History now makes all issues of Army History available to the public on its website. Each new publication will appear shortly after the issue is printed. Issues may be viewed or downloaded at no cost in Adobe® PDF format. An index page of the issues may be found at www.history.army.mil/ armyhistory/issues_complete_guide.html.

ARMYHISTORY CALL FOR SUBMISSIONS

A rmy History welcomes articles, essays, and commentaries of between 4,000 and 12,000 words on any topic relating to the history of the U.S. Army or to wars and conflicts in which the U.S. Army participated or by which it was substantially influenced. The Army's history extends to the present day, and Army History seeks accounts of the Army's actions in ongoing conflicts as well as those of earlier years. The bulletin particularly seeks writing that presents new approaches to historical issues. It encourages readers to submit responses to essays or commentaries that have appeared in its pages and to present cogent arguments on any question (controversial or otherwise) relating to the history of the Army. Such contributions need not be lengthy. Essays and commentaries should be annotated with endnotes, which should be embedded, to indicate the sources relied on to support factual assertions. A manuscript, preferably in Microsoft Word format, should be submitted as an attachment to an e-mail sent to the managing editor at usarmy.mcnair.cmh.mbx.army-history@mail.mil.

Army History encourages authors to recommend or provide illustrations to accompany submissions. If authors wish to supply photographs, they may provide them in a digital format with a minimum resolution of 300 dots per inch or as photo prints sent by mail. Authors should provide captions and credits with all images. When furnishing photographs that they did not take, or any photos of art, authors must identify the owners of the photographs and artworks to enable *Army History* to obtain permission to reproduce the images, if necessary.

Although contributions by e-mail are preferred, authors may submit articles, essays, commentaries, and images on readable electronic media (DVD, CD, USB flash drive) by mail to Bryan Hockensmith, Managing Editor, Army History, U.S. Army Center of Military History, 102 Fourth Ave., Collins Hall, Bldg. 35, Fort Lesley J. McNair, D.C. 20319-5060.

NMUSA FEATURE



NATIONAL MUSEUM OF THE U.S. ARMY'S MEDAL OF HONOR GARDEN

Uniquely positioned overlooking the museum campus, the Medal of Honor Garden at the National Museum of the United States Army offers a space for visitors to learn more about the Medal of Honor and to reflect upon the Army's recipients of the nation's highest military award for valor.

As in the museum's galleries, the Medal of Honor Garden tells Army history through soldier stories. The garden features select stories of recipients from all eras, including Sgt. William H. Carney, the first African American recipient, honored for his actions with the 54th Massachusetts Volunteer Infantry during the Civil War; Pfc. Emory L. Bennett, who was mortally wounded near Sobangsan, Korea, in 1952; and S. Sgt. Salvatore Giunta, who was recognized for his heroic actions in Afghanistan.

Engraved stainless-steel panels nestled along the rooftop plantings share the history of the medal itself and illustrate the locations where the medal has been earned. The significance of the medal's design is also explored. For example, the laurel wreath hearkens back to ancient Greece, where the gift of a crown made from local vegetation demonstrated the people's gratitude to the warrior. The south side of the garden is anchored by a black granite wall etched with the names of all Army Medal of Honor recipients. Beyond this wall, visitors transition indoors to the Medal of Honor Gallery and an adjacent rotating exhibit gallery currently hosting the Nisei Soldier Experience.

As a tribute to the memory of all past, present, and future Medal of Honor recipients, evergreen perennials and foliage are planted throughout the garden as symbols of appreciation to those men and women who distinguish themselves above and beyond the call of duty.

The garden represents and recognizes the gratitude of the American people to those soldiers who have received this impressive honor. By sharing their stories of sacrifice and courage, the garden honors their legacy and preserves the memory of this elite group of individuals. With beautiful views of the museum campus, the Medal of Honor Garden provides space for visitors to reflect upon these soldiers and their stories of valor, gallantry, and intrepidity.





U.S. ARMY ARTIFACT SPOTLIGHT

THE FRIDEN ELECTRO-MECHANICAL CALCULATOR By J. Travis Moger

The U.S. Army runs on more than fuel and firepower. Math also plays an important role. Numerous jobs—from artillery to engineering to finance—require a lot of number crunching. At least as early as World War II, the Army used electro-mechanical calculators such as those produced by the Friden Calculating Machine Company to meet this need. The U.S. Army Engineer Museum in Fort Leonard Wood, Missouri, has in its collection a Friden Model SW10 (*Figure 1*).

One military occupation that made use of electro-mechanical calculators was the Army Corps of Engineers' "topographic computers." Here "computers" meant the soldiers, not machines. According to the 1952 edition of the U.S. Army's *Occupational Handbook*, a topographic computer "performs computations and adjustments of lines and areas concerning their direction, elevation, and distance. Working from the field surveyor's notes, he uses electrical computers and higher mathematics including algebra, trigonometry, and logarithmic functions to perform adjustments or corrections on azimuth, distance, and coordinates, to compute slopes, angles, and grids; and to convert data from field notes."¹ Friden calculating machines aided soldiers in this specialty by rapidly performing basic math functions (addition, subtraction, multiplication, and division) as well as percentages and, beginning in 1952, automatic calculation of square roots.

Friden produced special versions of its Model ST and STW to meet the Army's need for fully automatic calculators that could be used in field conditions where electricity was scarce. A 1958 photograph shows U.S. Army Sp4c. Robert J. Moger Jr., a topographic calculator by occupational specialty, using a modified Friden STW machine in a barracks in Wiesbaden, Germany (*Figure 2*). This calculator had a fitting on the right side, which allowed the user to operate it manually with a hand crank. The Army trained personnel to input numbers with the left hand, so they could hold a pencil in the right and copy down answers quickly.

Electro-mechanical calculators had their limitations. They were bulky, heavy, and noisy to operate. Even simple mathematical operations required multiple steps. For example, the Friden STW owner's manual instructed users to solve the problem "2.35 × 54.32" in the following way. First, "program" the machine with the following settings: "Add lever down. Set decimal marker. Keyboard: 2. Multiplier: 2. Upper Dials: 4. Lower Dials: 2." Then, the manual told the user to follow a three-step method: "1. Set 54.32 on keyboard. 2. Enter 2.35 in multiplier. 3. Depress MULT." If the operator performed the steps properly, the machine would clack-clack-clack and churn out the answer: "127.6520 appears in upper dials at decimal point." More complex problems had additional steps, adding to the time and hassle required.

Fully electric calculators began to replace electro-mechanical calculators in the 1960s, but the older models remained useful for many years after because soldiers could operate them manually in the field.

Dr. J. Travis Moger is a historian at the U.S. Army Center of Military History.

1. U.S. Army, Occupational Handbook: A Manual for Civilian Guidance Counselors and Students (Washington, D.C.: Office of the Adjutant General, Department of the Army, 1952), p. 58.





Figure 1. Friden Model SW10, Army Museum Enterprise, U.S. Army Engineer Museum, Fort Leonard Wood



Figure 2. Sp4c. Robert J. Moger Jr. operates a Friden Model STW, Wiesbaden, Germany, 1958

FEATHERS OF HONOR

U.S. ARMY SIGNAL CORPS PIGEON SERVICE IN WORLD WAR I, 1917–1918

Frank A. Blazich Jr.

A pigeon with a message tube attached at Fort Lucy, France

In October 1918, an American infantry division found its flank threatened by a German counterattack. The division commander wished to coordinate his movements with the corps commander, but the telephone lines were down. Annoyed, without his phone, and disinclined to use the functional radio, the division commander instead called for a homing pigeon. Lacking any birds, the general's aide located a nearby signalman and requested a pigeon. The young enlisted man, a recruit telephone lineman, had no idea why the general wanted a pigeon. Not wishing to disappoint his commander, the young man went to a sergeant who had a pet pigeon, borrowed the bird, and presented it to the aide. Pigeon in hand, the aide raced back to the division headquarters. A message was prepared and secured to the pigeon's leg. The bird was released into the air, but it landed immediately and proceeded to peck at the message tube.

"What is the matter with the damned pigeon?" asked the chief of staff.

"Where is the signal officer?" demanded the general.

At this point, the pigeon's owner happened upon the scene and asked for his pet back.

"Take him, he is no good to me," grumbled the general, but word that the corps commander was on the telephone soon smoothed his ruffled feathers.

After this incident, the division headquarters received a steady supply of trained homing pigeons.¹

By contrast, Col. George C. Marshall, an operational planner in the headquarters of the American Expeditionary Forces (AEF), had first-hand knowledge of the value of

the pigeon messengers. Earlier in 1918 during the Battle of Cantigny, German artillery shredded the American wired communications. Pigeon messages, however, managed to reach 1st Division headquarters and provided clarity on the battlefield situation. While preparing for the grand assault on Sedan in late October, Colonel Marshall called several young officers into his office. He ordered each of them over to the chief signal officer to receive training in the handling and use of homing pigeons. Upon their return, Marshall issued the men instructions to accompany the assault troops of the attacking divisions. Equipped with six pigeons apiece, the officers would release four messages on 1 November and two on 2 November at designated hours, providing the exact point which the lead troops of each division had reached.² Through this technique, recalled Marshall, "we thus had an accurate statement of the location of the most advanced troops of the Seventyseventh, Eightieth, Second, Eighty-ninth, and Fifth divisions at the same hour."3

These markedly different anecdotes show that the familiarity of the U.S. Army with the use of homing pigeons as an auxiliary method of communication was not widespread in World War I, even though homing pigeons proved reliable messengers on the battlefield. For the U.S. Army, the Signal Corps' Pigeon Service experience offers a unique case study in civil-military relations and the rapid adoption of coalition knowledge and technology.

OLD "TECHNOLOGY" FOR A NEW ERA OF WARFARE

After the United States entered the war in April 1917, senior military leaders confronted unfamiliar weapons, technologies, and stratagems. The years of fighting since 1914 had already demonstrated to European combatants that scientific and technological development combined with new means of industrial output proved exceptionally lethal. These new technologies, however, remained foreign to American military members. Despite the threat of German submarines to safe passage at sea since 1914-as demonstrated by the sinking of civilian vessels, such as the RMS Lusitania, by German U boats-the U.S. Navy had limited knowledge of recent advances in submarine warfare. Almost no American sailor had ever seen or heard of a depth charge, a recent but widely employed innovation, until May 1917. On land, the



Edgar A. Russel (*left*), shown here as a brigadier general, being decorated by Field Marshal Douglas Haig

defensive advantages of trench warfare forced combatants to seek new technologies to either better protect or dislodge soldiers. Introduction of poison gas resulted in the extensive production and use of gas masks. Concentrated use of shrapnel and canister shellfire reintroduced widespread use of combat helmets to protect against lethal head wounds.⁴ When the first

members of the AEF arrived in France in late June 1917, however, they marched ashore sporting felt campaign hats reminiscent of cavalry actions in the American West. American doughboys soon adopted steel combat helmets, copied from a British design.⁵ As it entered the trenches, the AEF faced a steep tactical learning

curve that would force officers and enlisted men alike to draw heavily on their allies' experiences in this new world war.

In spite of its relative inexperience with contemporary military innovations, the U.S. Army entered the war with notable advantages in communications technology. The Signal Corps led the world in military telephony and expertise, but this wire-reliant equipment proved vulnerable to outages or interception in a war with frequent massed artillery fires.6 Col. Edgar A. Russel, General John J. Pershing's chief signal officer for the AEF, spent his first weeks in Europe meeting with British and French signal officers. He soon learned about the use of a relatively simple communications method: homing pigeons. French officials championed the value of homing pigeons after their performance at Verdun. In a report provided to Colonel Russel and the AEF, the French experience demonstrated that:

Pigeons only, can work regularly, and in spite of bombardments, dust, smoke or fog, can bring accurate details concerning the situation of the troops in action within a relatively short space of time. Liaison by pigeons has rendered inestimable services ever since the beginning of the battle of Verdun. It has won the approbation of the high command and line officers, and its general adoption is advisable.⁷

For the British Expeditionary Force, "the necessity and possibility of maintaining liaison by means of pigeons, has been demonstrated during the Battle of Verdun and confirmed during the offensive on the Somme. This method of liaison has always been able to operate regularly. In many cases it was the only one which was able to resist the weather and the means of destruction of the enemy."⁸

The weight of evidence proved sufficient for Russel to act. On 16 July 1917, he wrote to Maj. Gen. George O. Squier, Chief Signal Officer of the U.S. Army, about his staff's investigations into French and British pigeon usage. Russel concluded that "[t] here is no longer any doubt of the immense importance of this service, and the necessity of the immediate action of the United States to provide similar service for our armies." The following day, General Pershing wired Squier requesting the swift commissioning of two pigeon specialists as first lieutenants



General Squier

to accompany twelve enlisted pigeon experts for service in France.⁹

PIGEONS IN THE PREWAR U.S. ARMY

For millennia, both in times of war and peace, humans have recognized and used the homing ability of pigeons for the transportation of messages.¹⁰ The U.S. Army began working with homing pigeons in the Dakota Territory approximately forty years before World War I. In 1878, the Signal Corps purchased a dozen pigeons from Thomas Gist of Philadelphia and shipped the birds out west to Col. Nelson A. Miles commanding the 5th Infantry at Fort Keogh in Montana. These birds bred and increased to number around fifty. Hawks killed some of the pigeons in the course of Miles' experiments, but he still managed flights of about one hundred miles from the mouth of Big Horn River back to the fort. Despite limited time and undertrained birds, Miles deemed his pigeon experiments successful, having demonstrated "the fact that they can be made useful for military service." Four years after Miles' experiment, Signal Corps 1st Lt. William E. Birkhimer questioned the present utility of homing pigeons and the need to develop a detail plan for a military pigeon service. In 1888, the Signal Corps established a small pigeon loft at Key West, Florida, but closed the operation four years later, transferring the birds to the U.S. Naval Academy.11 In the 1890s, the Navy saw value in using homing

pigeons for ship-to-shore communication and managed to attract congressional attention to the birds' potential uses. A legislative proposal introduced in Congress in 1898 by Senator Jacob H. Gallinger (R-NH) sought to establish a homing pigeon service in the Treasury Department for commercial, military, and naval purposes. The bill died in committee.¹²

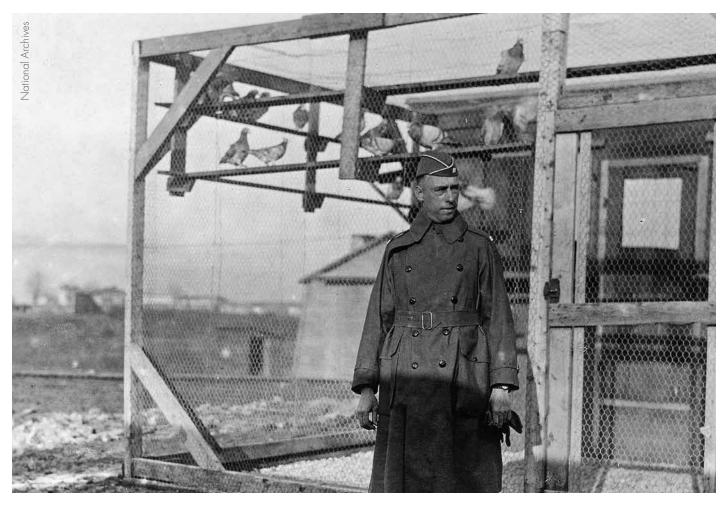
Despite the Army's initial disinterest in the concept, civilian homing pigeon enthusiasts promoted uses of pigeons for military purposes in the ensuing years. Pigeon racing itself came to the United States in the 1860s, and the first organized pigeon racing efforts began in the early 1880s. In 1910, the pigeon racing community reached consensus on racing rules and standards, and the American Racing Pigeon Union (AU) launched in Washington, D.C. on 15 August 1910.13 Under the AU, pigeon racing clubs from across the nation could compete on equal terms in races of varying distances and for ever-increasing prizes.14 On the eve of America's entry into World War I, the Signal Corps experimented with homing pigeons in Mexico as part of Pershing's Punitive Expedition of 1916, but the trials were unsuccessful. They found fault with inexperienced personnel and pigeons that had not acclimated sufficiently to the environment.15

FINDING THE RIGHT PIGEONEERS

By late summer 1917, the War Department had located two men who shared the essential qualifications for the new pigeon



Captain Carney

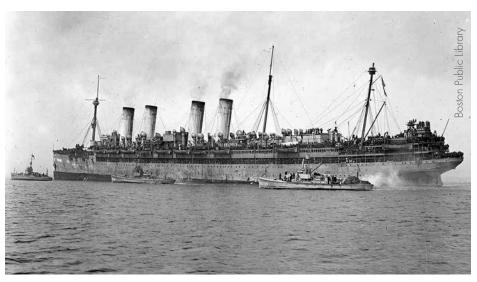


Captain Buscall in front of a pigeon loft at Langres, France

service: prior military service and pigeonracing experience. The man destined to lead the AEF pigeon effort worked at the Marine Barracks in Washington, D.C. English-born David C. Buscall arrived in the United States in 1890 and settled with his family in Springfield, Massachusetts. He developed a fondness for pigeons as a child in London, and frequently built his bird lofts on the roof of his father's or neighbors' houses. Enlisting in the U.S. Marine Corps on 2 September 1905, Buscall was serving as a quartermaster sergeant by June 1917.¹⁶ Discharged from the Marine Corps on 23 August, he commissioned the next day as a first lieutenant in the U.S. Army Signal Corps.¹⁷ John L. Carney of Pittsburgh joined Buscall on 4 September. A native of Salem, New Jersey, Carney was a veteran Signal Corps telegrapher, having seen service in the Spanish-American War, the Philippine-American War, the Boxer Rebellion, and at the Mexican border during the Punitive Expedition. Like Buscall, he had bred and worked with pigeons all his life.18 Both men were founding members and officers of the AU,

with Carney having served as its second men—to be known as "pigeoneers"—for the U.S. Pigeon Intelligence Service.²⁰ Buscall

Together, the men began assembling a pigeon service for the U.S. Army. Throughout September 1917, they used their connections in the racing pigeon community to purchase birds and feed, and to locate additional personnel to fill out the enlisted ranks of men—to be known as "pigeoneers"—for the U.S. Pigeon Intelligence Service.²⁰ Buscall arranged with the carriage-building firm of Sechler and Company of Cincinnati, Ohio, for the purchase of twelve mobile pigeon lofts of his own design to be shipped along with the birds.²¹ By October, a blend of purchases and patriotic donations fielded a feathered



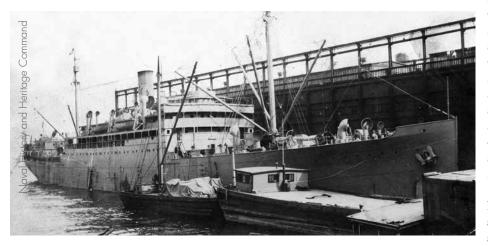
USS Agamemnon



A mobile loft, displaying captured German pigeons, is used as a recruiting station.

Army force of approximately 2,350 young and breeding pigeons.²² The birds were shipped to holding lofts at Fort Wood, New Jersey.²³ By 13 October, the Signal Corps requested overseas orders for half of the initial personnel requested by AEF General Headquarters.²⁴ On 29 October, Buscall, along with 6 noncommissioned officers, 800 pigeons, 12 mobile lofts, and a supply of feed, boarded the transport USS *Agamemnon* bound for France. Arriving in Brest on 12 November, the small detachment moved to Paris and quartered at the French Pigeon Lofts at Vaugirard.²⁵

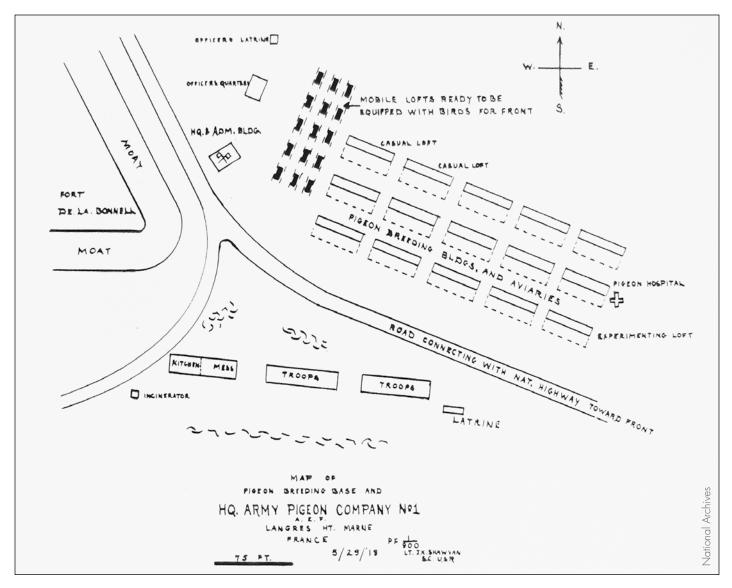
The unit was now officially authorized and designated as the Signal Corps Pigeon Service, and the AEF General Headquarters tapped Buscall as its officer in charge.²⁶



USS Henry R. Mallory

He got right to work on two fronts: first, to secure permanent lofts for the AEF's birds; second, to learn everything about the military training and fielding of homing pigeons. Buscall and Russel met and reached an agreement on 20 November to construct a central breeding base to supply the AEF with young birds, selecting a location near the entrance to Fort de la Bonnelle, Langres, in northeastern France for this purpose.²⁷ On 5 December, Buscall and four of his men left Paris and headed first to Amiens and then to the headquarters of the 13th Corps of the British Expeditionary Force near Arras. For two days, the Americans studied the British mobile lofts and at the advance trench posts that provided pigeon service in the sector immediately in front of Vimy Ridge. The American pigeoneers also visited stationary lofts at Arras and the British breeding base at Albert.²⁸

On 10 December, Carney arrived at St. Nazaire aboard the USS *Henry R. Mallory*, along with 6 noncommissioned officers and 1,800 birds.²⁹ For the voyage over, the Army had stored the crates of pigeons on



Sketch 1. Layout of the breeding base at Langres, France

the hurricane deck, covered with tarpaulins. When the transport hit rough, pitching seas, sailors worked the decks to secure the birds and keep the crates from washing overboard. After joining Buscall and his half of the pigeon detachment in Paris on 14 December, the two officers traveled to Toul to meet with the pigeon officer of the French Eighth Army. Carney and Buscall inspected the French mobile lofts and stationary lofts as well as French pigeon operations in combat. Subsequently, Buscall saw to it that two samples of every article of French mobile loft equipment was collected for shipment to the United States to be reproduced for training use.30

By late December, the officers had completed their initial observations, and the Pigeon Service began to take flight. The rigors of the initial overseas voyage discouraged the importation of younger birds, so the Pigeon Service would have to either breed its own birds or purchase French and British pigeons to serve the AEF's needs. In the meantime, the American pigeons that Buscall and Carney had brought over, the majority of which would serve as breeding birds, would have to acclimate to France. On 31 December, Buscall received clearance to acquire the materials for construction of a central breeding base of his own design. His plans consisted of fifteen buildings, measuring 20 by 50 feet, subdivided into four compartments, with each building housing ninety-six breeding pairs. Delay after delay hampered the work; not until 15 March 1918, one month after initially promised, did the American birds move from the French lofts in Paris to the new quarters at Langres. The birds undoubtedly were relieved to enter their new lofts, having spent a week in shipping baskets

awaiting completion of the "barracks." Although the finished lofts differed from Buscall's original plans, they proved successful for the AEF. On 20 March, Carney took command of all breeding operations, and under his care approximately 900 breeding pairs would supply Pershing's forces with 4,422 young birds by November 1918.³¹

Allied generosity provided additional young birds to supplement those raised by the American breeding lofts. In mid-May 1918, Maj. Alfred H. Osman, commanding the British Home Forces Pigeon Service, arranged to donate 600 young British pigeons to the AEF. On 20 May, Sgt. Frederic J. Herrmann arrived at the British Pigeon Depot at Kings Cross, London, to assist in



A view of the breeding base at Langres, France

the selection and packing of the 600 young birds donated by British pigeon fanciers. A pigeon racer before the war, Herrmann was one of the first Signal Corps pigeoneers sent to France in early November 1917 to establish the AEF's pigeon service; he was well qualified to select top fliers.32 By 23 May, Herrmann and the birds, together with a supply of feed and transport baskets, arrived in Langres.³³ There, the Pigeon Service divided up the English birds, sending 245 to the front in mobile lofts, shipping 30 to the stationary loft at Châtillon-sur-Seine, and leaving the remainder at Fort de la Bonnelle.³⁴ In ensuing months, the majority of the English birds would be moved into American mobile lofts as the AEF's operations increased at the front.35

The raising and preparing of the Pigeon Service's new recruits seemed akin to basic training for the infantry. At approximately three weeks, attendants would remove the squeakers from their parents and move them to a weaning loft where the birds learned to feed themselves. At five weeks of age, these birds were transferred to either mobile lofts or a detaining loft. More often than not, the birds moved from the weaning loft to mobile lofts held at a reserve field at the aviation field at Vaucouleurs for training as message carriers. At ten weeks, the birds were ready for use in the trenches, able to execute short flights of ten or so miles to their designated lofts.³⁶

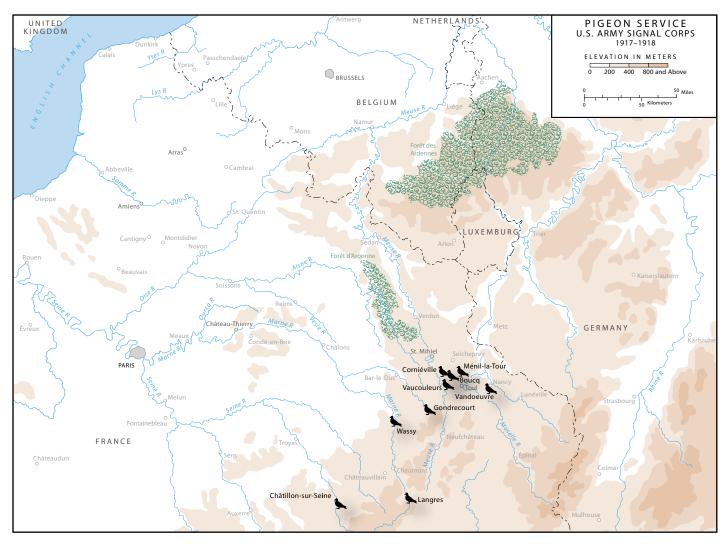
THE ARMY'S PIGEON SERVICE TAKES FLIGHT

Homing pigeons are the genetic relatives of the rock dove, *Columba livia*, which frequently conduct seize and hold operations or tactical air strikes on urban residents and residences worldwide. In viewing a homing pigeon as a piece of equipment or technology, the best comparison is to a thoroughbred racehorse. To quote a 1918 U.S. Army pigeon manual, the birds are "the result of several centuries of intelligent cross-breeding between various races derived from the . . . rock pigeon. This crossing, which was only made with the perfect specimens of each race, has produced an amalgam: the Homing pigeon of today, a variety of the pigeon family noted for its superior intelligence and physique."37 The pigeons themselves weigh roughly a pound for each sex, and are capable of flying uninterrupted for 12 to 15 hours daily, covering 500 to 700 miles, and at speeds varying from 30 to 60 miles per hour. Contemporary champion birds can sprint at over 90 miles per hour.38

As AEF breeding operations stood up, the human component of the Pigeon Service likewise began to coalesce. The initial plan for the AEF's Pigeon Service assigned three officers and fourteen enlisted men to AEF Headquarters, one officer and eight pigeoneers for each Army corps, and fourteen pigeoneers for each division. In mid-December 1917, the chief



Soldiers in training at the II Army Corps Signal School, Châtillon-sur-Seine, France



Map Note: This map is not indicative of all loft locations, only those mentioned in the text.

signal officer received orders for an additional 2 officers and 96 enlisted soldiers to join the small pigeon service vanguard. These personnel would complete the headquarters for Pershing's AEF General Headquarters and also would provide the pigeon needs of the I Army Corps and six infantry divisions. Almost immediately thereafter, the Signal Corps requested a second authorization for 10 officers and 602 enlisted soldiers for the Pigeon Service, both domestically and overseas. On 31 January 1918, just 2 additional officers and 81 enlisted personnel sailed for France, comprising the last pigeon-specific personnel sent overseas during the war.³⁹

In February, with personnel limited, Buscall and other senior Signal Corps officials began work on a plan to reorganize the Pigeon Service as an Army-level pigeon company. The company would maximize the use of existing personnel to support five corps, each composed of six divisions. The resulting company, Pigeon Company No. 1, numbered 9 officers and 324 enlisted soldiers. With personnel authorized to staff ninety mobile lofts, each Army corps and

division headquarters could receive lofts and pigeoneer support that could be tailored to the battlefield situation.⁴⁰ This plan received



American-designed mobile lofts



The interior of a mobile loft

approval in Washington on 9 July in time for the AEF's first major engagements in the late summer.⁴¹

The next matter to address was supply and equipment. Under the command of 2d Lt. John K. Shawvan of Milwaukee, the Pigeon Service Supply Depot opened on 1 March in Langres to oversee the stocks of grain and an array of pigeon equipment required for field operations. The specialized pigeon field equipment placed into service with the American birds was predominantly French-designed. This equipment consisted of various message pads, loft cleaning tools, and baskets for transporting and holding pigeons in the trenches, aircraft, tanks, bicycles, and even inside submarines. Meanwhile, Shawvan prioritized acquiring suitable mobile lofts. The twelve Americandesigned mobile lofts brought over in late 1917 were assembled by February 1918. These initially were complemented by eighteen English mobile lofts, but the English lofts unfortunately proved to be cheaply constructed and were deemed unsatisfactory for both birds and pigeoneers.42

Mobile lofts were the critical cornerstone of AEF pigeon operations, often serving at the battlefront. Each wooden loft was mounted on what was essentially an automobile chassis with leaf-spring suspension. The loft's interior consisted of three compartments. The first, rear-most compartment held feed bins and supplies while the forward two compartments housed the birds, separated into either old and young birds, or hens and cocks. Perches and nest boxes outfitted these compartments. Nest boxes were painted in varying colors of red, white, and blue to help identify nesting birds. A large water tank was mounted on the rear of the loft for siphon-system drinking troughs, and personnel were instructed to keep the lofts clean and in good order at all times. Mobile lofts also kept pigeon trench equipment and issued it directly to infantry regiments until August 1918, when the AEF issued such items directly to the infantry regiments. The reasoning for the change was to coordinate the AEF's Pigeon Service with that of the British and French counterparts so American forces serving with Allied armies (and using British or French birds) carried their own AEF-issued pigeon equipment.⁴³

The mobile lofts provided the primary training for the birds assigned to them, because they could advance along with ground forces. At all lofts, pigeons would be stamped on the fifth or sixth primary flight feathers on the right wing with the letters "U.S." and numbers designating the bird's assigned loft. Prior to being sent out to the field, birds were separated by sex and marked just above the tail with blue ink for cock birds and red ink for hens. At the lofts, pigeoneers divided the birds into lots of twelve per field station, with each lot further subdivided into three sets of four. Soldiers could carry a maximum of four birds in a backpack-style infantry basket. The baskets also contained message blanks, carbon sheets, a pencil, food, message tubes, instructions, and a gas-proof cover. Two-bird baskets were also available for use, albeit designated for assault infantry, aviation units, or the tank corps.44

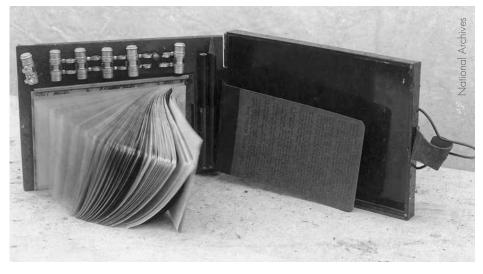
To prepare the AEF's doughboys for this new battlefield resource, the Pigeon Service established a detailed training effort. A fixed instruction loft was erected at Gondrecourt in mid-May and stocked with forty pigeons on 3 June. American Pigeon Service personnel attended French and British training courses and then returned to teach AEF personnel assigned to the French and British sectors of the Western Front.⁴⁵ The AEF five-day course to train auxiliary pigeoneers covered such topics as the characteristics and proper handling



Identification stamps on a pigeon's wing

of homing pigeons, writing and attaching messages, feeding and watering, and the use of various pigeon equipment.⁴⁶ Students learned that the purpose of the birds is "to insure a quick liaison when other methods of liaison are too slow, unreliable or when they have broken down between the first line troops and the command.²⁴⁷

Restricting the pigeons' food was arguably the most important concept for students to grasp. The primary method for training pigeons to home is to teach the birds that the loft is where food and mates are located. Soldiers were thus ordered not to feed pigeons in the field until they had been away from the loft for twentyfour hours, and then only with the food provided. As one lecturer explained, "The object in keeping the birds hunger during the day is to insure their quick entry into the loft in the event of their being liberated with a message."48 After forty-eight hours of confinement, however, the bird's physical condition deteriorates, thereby limiting its



A Signal Corps carrier pigeon message book with carrying tubes

speed and potential desire to return to the home loft and making it more likely to seek a closer source of food or avian companionship. Outside of the training loft, individual mobile and stationary lofts also provided training in the field, with the added benefit



A soldier displays how birds are to be carried into battle at the II Army Corps Signal School, Châtillon-sur-Seine, France.

of better familiarizing the pigeoneers at the lofts with the doughboys at the front.⁴⁹

Pigeons would be used only when all other communication options had failed or were likely to fail. Once ferried by motorcycle dispatch to front-line troops, doughboys were instructed not to hold birds in the baskets for more than forty-eight hours. If a bird was required, the pigeongram would be concisely written in triplicate on thin tissue paper—one copy remained in the message book and one for the pigeon's message tube, with an additional copy sent by a second bird as a backup for the original. Once the message was ready, it would be inserted into an aluminum message holder, which had metal clips that could be folded around the bird's leg. After the pigeon entered the trap back at its loft, a handler would retrieve the message from the holder and relay its contents by telephone or courier to the appropriate headquarters.⁵⁰

The first field work for the Pigeon Service commenced in late January 1918. Initially, a French stationary loft at Corniéville supplied the U.S. 1st Division with French birds from the 2d Colonial Corps of the 1st French Army, before the American pigeoneers formally assumed loft operations on 30 January.⁵¹ Weeks later, Mobile Loft No. 1, carrying sixty American pigeons in the charge of Sgt. Henry J. Knoerschild of Buffalo, New York, arrived at the 1st Division headquarters at Ménil-la-Tour on 22 February. To the amazement of the French, Knoerschild soon had fifty-seven of his birds homing to the loft on the French front. The first American pigeons to enter action, however, were housed at the French stationary loft at Corniéville. Those pigeons, under the training of Sgt. Lewis Swanker



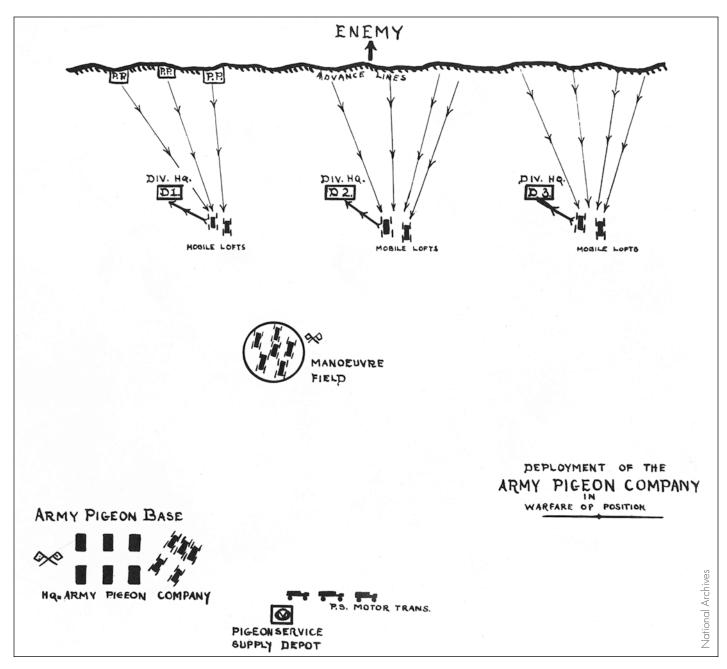
A motorcycle dispatch rider transports pigeons to the front.

of Lakewood, Ohio, entered the front lines at three trench posts with stations of four pigeons each. Two days later on 17 March, "Gunpowder," a black check hen bred by Herman Moser of Aurora, Illinois, delivered the first American pigeon message from the trenches of the front to the headquarters of the 26th Division at Boucq. Gunpowder was followed by a second pigeon, the black pied hen "Pretty Baby," carrying a carbon copy to ensure delivery in case the first bird went down.52 Thus, the American Pigeon Service entered the war. By the end of April, the AEF had fielded ten mobile lofts and one stationary loft, with 652 pigeons and available resources for a further twenty mobile lofts.53

Within two months, this force had more than doubled. In July, the Pigeon Service numbered twenty-two mobile and five stationary lofts, fielding 1,635 birds. Buscall, in preparation for fighting in 1919, placed orders for 150 additional mobile lofts and 30 smaller portable lofts sufficient to equip 80 divisions. Buscall also needed more pigeoneers to manage the lofts, but he found that qualified personnel were in short supply. He wrote to Russel that the necessity for such "first class pigeon men cannot be too strongly emphasized. To successfully run the service it is necessary to have only men who are experienced and successful racing pigeon fanciers."54 When American forces joined with French and Belgian troops

fighting at Château-Thierry in June and July, the Pigeon Service received orders to move eight mobile lofts to the Aisne-Marne Sector for liaison duty. American pigeons soon found their way to the doughboys at the front and suffered their first combat deaths from poison gas.⁵⁵ Despite the losses, these initial operations proved successful. From 29 August to 11 September, Mobile Loft No. 9 operated at the front, where it received 78 important messages and 148 test messages from its 72 birds, none of which failed to home.⁵⁶

Lessons from Château-Thierry and additional field training in August brought renewed emphasis on the proper use and care of pigeons as nonexpendable assets.



Sketch 2. Mobile pigeon lofts deployed with three divisions at H-Hour

On 6 August, Buscall issued guidance to all noncommissioned officers in charge of mobile or stationary lofts that, in the event they had to abandon the lofts, the men were to save as many pigeons as they were able to carry.⁵⁷ Lamentably, the initial field operations in July and August resulted in higher than anticipated losses of birds, often caused by improper handling. Unfamiliar with the special handling requirements, some soldiers treated pigeons as common equipment with a total disregard for the birds' health. Many birds were abandoned in the field; others suffered from muddy or broken feathers. These losses brought a stern rebuke to all I Army Corps division commanders from its chief of staff, Brig. Gen. Malin Craig.

He remarked how the recent mistreatment of the pigeons resulted in a "greatly reduced number of birds assigned" for use in each division. He thereafter instructed all division commanders to make sure that auxiliary pigeoneers assigned to work with birds had thorough instruction in the proper treatment of homing pigeons.⁵⁸

The need for pigeon service increased in mid-September with the Battle of St. Mihiel and the first massed combat use of AEF pigeons. Prior to the battle, the AEF Tank Corps' 344th and 345th Battalions, under the command of Lt. Col. George S. Patton Jr., had trained with pigeons in simulated maneuvers and had decided to carry the birds into battle.⁵⁹ When the attacks commenced on 12 September, a total of 586 pigeons went into battle, 384 on the backs of doughboys in the trenches and 202 inside American tanks. Heavy mist and rain, together with muddy conditions in the trenches, hampered the birds' work, but most averaged respectable thirtyminute flights at speeds of approximately 37 miles per hour. One pigeon liberated from a tank at 0800 arrived back at its loft at



Soldiers from the 42d Division prepare pigeons to carry messages back from the front.

0820, and the message reached the IV Army Corps' chief signal officer by 0825. A total of sixty-four birds died in the operation, twenty-four of which were from the tank corps; their deaths primarily were the result of poor handling. Despite these losses, the surviving tanker birds safely delivered ninety important messages, resulting in an overall return rate of approximately 91 percent for the deployed pigeon force. Quite a few hero pigeons emerged from St. Mihiel, notably the American-bred birds "President Wilson" and "Lord Adelaide." Even birds that were wounded in the action. such as "The Mocker," who lost an eye, and "The Poilu," who suffered severe head lacerations, successfully delivered their respective messages.60

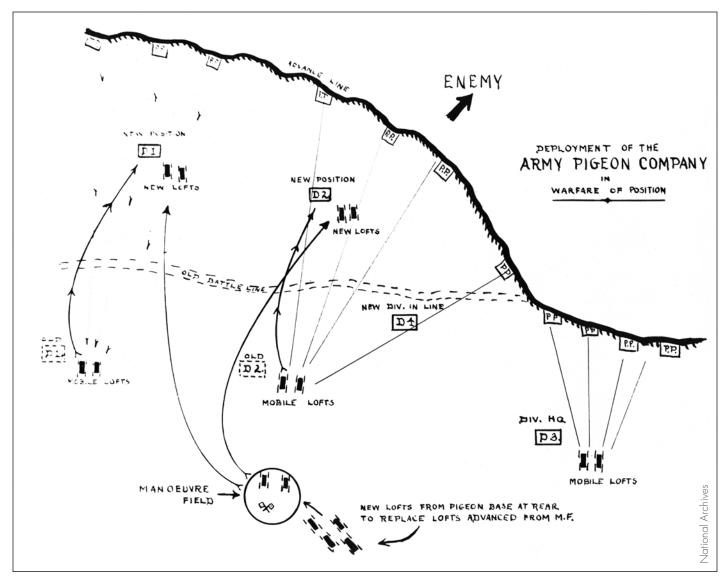
No sooner had the fighting started to subside when word reached the Pigeon Service on 21 September to prepare for an even larger operation. The Meuse-Argonne Offensive would become the bloodiest battle in American military history and it would be the culminating operation for the AEF's pigeons.⁶¹ Despite having only five days to reposition mobile lofts and train the birds to home, the Pigeon Service managed to place 14 mobile lofts and 442 pigeons with the U.S. First Army for the opening of battle on 26 September. On the eve of the offensive, six out of eight French lofts that had been promised to the American forces failed to materialize; only one mobile and one stationary loft provided partial compensation. These reductions forced 90 percent of the American pigeons to be at the front, leaving little time for the birds to rest at the loft before being sent back out. French pigeons from the two French lofts joined with the American birds, although some American command posts were left underequipped because French

restrictions permitted only 30 percent of their birds to

go to the front at any one time.⁶²

From 26 September to the Armistice of 11 November, the Pigeon Service faithfully provided communications to AEF forces in the field. Pigeons who were veterans of the fighting in Aisne-Marne and at St. Mihiel served again in the Meuse-Argonne. French and American lofts received 343 important messages from the field and a further 144 test messages from pigeons released at distances from five to twenty-five miles. Buscall estimated that some birds flew at speeds averaging 31 miles per hour in the face of severe and unfavorable weather. Buscall and his staff never compiled an official record of losses, but no pigeon carrying an important message is known to have gone astray during the offensive. Postwar, the Signal Corps estimated that no more than 10 percent of the AEF pigeons failed to return to their lofts.63

The most prominent use of pigeons in the Meuse-Argonne involved the men of the 77th Division's 308th Infantry. Under the command of Maj. Charles W. Whittlesey and accompanied by two companies from the 306th Machine Gun Battalion, the



Sketch 3. Advance of mobile pigeon lofts after 24 hours

force advanced into the Argonne Forest with the objective of reaching the La Viergette-Moulin de Charlevaux-Binarville Road. Reaching the road on the afternoon of 2 October, Whittlesey's forces dug in to await further orders. Isolated from their flanking divisions, the men soon found themselves cut off by German forces, squeezed into a small pocket along the slope of the roadway, and able to communicate only through homing pigeons. Of the eight birds brought into the forest, seven successfully delivered messages from the stranded troops who would come to be known as the Lost Battalion.⁶⁴ The last bird, an English blue-checked pigeon named "Cher Ami," released on the afternoon of 4 October, brought an urgent message requesting a cessation of incoming friendly artillery. According to popular lore, Cher Ami arrived at its loft with the message tube hanging from the remains of its right leg

and a hole across its chest cutting through the breast bone, wounds most likely received from a shell burst or enemy bullet as the bird was escaping the pocket. The message provided the exact position of the trapped men, which facilitated the relief of the survivors on the night of 7 October.⁶⁵

Following the Armistice, the Pigeon Service immediately curtailed operations. All breeding ceased at the lofts at Fort de la Bonnelle, and loft attendants segregated the birds by sex to prevent unauthorized fraternization. Plans to construct additional breeding lofts at Wassy for the U.S. Second Army ceased. All but two mobile lofts assigned to the First Army were concentrated at Vaucouleurs and all of those with the Second Army concentrated at Vandoeuvre. Initially, the newly constituted U.S. Third Army did not request pigeon service until in position in the occupied territory, but beginning in January 1919 it operated eight mobile lofts with 640 pigeons.⁶⁶

A HOMECOMING FOR AMERICA'S HERO PIGEONS

The human-animal bond, forged in battle, brought a change to the original plans for the disposition of the AEF pigeons. The Army initially informed Russel not to return any birds to the United States, but Russel disagreed. He wrote to Buscall on 3 December to share his opinion that the AEF should make "an exception in the case of the bird which brought in its message after being very seriously wounded." He directed for this bird to "be sent home in charge of an officer, surrounded by all luxury possible" and photographed with a large placard stating the nature of its achievement. Russel further asked Buscall for recommendations for the disposal of the remaining pigeons.67 Buscall replied that approximately fifty pigeons, "all



Cher Ami

of which specially distinguished themselves in combat liaison should be taken back to [the] U.S." as the birds "will be of great value in extolling Signal Corps work especially at the big shows held annually in the U.S."68 On 15 December, a Signal Corps photographer visited the breeding lofts at Langres and photographed eight hero birds.⁶⁹ Before Christmas, Buscall again wrote Russel to recommend that six American hero pigeons and six captured German pigeons be sent to zoological parks in either Washington, D.C., or New York. He added instructions that when any of the Signal Corps birds died they should be properly mounted with the story of their achievements and kept at the Smithsonian Institution. Russel relayed these recommendations to Washington.70

In mid-January 1919, Russel received authority from Pershing's headquarters to publicly auction off the remaining pigeons. Prior to the auction, Russel received a list with descriptions of special birds that were slated to return to United States, including 32 distinguished hero pigeons, 10 captured German pigeons, and 132 additional pigeons identified as breeders.⁷¹ The ensuing auction at the Pigeon Service breeding lofts at Langres on 12 February sold 2,049 birds for a total of 10,058 francs. Cognizant of civilian interest in the Pigeon Service personnel, Russel granted permission for the doughboys to bid on birds. As a result, some 800 additional AEF pigeon veterans came home to the United States for private use.⁷² General Headquarters, AEF, subsequently cut orders to return all Pigeon Service personnel to the United States, except for the thirty-two pigeoneers who were transferred to the

Third Army's 322d Field Signal Battalion to oversee the eight mobile lofts with the occupation force.⁷³

On 16 April 1919, the troop transport USS Ohioan docked at Hoboken, New Jersey. Along with men from the 40th Division and other units, John Carney and the twenty enlisted men of Pigeon Company No. 1 disembarked with their 174 feathered comrades.74 Chief among the ship's celebrities was Cher Ami, the pigeon credited with saving the Lost Battalion, who had crossed the Atlantic for the first time in the comfort of Carney's cabin.⁷⁵ Dockside reporters interviewed Carney about the pigeons' heroics and thereafter began spreading Cher Ami's story across the nation, arguably making the pigeon the most famous bird in the world.76 After various press events



Army carrier pigeons are exhibited at the Madison Square Garden Poultry Show in February 1918.

celebrating the pigeons' achievements in battle, the feathered heroes entered a special "veterans home" loft that was exhibited in Potomac Park in Washington, D.C, per General Pershing's orders. Officially titled the "Hall of Honor of the American Pigeon Service," the loft housed the honored birds who also received full pensions in feed. Although not required to work, the pigeons performed daily drill flights, weather permitting.⁷⁷ The remaining pigeons went to Signal Corps lofts in the United States, with breeding efforts consolidated at Camp Alfred Vail, New Jersey, in the Signal Corps Pigeon Breeding and Training Section.⁷⁸

Upon his return to the United States, David Buscall compiled a history of the Pigeon Service in the AEF. Drawing on his monthly reports, he outlined the establishment and operations of the service. In his brief concluding recommendations for the future, Buscall focused on personnel issues. He singled out a lack of "officers with sufficient technical knowledge of pigeons" and stated how less than a fourth of enlisted personnel were deemed suitable for pigeon work for similar reasons. Racing pigeon men, rather than pigeon fanciers, were essential for Signal Corps work. Rather pointedly, Buscall noted that "only two [Buscall and Carney] of the six officers detailed with the Pigeon Service up



Four-week-old pigeons and recently laid eggs

to the time of the signing of the armistice, were racing pigeon men, the others were worse than useless for pigeon work." He concluded that the expertise of a few officers and enlisted men, combined with the stellar performances of American pigeons of "exceptional quality," proved to be the main reasons for the Pigeon Service's success.⁷⁹



A soldier removes a message from the carrying tube of the pigeon Gunpowder.

Perhaps heeding Buscall's advice, the Signal Corps retained its Pigeon Service and maintained close relationships with civilian racing pigeon organizations until the disestablishment of the Army's pigeon program in 1957.80 The hero birds of World War I made guest appearances at national conventions throughout the 1920s, and the Signal Corps entered its newest working pigeons in various exhibitions and races in the interwar period, winning a fair share of events. While participating in various civilian pigeon exhibitions and races, the Signal Corps recruited for the next generation of pigeoneers, seeking men with "pigeon knowledge" to train America's feathered Army messengers.81

Within a year of its "hatching," the Pigeon Service grew from a mere squeaker to a capable communication service. Even as an auxiliary or emergency line of communications, the pigeons proved reliable, with an average success rate over 90 percent and low loss rates when personnel were trained to handle the birds properly. Cooperation with the French and British armies yielded training, specialized equipment, and pigeons for breeding and field work, all of which enabled the AEF to stand up operations with considerable efficiency. Through the civil-military conduit of Buscall and Carney, thousands of high-quality birds and a small, core group of talented citizensoldiers allowed the AEF to field a pigeon force as capable as any other military in the field, ready and able to meet any requirement of the war and to serve the cause with honor.

AUTHOR'S NOTE

The author would like to thank the numerous colleagues at the National Museum of American History for their moral support, to Bryan Hockensmith, Cheryl Bratten, and Margaret McGarry for their comments and suggestions, and to the American Racing Pigeon Union, whose request for a museum tour launched my research into this topic.

Dr. Frank A. Blazich Jr. is a veteran of the U.S. Air Force and holds a doctorate in modern American history from the Ohio State University. Following his doctoral studies, Blazich served as the historian at the U.S. Navy Seabee Museum in Port Hueneme, California before moving to Washington, D.C., to serve as a historian in the History and Archives Division at the Naval History and Heritage Command. In January 2017, he assumed his current position as curator of modern military history at the Smithsonian Institution's National Museum of American History. His most recent book project, "An Honorable Place in American Air Power:" Civil Air Patrol Coastal Patrol Operations, 1942-1943, is slated for publication by Air University Press in late 2020.

NOTES

1. Memo, O. S. Albright for Ch Signal Ofcr, 4 Jan 1919, sub: Personal Historical Data, binder "Volume III, Copy No. IV," box 43, Rpts, Summs, Photographs, and Charts Relating to the History of the Signal Corps in Combat ("Historical File"), 1917–1919, Entry NM-92 2041, Records of the American Expeditionary Forces (AEF) – World War I (RG 120), National Archives and Records Administration, College Park, MD (NACP).

2. George C. Marshall, *Memoirs of My Services in the World War, 1917–1918* (Boston: Houghton Mifflin Co., 1976), pp. 96–98, 182–83.

3. Marshall, Memoirs of My Services, p. 184.

4. Bashford Dean, *Helmets and Body Armor in Modern Warfare* (New Haven, Conn.: Yale University Press, 1920), pp. 64–67.

5. Edward M. Coffman, The War to End All Wars: The American Military Experience in *World War I* (Lexington: University of Kentucky Press, 1998), p. 131; Dean, *Helmets*, pp. 193–94.

6. Rebecca Robbins Raines, *Getting the Message Through: A Branch History of the U.S. Army Signal Corps* (Washington, D.C.: Center of Military History, 2011), pp. 168–70, 188.

7. War Dept, Ofc Ch Signal Ofcr, "Instructions on the Use of Carrier Pigeons in War – U.S. Signal Corps," Confidential, Apr 1918, p. 1, box 502, Pigeon Service – HQ – Weekly Rpts, Entry NM-92 2051, World War I Organizational Records – Signal Corps, RG 120, NACP. Hereinafter cited as "Pigeon Instructions."

8. "Pigeon Instructions," p. 2.

9. U.S. Congress, House, *War Department Annual Reports, 1919, Reports of The Chief Signal Officer,* 66th Cong., 2d sess., 1920, H. Doc. 426, p. 1218. 18 July 1917 is also listed as the date when the Signal Corps received a requisition for two officers and twelve men to begin the pigeon service (p. 909).

10. For a longer study of the military use of homing pigeons, see Jerome J. Pratt, *Courageous Couriers: Memoirs of a Pigeon Soldier* (Warrenton, Mo.: American Pigeon Journal Co., 1977), pp. 16–17; Frederick C. Lincoln, "The Military Use of the Homing Pigeon," *The Wilson Bulletin* 39, no. 2 (Jun 1927): 67–68; Andrew D. Blechman, *Pigeons: The Fascinating Saga of the World's Most Revered and Reviled Bird* (New York: Grove Press, 2006), pp. 11–12, 30–39.

11. William E. Birkhimer, *Memoir on the Use of Homing Pigeons for Military Purposes*, Signal Service Notes No. II, War Dept (Washington, D.C.: Office of the Chief Signal Officer, 1882), pp. 8–10; Raines, *Getting the Message Through*, p. 68.

12. U.S. Congress, Senate, *Homing Pigeons for Sea Service*, 55th Cong., 2d sess., 1898, S. Doc. 338; U.S. Congress, Senate, *Homing Pigeons*, 55th Cong., 2d sess., 18 Apr 1898, S. Doc. 241, pp. 3–4; *Cong. Rec.* 1898, 55, pt. 2, p. 6742; U.S. Congress, Senate, *A Bill for the Establishment of a Homing Pigeon Service*, S. 4857, 55th Cong., 2d sess., 7 Jul 1898, Congressional Record Index, Library of Congress; Laurence M. Burke, "The First Naval Aviators: Pigeons and Pigeoneers in the U.S. Navy" (paper presented at the 86th annual meeting of the Society for Military History, Columbus, Ohio, 10 May 2019).

13. "Big Homing Pigeon League Under Way: American Racing Union Elects Officers and Holds Successful Banquet," *Evening Star* (Washington, D.C.), 4 Nov 1910, p. 18.

14. "Washington Birds Enter Big Flight," *Washington Times*, 27 Jun 1909, p. 9; "Large Cash Prizes for Pigeon Races," *Evening Star*, 7 Dec 1910, p. 15; "Pigeon Racing is Their Sporting Fad," *Pittsburgh Post-Gazette*, 23 Apr 1911, p. 21. 15. Evan D. Cameron Jr., "The Development and Use of Homing Pigeons for Military Purposes," Signal Corps War Plans and Training Division, undated [ca. mid-1920s?], folder "[311.91] Origin and History of Homing Pigeons," box 9, 311.91 Gen Folder. Vi 1/45–4/45 Thru 311.91 experiment 2-way pgns, Entry UD 1025, Rcds Relating to Army Pigeons, 1919–1948, Ofc Ch Signal Ofcr, Department of Defense (DoD), Department of the Army (DA), RG 111, NACP.

16. "Pigeons Cited for Bravery," *Boston Globe*, 30 Mar 1919, p. 52; "Lieut. Buscall in France Busy with Pigeon Camp," *Evening Star*, 27 Nov 1917, p. 5; "Cares for Army Pigeons," *Kansas City Times*, 26 Dec 1917, p. 14; Muster Roll of Officers and Enlisted Men of the U.S. Marine Corps, HQ, U.S. Marine Corps (USMC), Washington, D.C., 1–31 Aug 1917; Muster Roll of Officers, Noncommissioned Officers, Drummers, Trumpeters, and Privates of the U.S. Marine Corps, stationed at Headquarters, U.S. Marine Corps, Washington, D.C., 1–30 Jun 1907, Ancestry.com.

17. Entry for "Buscall, David C.," Muster Roll of Officers and Enlisted Men of the U.S. Marine Corps, HQ, USMC, Washington, D.C., 1–31 Aug 1917, Ancestry.com.

18. "Saw Service in Two Wars," *Philadelphia Inquirer*, 6 Aug 1901, p. 4; "Chicago Pigeon, Hero of Victory, to get Medal," *Chicago Tribune*, 17 Apr 1919, p. 1; "Cher Ami,' Argonne Veteran, D.S.C. Winner, Chief Among Jack Carney's Bird Heroes, is Transport's Honor Guest," *Pittsburgh Daily Post*, 17 Apr 1919, p. 1; "Capt. Carney, War Veteran, Newspaperman, Dies at 68," *Pittsburgh Sun-Telegraph*, 5 Feb 1940, p. 10; U.S. Congress, House, *Reports of Chief Signal Officer*, p. 1218.

19. "Membership Over Hundred," *Pittsburgh Daily Post*, 21 Nov 1910, p. 9; "Big Homing Pigeon League Under Way," *Evening Star*, 4 Nov 1910, p. 18; "Pigeon Fanciers Organize Union," *Washington Herald* (Washington, D.C.), 3 Nov 1910, p. 12; "War Department Requests Pigeons from Pittsburgh," *Pittsburgh Daily Post*, 8 Jul 1917, p. 19; American Racing Pigeon Union, *AU Yearbook 2018* (Oklahoma City: American Racing Pigeon Union, 2018), p. 57.

20. "Pershing Asks for Racing Pigeons," *American Squab Journal* 6, no. 10 (Oct 1917): 314; "Thousands of American Pigeons to Carry Messages for Pershing," *Washington Post*, 8 Sep 1917, p. 4; "Army Orders," *Washington Post*, 6 Sep 1917, p. 6; 14 Sep 1917, p. 6; 18 Sep 1917, p. 6; 20 Sep 1917, p. 6; 22 Sep 1917, p. 6.

21. David C. Buscall, "Pigeon Service Division: Report for December 1917," Exhibit No. 13 in Ch Signal Ofcr, AEF, Monthly Rpt – Dec 1917, box 31, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

22. "U.S. Mobilizes Its Birds of War," The Daily Notes (Canonsburg, Pa.), 20 Sep 1917, p. 1; "Over 3,000 'Homing' Pigeons for Use in French War Zone," Evening Star, 25 Oct 1917, p. 17; "Homing Birds to France," Baltimore Sun, 12 Oct 1917, p. 5; "Pittsburghers Have Charge of Flock of Army Pigeons," Pittsburgh Post-Gazette, 27 Oct 1917, p. 5; "Pedigreed Pigeons Going to France," Washington Post, 28 Oct 1917, p. 3; Memo, F. R. Curtis and Alfred H. Osman, 25 Jun 1919, sub: Pertaining to the Return of Homing Pigeons from the A.E.F. to the U.S. After the World War, folder "000.7 Pigeon Publicity - Vol. II," box 1, 000.7 Pigeon Publicity Vol 1 thru 000.7 Pigeon Publicity Vol IV, Entry UD 1025, RG 111, NACP. It must be noted that the figure of 2,350 varies from 2,400 to 2,600 depending on the source. Buscall's December 1917 report to the Chief Signal Officer (note 21) lists 2,500 American birds on hand.

23. "History of the Pigeon Service, Signal Corps, American Expeditionary Forces," ch. 14, "History of the Pigeon Service," in U.S. Army Signal Corps, Chief Signal Officer of the Army, *History of the Signal Corps – American Expeditionary Forces*, vol. 7, Binder "Volume VI – Copy No. IV," box 44, "Historical File", 1917–1919, Entry NM-92 2041, Ch Signal Ofcr, RG 120, NACP. Hereinafter cited as "Pigeon History."

24. U.S. Congress, House, Reports of Chief Signal Officer, p. 909.

25. United States Army Transport Service, Passenger List for Homing Pigeon personnel, USS *Agamemnon*, 29 Oct 1917, Ancestry.com; David C. Buscall, "Report of Activities of Pigeon Service, Signal Corps, A.E.F. – From November 2nd 1917 to May 1919," folder "311.91 – AEF, Homing Pigeons – #2," box 128, 311.91 – Homing Pigeons, Entry NM-92 2040, Rcds of the Ch Signal Ofcr, Ch Signal Ofcr Correspondence, 1917–1919, RG 120, NACP. Hereinafter cited as Buscall, "Pigeon Service Report."

26. Buscall, "Pigeon Service Division: Report for December 1917." The AEF Pigeon Service was detached from the Pigeon Service (also referred to as Section) in the United States. The latter was commanded by Maj. Frank J. Griffin, and the Pigeon Section's principal duties were "to provide personnel, pigeons, and equipment for training of all arms of the service, conduct this training at different camps and aeroplane stations, to coordinate pigeon activities with the other branches of the War Department, to procure personnel and equipment for the forces overseas and to answer all inquiries for information concerning pigeons and their training." U.S. Congress, House, Reports of Chief Signal Officer, pp. 1218-19.

27. Buscall, "Pigeon Service Report."28. "Pigeon History," p. 89.

29. United States Army Transport Service, Passenger List for Homing Pigeon personnel, USS *Henry R. Mallory*, 26 Nov 1917, Ancestry.com; Buscall, "Pigeon Service Report." See note 22 regarding the figure of 1,800 birds.

30. Buscall, "Pigeon Service Division: Report for December 1917;" "Pigeon History," pp. 90–91. 31. Buscall, "Pigeon Service Report;" "Pigeon History," pp. 91–93. Buscall formally assigned Carney his duties as being in charge of the breeding lofts, mobile lofts, and operations at the front on 21 March. See Memo, David C. Buscall, 21 Mar 1918, folder "Enroute from States to Langres," box 506, Entry NM-91 2052, RG 120, NACP.

32. "Winged Wireless Helps Sammies," *Evening Sun* (Baltimore), 15 Feb 1918, p. 3; United States Army Transport Service, Passenger List for Homing Pigeon personnel, USS *Agamemnon*, 29 Oct 1917, Ancestry.com; Buscall, "Pigeon Service Report."

33. Memo, David C. Buscall for Frederic J. Herrmann, 10 May 1918; Memo, Alfred H. Osman for C. V. Lawrence, 16 May 1918; Memo, C. V. Lawrence for Alfred H. Osman, 17 May 1918, sub: Movement of 600 Young Pigeons; Memo, Thomas P. Dudley for Frederic J. Herrmann, 19 May 1918, folder "Pigeons," box 507, Entry NM-91 2052, RG 120, NACP.

34. Monthly Rpt, Ch Signal Ofcr, AEF, May 1918, Exhibit No. 10 – "Pigeon Division," box 33, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

35. Surviving records for pigeon transfers to mobile or stationary lofts records lists 465 English pigeons in operational use. Untitled red binder with pigeon transfer lists, box 505, NM-92 2051, RG 120, NACP.

36. Buscall, "Pigeon Service Report."

37. "Pigeon Instructions," p. 4.

38. Ibid., p. 5; AU Yearbook 2018, p. 63.

39. Buscall, "Pigeon Service Division: Report for December 1917;" U.S. Congress, House, *Reports of Chief Signal Officer*, p. 923. This detachment consisted of one officer (2d Lt. John K. Shawvan) and ninety-nine enlisted men, who arrived in England on 16 February 1918. "Pigeon History," p. 91.

40. Buscall, "Pigeon Service Report;" Terry M. Mays, "A Signal Company for the Birds," *Army Communicator* 12 (Summer 1987): 26, 29, fig. 3. Pigeon Company No. 1 used a total of seventy mobile lofts of American, English, and French design during the war.

41. Buscall, "Pigeon Service Report;" "Pigeon History," pp. 93–94; Mays, "Signal Company for the Birds," p. 30n4; U.S. Congress, House, *Reports of Chief Signal Officer*, p. 936. Buscall's report lists 5 July as the date of authorization, while the Chief Signal Officer report lists 9 July for the authorization. Originally, the Signal Corps intended to stand up two pigeon companies, both authorized on 9 July 1918, but the Armistice shelved this idea. See Memo, George S. Gibbs for Avery D. Andrews, 30 Oct 1918, sub: Pigeon Organization, Signal Corps, folder "Second Army – Pigeon Company No. 2, S.C.," box 506, Entry NM-92 2051, RG 120, NACP.

42. David C. Buscall, "Pigeon Service Division: Report for January 1918," Exhibit No. 13 in Ch Signal Ofcr, AEF, Monthly Rpt – Jan 1918, box 32, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP; Buscall, "Pigeon Service Report;" "Pigeon History," pp. 91–94; John K. Shawvan, "Lecture on the Military Use of Homing Pigeons in the Signal Corps U.S. Army," [ca 1928], folder "000.7 Pigeon Publicity Vol. 5," box 2, 000.7 Pigeon Publicity Vol V thru 000.7 Pigeon Publicity folder iii 9/44– 5/45, Entry UD 1025, RG 111, NACP. Hereinafter cited as Shawvan, "Pigeon Lecture."

43. Shawvan, "Pigeon Lecture;" "Pigeon Instructions," pp. 12–19; Buscall, "Pigeon Service Report."

44. Buscall, "Pigeon Service Report;" "Pigeon Instructions," pp. 12–19, 25–30; Pigeon Company Number One, Signal Corps, AEF, France, Company Order No. 28, "U.S. On Wing," 20 Sep 1918, box 506, Entry NM-92 2051, RG 120, NACP.

45. Buscall, "Pigeon Service Report;" David C. Buscall, "Pigeon Service Division: Report for August 1918," Exhibit No. 10 in Ch Signal Ofcr, AEF, Monthly Rpt – Aug 1918, box 34, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

46. Buscall, "Pigeon Service Report;" "Use of Homing Pigeons for Military Purposes," undated, ca. May 1918, folder "Auxiliary Pigeon Men," box 506, Entry NM-92 2040, Pigeon Service – HQ Property Accounts and Misc. Corresp Arranged by Subj., A-MI, RG 120, NACP; U.S. Congress, House, *Reports of Chief Signal Officer*, pp. 977–78.

47. Army Signal Schs, AEF, France, "Lecture No. 41 – Military Use of Pigeons," folder "Lectures," box 506, Entry NM-91 2051, RG 120, NACP.

48. Ibid.

49. Ibid.; Buscall, "Pigeon Service Report."

50. "Use of Homing Pigeons for Military Purposes," attached to Memo, Ofcr in Charge, Homing Pigeon Service, AEF for Commandant, Army Signal Schs, AEF, 15 May 1918, sub: Instruction of Auxiliary Pigeon Men; Memo, Malin Craig, HQ I Army Corps, AEF, 25 Aug 1918; sub: Lecture No. 41 – Military Use of Pigeons, box 506, Entry NM-92 2051, RG 120; Shawvan, "Pigeon Lecture;" "Pigeon Instructions," pp. 31-34.

51. Buscall, "Pigeon Service Division: Report for January 1918."

52. "Pigeon History," pp. 90–91; J. W. Greenaway, *With the Colors from Aurora, Illinois, U.S.A., 1917, 1918, 1919* (Aurora, Ill.: Eugene Smith Co., 1920), pp. 212–13. Pretty Baby was later a victim of fratricide, mistaken as a German homing pigeon. In his January 1918 report of the Pigeon Service, Buscall recorded that the pigeon service for the 1st Division was placed under the charge of Sgt. Louis Serrurier of Holyoke, Massachusetts. Monthly Rpt, Ch Signal Ofcr, AEF, Jan 1918, Exhibit No. 13 – "Pigeon Service Division," box 32, Ofc Ch Signal Ofcr, AEF, 1917– 1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

53. David C. Buscall, "Pigeon Service Division: Report for April 1918," Exhibit No. 11 in Ch Signal Ofcr, AEF, Monthly Rpt – Apr 1918, box 32, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

54. David C. Buscall, "Pigeon Service Division: Report for July 1918," Exhibit No. 10 in Ch Signal Ofcr, AEF, Monthly Rpt – Jul 1918, box 33, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

55. Buscall, "Pigeon Service Report;" "Pigeon History," pp. 94–95; Document, "List of Managers and Assistants with Lofts," folder "Location – Mobile and Stationary Lofts," box 506, Entry NM-92 2051; Document, "Location of Lofts Sept. 8, 1918;" Document, "Location of Lofts Sept. 13 1918;" Document, "Location of Lofts Sept 19, 1918," box 502, Entry NM-92 2051, RG 120, NACP; "Homing Pigeons Used by the Signal Corps During the World War," *Signal Corps Bulletin* 30 (Jun 1925), folder "000.7 Pigeon Publicity Vol. II," box 1, Entry UD 1025, RG 111, NACP.

56. Buscall, "Pigeon Service Report;" United States Army Training Manual No. 32, *The Pigeoneer – Students Manual for All Arms* (Washington, D.C.: Government Publishing Office, 1925), p. 104.

57. David C. Buscall, "Instructions for N.C.O. in Charge of Mobile, Portable and Fixed Pigeon Lofts," 6 Aug 1918, folder "Agreement – French, British, American Pigeon Services," box 506, Entry NM-92 2051, RG 120, NACP.

58. Memo, Malin Craig for I Army Corps, 25 Aug 1918, sub: Instructions on the Care of Pigeons, folder "Miscellaneous," box 506, Entry NM-91 2051, RG 120, NACP.

59. Memo, John K. Shawvan for Asst Ch Signal Ofcr, Gen HQ, AEF, 7 Sep 1918, sub: Pigeon Equipment, Light Tanks, box 505, Entry NM-92 2051; Buscall, "Pigeon Service Division: Report for August 1918." 60. Buscall, "Pigeon Service Report;" "Pigeon History," pp. 95–96; "Homing Pigeons Used by the Signal Corps During the World War;" Memo, Charles E. Ries for Edgar A. Russel, 3 Feb 1918, sub: Description of Pigeons, folder "311.91 – AEF Homing Pigeons – Folder #2," box 128, Entry NM-92 2040, RG 120, NACP; David C. Buscall, "Pigeon Service Division: Report for September 1918," Exhibit No. 10 in Ch Signal Ofcr, AEF, Monthly Rpt – Sep 1918, box 34, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

61. Robert H. Ferrell, *America's Deadliest Battle: Meuse-Argonne, 1918* (Lawrence: University Press of Kansas, 2007).

62. Buscall, "Pigeon Service Report;" "Pigeon History," pp. 97–99; "Homing Pigeons Used by the Signal Corps During the World War;" David C. Buscall, "Pigeon Service Division: Report for October 1918," Exhibit No. 10 in Ch Signal Ofcr, AEF, Monthly Rpt – Oct 1918, box 35, Ofc Ch Signal Ofcr, AEF,1917–1919, Monthly Rpts, Entry NM-92 2042, RG 120, NACP.

63. David C. Buscall, "Pigeon Service Division: Report for October 1918;" "Homing Pigeons Used by the Signal Corps During the World War."

64. One pigeon escaped from the hands of the pigeoneer before a message could be attached.

65. Alan D. Gaff, Blood in the Argonne: The "Lost Battalion" of World War I (Norman: Oklahoma University Press, 2005), pp. 116-251; Louis Wardlaw Miles, History of the 30th Infantry, 1917-1919 (New York: G.P. Putnam's Sons, 1927), pp. 148-52; Robert J. Laplander, Finding the Lost Battalion: Beyond the Rumors, Myths, and Legends of America's Famous WWI Epic (Printed by author, Lulu Press, 2006), pp. 249-76, 353-56; Memo, Charles W. Whittlesey for Cromwell Stacey, 9 Oct 1918, sub: Report of 1st and 2nd B'nds. 308th Infty from Oct 2nd to Oct. 8th 1918, folder "77th Div. 308th Inf. 1st Bn [Rpt of Opns] [Lost Battalion] 277-33.6," box 37, Rcd of Combat Divs, 1918-1919, 77th Div, Historical - 308th Inf Reg - 11.4 to 308th Inf Reg - 50, Entry NM 1241; pigeon message from Detroit Red [Charles W. Whittlesey], 4 Oct 1918, folder "77th Div. 308th Inf. Field Messages 1918 [1 of 3] 277-32.16," box 37, Rcds of Combat Divs, 1918-1919, 77th Div, Historical - 308th Inf Reg - 11.4 to 50, Entry NM-91 1241, RG120, NACP; Buscall, "Pigeon Service Division: Report for October 1918;" Thomas M. Johnson, "Written Under Fire: The Lost Battalion is Decimated by its Own Artillery in Dramatic Climax of Private Jim Larney's War Diary," Hartford Courant (Conn.), 3 Oct 1937, p. 53; "Rescue Pigeon's Keeper Hears Story on W-G-N," Chicago Tribune, 13 Mar 1932, p. 38;

"Pigeon Messenger of Lost Battalion Home with D.S.C.," *New York Tribune*, 17 Apr 1919, p. 5.

66. Buscall, "Pigeon Service Report;" Henry G. Gale, "Special Service Division: Report for November 1918," Exhibit No. 8 in Ch Signal Ofcr, AEF, Monthly Rpt – Nov 1918, box 36, Ofc Ch Signal Ofcr, AEF, 1917–1919, Monthly Reports, Entry NM-92 2042; David C. Buscall, "Officer in Charge, Pigeon Service – Report for December 1918," Exhibit No. 10 in Ch Signal Ofcr, AEF, Monthly Rpt – December 1918, box 38, Entry NM-92 2042, RG 120, NACP.

67. Memo, Edgar Russel via Henry G. Gale for David Buscall, 3 Dec 1918, sub: Disposal of Pigeons, folder "311.91 – AEF, Homing Pigeons – Folder #2," box 128, Entry NM-92 2040, RG 120, NACP.

68. Telg, U.S. Army Signal Corps, David Buscall for Edgar Russel, 7 Dec 1918, box 503, Entry NM-92 2040, RG 120, NACP.

69. The hero pigeons photographed included "Big Tom" [Cher Ami], "President Wilson," "The Mocker," "The Poilu," "Kaja Boy," "Blanchette," "Petite Rosette," and "Lord Adelaide" [Cuisy Bill].

70. Memo, David C. Buscall for Edgar Russel, 21 Dec 1918, sub: Disposition of Wounded and Captured Messenger Pigeons; Memo, Edgar Russel for George O. Squier, 28 Dec 1918, sub: Disposition of Wounded and Captured Messenger Pigeons, folder "311.91 – AEF, Homing Pigeons – Folder #2," box 128, Entry NM-92 2040, RG 120, NACP.

71. Memo, Charles E. Ries for Edgar A. Russel,3 Feb 1919, sub: Description of Pigeons.

72. Buscall, "Pigeon Service Report;" Document, "Auction Sale of Racing Pigeons," undated, folder "Auction," box 508, Entry NM-92 2051, RG 120, NACP.

73. Buscall, "Pigeon Service Report;" U.S. Congress, House, *Reports of Chief Signal Officer*, p. 1387.

74. Memo, Curtis and Osman, 25 Jun 1919, sub: Pertaining to the Return of Homing Pigeons from the A.E.F. to the U.S. After the World War; "Carney, John L," Passenger List of Organizations, Transport *Ohioan*, 4 Apr 1919, Ancestry. com; "Kockler, Ernest P," List of Military Personnel Returning to the United States, Transport *Pastores*, 14 Mar 1919, Ancestry.com; "Troops at Sea Bound Home are Announced at Capital," *Reno Gazette-Journal* (Nev.), 8 Apr 1919, p. 1; "77th Soon to Return," *Baltimore Sun*, 9 Apr 1919, p. 3.

75. "Chicago Pigeon, Hero of Victory, to Get Medal," p. 1; "Cher Ami Home Wearing Scars and the D.S.C.," *San Antonio Evening News*, 17 Apr 1919, p. 7; "Captain Carney Brings Home His Pigeon 'Cher Ami,'" *Pittsburgh Post*, 3 May 1919, p. 3.

76. Gaff, Blood in the Argonne, p. 264.

77. "To Pension War Homers: Veterans' Home Open to Hero Birds that Helped to Defeat Boches," *The News Journal* (Wilmington, Del.), 3 Jun 1919, p. 8; H. E. C. Bryant, "Pigeon Heroes to be Honored," *The Charlotte Observer*, 16 Apr 1919, p. 9; "Wounded Pigeon Which Got War Cross for Carrying Messagee [sic] from 'Lost Battalion," *Wilmington Morning News* (Del.), 1 May 1919, p. 2.

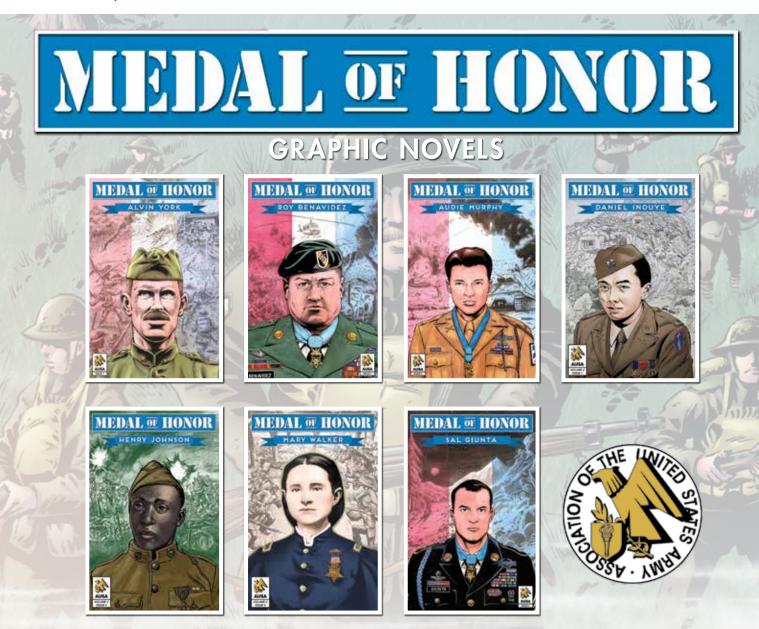
78. 78 Raines, Getting the Message Through, p. 222; Historical Ofc, Ofc Dep Ch of Staff for Operations and Plans, U.S. Army CEOMC Life Cycle Management Command, A History of Army Communications and Electronics at Fort Monmouth, New Jersey, 1917–2007 (Fort Monmouth, N.J.: Government Printing Office, 2008), p. 6. Two additional groups of breeding birds arrived in the United States on 17 July 1919 (300 breeders and 22 captured German birds) and 19 August 1919 (300 breeders purchased from the British Army Pigeon Service). Memo, Curtis and Osman, 25 Jun 1919, sub: Pertaining to the Return of Homing Pigeons from the A.E.F. to the U.S. After the World War; Cameron, "Development and Use of Homing Pigeons for Military Purposes."

79. 79 Buscall, "Pigeon Service Report."

80.80 Memo, J. D. O'Connell for Commanding General, Fort Monmouth, N. J., 30 Nov 1956, sub: "Discontinuance of Pigeon Breeding and Training Facilities," box 10, Documents and other Paper Related Materials Related to Pigeons, U.S. Army Communications – Electronics Command Historical Office, Aberdeen Proving Grounds, Md.; Jack Raymond, "Army's Pigeons to Turn in Wings," *New York Times*, 5 Dec 1956, p. 1; "15 Pigeon Heroes to Go to New Roosts; Army Closing Their Monmouth Center," *New York Times*, 7 Apr 1957, p. 120.

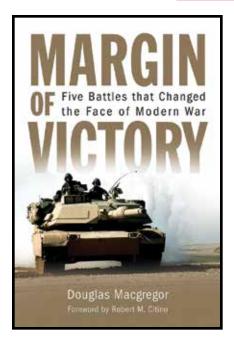
81. 81 Raines, *Getting the Message Through*, p. 222; Frank H. Hollmann, "First National Pigeon Show a Great Success," *American Squab Journal* 9, no. 2 (Feb 1920): 52; Edwin Teale, "Mile-a-Minute Pigeons," *Popular Science Weekly* (Jun 1936); Carter W. Clarke, "Signal Corps Pigeons," *The Military Engineer* 25, no. 140 (Mar-Apr 1933): 133–38; War Department, Ofc Ch Signal Ofcr, *The Signal Corps Bulletin, January-February 1932* (Washington, D.C.: Government Publishing Office, 1932), p. 41.





Visit https://www.ausa.org/medal-honor-graphic-novels

BOOKREVIEWS



Margin of Victory: Five Battles that Changed the Face of Modern Warfare By Douglas Macgregor Naval Institute Press, 2016 Pp. xvi, 268. \$34.95

Review by Steven A. Patarcity

I have been an avid follower of Doug Macgregor's writing for more than twenty years, ever since the publication of his first book, Breaking the Phalanx: A New Design for Landpower in the 21st Century (Westport, Conn., 1997), which I made mandatory reading for my officers when I commanded a battalion in 1997-2000. Our association later became a more personal one after a face-to-face meeting and his gracious support for the Officer Professional Development program in the Office of the Chief of Army Reserve, as well as serving as a panel member on Force 2025 at the Army Reserve 2015 Commander's Conference. So when I was contacted by the Center of Military History to review his latest book, Margin of Victory: Five Battles that Changed the Face of Modern Warfare, I looked forward to reading yet another thought-provoking and insightful-and probably contentious-effort.

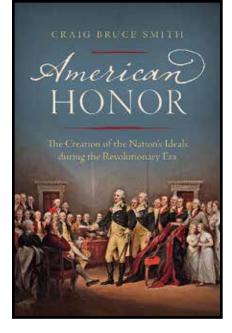
Margin of Victory is about change: intelligently and soberly recognizing the need for change regardless of preconceived notions and the consequences of failing to do so. Each of the conflicts analyzed by Macgregor, all seemingly unrelated at first glance, center on his repeated premise that victory will depend on lessons learned, which will drive accepting change and implementing the hard decisions accompanying transformation-notably in technology, people, strategy, and organization. Although history provides perspective to be considered, holding on to outmoded concepts or failing to properly leverage what's been learned ultimately leads to decisive defeat.

Margin of Victory scrutinizes five battles of the twentieth century, beginning with the 1914 Battle of Mons in World War I, the 1937 Battle of Shanghai, the destruction of Nazi Germany's Army Group Center in 1944, the 1973 Yom Kippur War counterattack by the Israelis across the Suez, and finally, the Battle of 73 Easting in 1991 during the Persian Gulf War. These historical vignettes were carefully selected by the author and in themselves are absorbing accounts of key battles of the past century. Of particular note is Macgregor's account of 73 Easting, because he was an active participant. However, a retelling of bygone battles is not his prime focus. His selection of these clashes is calculated to enable effective analysis of each belligerent's organization and military ethos, and how the victor properly extrapolated what was needed to be changed before the battle. It is said that we plan for the next war based on the last one we fought. Macgregor shows this has not always been the case, and those who recognize that fact ultimately win. This analysis enables him to lead the reader to his observations on the American defense establishment and what Macgregor sees as a dire need to fundamentally alter our armed forces to fight and win in future conflict. This theme of urgent need for real transformation is the constant topic in all of Macgregor's writing and critiques of the military.

What makes Macgregor's Margin of Victory stand out is his final well-reasoned argument for transformation now. Even those who may not agree with him cannot argue with the depth of his assessment, his experience, and writing ability. The needs for joint operations, with true integration of capabilities in all domains, and the cessation of interservice rivalry are not new ones, and there are few who argue against our need to improve in these areas. Macgregor ties all of his analysis together in his last chapter, "America's Margin of Victory in the Twenty-First Century." At its core, he continually stresses the dire need to dump outdated strategy and tactics, wasteful structure, and outmoded organizations and doctrine, and add the necessity for the birthing of National Defense Staff and Joint Force commands to maximize maneuver and strike capabilities, as well as the effective employment of our greatest, most precious asset—our human capital—all driven by an acceptance of the evolving nature of war.

This book is most highly recommended to all, even if it just serves to stimulate some basic thought processes. With America's Army (and sister services) engaged in heavy debate and frenzied activity on what we need to face the unknowable future, reflected in the activation of the new Army Futures Command, Multi-Domain Operations, the inception of Space Command, and the impact of the new realm of cyber warfare to name a few, Doug Macgregor continues to offer us more food for thought. Indeed, he may well have his fingers firmly on the pulse of what we must do to succeed, coupled with an insight and level of experience shared by few.

Steven A. Patarcity, a retired U.S. Army colonel, is an Army civilian senior strategic planner on the staff of the Office of the Chief of Army Reserve at the Pentagon. He retired in 2010 after thirty-three years of service in the active Army and the Army Reserve, which included military police and armor assignments in the United States, Kuwait, and Iraq.



American Honor: The Creation of the Nation's Ideals during the Revolutionary Era

By Craig Bruce Smith University of North Carolina Press, 2018 Pp. ix, 367. \$35

Review by Rachel Engl

Craig Bruce Smith provides a refreshing causation narrative for the American Revolution through his book, American Honor: The Creation of the Nation's Ideals during the Revolutionary Era. From the outset of his study, Smith clearly elucidates his goal: to provide an ethical history, which challenges readers to appreciate the critical role of ideological transformation in the way early Americans understood honor and virtue and the way in which this understanding affected the trajectory of the American Revolution. Identifying honor and virtue as indistinguishable from morality and ethics, he contends "the Revolution allowed for new ideas of honor and virtue to be instituted in society" and sparked an egalitarian shift in ethics, paving the way for individuals to rise through the ranks in ways previously unprecedented and unimagined by early Americans (p. 9). Throughout the book, Smith bridges the divide between the ideological and social history of the Revolution by demonstrating the myriad ways in which honor and virtue existed in both an intellectual and a practical realm for early Americans. This insight is a significant and welcome contribution to scholarship on

the American Revolution and the creative swell of new military history focused on the Revolutionary War.

Through seven chapters, Smith convincingly argues honor and virtue were paramount to the actions taken and decisions made by individuals from all cross-sections of colonial and revolutionary American society. The first chapter of the book begins before the outbreak of the revolutionary crisis to illustrate how early Americans adopted many elements fundamental to British understandings of honor and virtue, but also how they increasingly embraced "merit-based advancement over traditional patronage and hierarchy" (p. 45). Smith notes the pace of this egalitarian conception of society varied regionally throughout the British colonies from New England to the South. In the second chapter, Smith argues American colleges served as a site to nurture and encourage a collective understanding of honor and virtue that united colonists intellectually and provided the foundation for their collective action of riots, boycotts, and resistance, which are the focus of the third chapter.

The fourth chapter serves as the linchpin in his argument that honor and virtue were not only lofty ideals driving the revolutionary thought of elites, but also notions accessible to all Americans, guiding the principles of how war would be waged against the British. From the structure established in the Continental Army, Smith astutely demonstrates how "codes of discipline and rank hierarchy became the core foundation of this ethic of honor within the military" (p. 103). Through the fifth chapter, Smith recasts the traditional narrative of the shift from the first years of the Revolutionary War dominated by a sense of rage militaire—a term used by contemporary observers and later historians to describe the initial patriotic fervor of American independence-to one of disaffection as a transformation intricately tied to matters of honor. He contends the lack of enthusiasm on the part of Americans to enlist and join the war effort after the first years of the conflict followed a broader societal trend of the triumph of personal honor or "reputation based on an individual's proper or right conduct" over a national or collective sense of honor (p. 19). For Smith, the American victory

in the Revolutionary War represented the prevailing of national honor once again. Though this may be too neat of an explanation for military historians, it nevertheless reminds us that "hearts and minds" are just as important as tactical victories on the battlefield.

The last two chapters of the book attempt to explain the legacy of the American Revolution through the democratization of honor and virtue in the years of the early republic followed by subsequent counterrevolution embraced by following generations. Utilizing examples such as the Society of the Cincinnati, Smith acknowledges the limitations of this new vision of merit-based honor and rightly suggests hierarchy continued to structure postrevolutionary American society. This becomes even more apparent through his coverage of the nineteenth century in the final chapter of the book. According to Smith, ideas about honor and virtue continued to evolve in the minds of the generations who inherited the legacy of the Revolution. Straddling "the ethics of natural aristocracy with a revival of personal honor," Smith explains how the War of 1812, the creation of the country's first political parties, and the reemergence of the duel serve as evidence of the tension between competing definitions of honor and virtue that existed before the Revolution and had been dormant during the years of war but resurfaced in the second half of the early republic (p. 240).

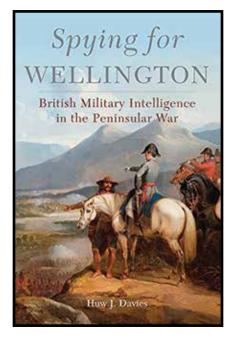
Throughout the book, Smith often uses the perspective of the founding fathers to trace these conceptual changes of ethics through figures like George Washington and Benjamin Franklin. He nevertheless also considers how more ordinary Americans, including African Americans, lower-ranking white men, and women, engaged with and embodied the ideals of honor and virtue through their actions and behavior before, during, and after the Revolutionary War. In doing so, Smith provides a notable contribution on American honor, which often overlooked how these ideals applied to people other than elite white men.

For those interested in the military history of the Revolution, Smith also enhances our understanding of two particularly noteworthy events of the war: Benedict Arnold's traitorous actions and the Newburgh Conspiracy. According to Smith, honor provides the broader context

to better understand Arnold's decisions and his feelings of resentment caused by being passed over for promotion on several occasions. These decisions were deeply insulting not only to Arnold as a military leader within the Continental Army, but more importantly to his sense of personal honor. In Smith's estimation, these slights left him no choice but to join the British Army as an attempt to salvage his personal honor. Similarly, Smith argues honor was integral to the events unfolding in the final months of the war at Newburgh. He presents the Newburgh Conspiracy as a test of the return to the triumph of national honor over personal honor, paving the way to an American victory in the Revolutionary War. For Smith, there was a more tenuous balance among Washington's officer corps than previously acknowledged and their latent personal aspirations threatened to erode the unification of revolutionary Americans behind the idea of national honor by revivifying the allure of personal honor.

Overall, Smith's American Honor enriches our understanding of both the causation of the Revolutionary War and the legacy of the Revolution itself. His book is a welcome addition to the innovative and expanding scholarship of the revolutionary era, promising to appeal to a variety of audiences interested in uncovering new insights into the founding ideals of our nation.

Dr. Rachel Engl is a member of the history faculty at the Moravian Academy Upper School and an adjunct professor at Muhlenberg College. She received her Ph.D. in 2019 from Lehigh University and is working to revise her dissertation, "America's First Band of Brothers: Friendship and Camaraderie within the Continental Army During the Revolutionary Era," into a book.



Spying for Wellington: British Military Intelligence in the Peninsular War

By Huw J. Davies University of Oklahoma Press, 2018 Pp. xiv, 313. \$39.95

Review by Hayley Fenton

While surveying the rise and fall of Napoleon, many times the great Battle at Waterloo or the doomed invasion of Russia may eclipse the drawn-out campaigns pitting Portuguese and English forces against the French in the Iberian Peninsula. Huw Davies' Spying for Wellington uses a finely focused lens on these campaigns to illustrate the specific impact of intelligence and counterintelligence as employed by Arthur Wellesley, Duke of Wellington. Davies, currently a professor at King's College in London, and the author of Wellington's Wars: The Making of a Military Genius (New Haven, Conn., 2012), contextualizes Wellington's use of intelligence against an earlier fragmented system that prevented effective analysis of collected information. Davies sees in the Peninsular War a "microcosm" of a vast British intelligence network developed synchronously in different areas in response to protracted hostilities with France (p. 6). Yet the narrative Davies offers emphasizes the unique potential of Wellington to exploit intelligence opportunities. When coupled with his military genius, his implementation of a vision dissolving the barriers between strategic and operational intelligence allows historians to see the potential of intelligence as applied to a localized theater.

In Chapters 1 and 2, Davies considers how Wellington was singularly positioned to break the patterns of inefficiency that marked the British intelligence landscape before the Napoleonic Wars. The effectiveness of Wellington's analysis and application of military and diplomatic intelligence defied earlier "ad hoc and almost always late" approaches, which are discussed in depth in the first chapter (p. 11). During the eighteenth century, bureaucratic infighting frequently prevented integration of available intelligence and analysis, leading to difficulty parsing reliable from unreliable sources. Wellington, however, was predisposed to acknowledge systemic flaws in the intelligence system. He was stationed in India when the British Army was nearly defeated by the Maratha Army in 1803. The intelligence available to commanders, informed by racial and cultural biases, dramatically underestimated the Maratha infantry forces. In his assignment to Europe, Wellington had learned the drawbacks of operating within the limits of established networks.

Chapters 3 and 4 demonstrate Wellington's capacity to leverage personal relationships to bridge the communication failures between the War Office and the Foreign Office. In a particularly important maneuver, he enlisted the aid of the diplomatic envoys in Spain and Portugal, Charles Stuart and Henry Wellesley-Wellington's brother. The proximity of the battlefield to those diplomatic outposts made close communication an important asset as Wellington sought to make sense of French intentions in the region. Through entrenched networks and the cross-referencing of civilian reports with military agents, Stuart and Wellesley offered Wellington "unparalleled detail on the strengths and intentions of the French forces in Spain and Portugal" (p. 90). Though disruptions in the courier system could hamper intelligence sharing, Stuart and the Wellesley brothers avoided the further delay of leaving London in charge of disseminating intelligence reports.

In this consideration of Wellington's intelligence integration, Davies carves out a niche for his argument alongside the conclusions of earlier scholars. Whereas earlier works emphasized Wellington's military genius and sole responsibility for the analysis of raw intelligence reports, Davies situates Wellington in a broader system. Information from Stuart and Wellesley was analyzed before being passed to Wellington. Wellington did receive a great deal of raw intelligence from the region around the battlefield, but the task of interpreting this information was made simpler by knowledge of the broader strategic picture he received from Lisbon and Cádiz.

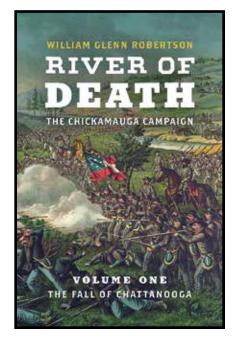
In Chapters 5 through 8, Davies takes an in-depth look at the interplay between the strategic intelligence he received through diplomatic channels, the collection of tactical and operational intelligence, and unfolding events. He considers several of the avenues through which Wellington derived intelligence. Civilians resisting the occupation of Portugal played an important role as entrenched observers and couriers of information. Yet the shifting lines of battle disrupted regional intelligence networks, as occurred when Ciudad Rodrigo fell to the French in 1810. For more specialized information regarding the availability of specific types of troops and armaments, Wellington relied on mobile military observers in British uniform. As reports of civilians sketched the enemy's intentions, these trained officers could satisfy immediate information requests. Finally, Davies emphasizes the criticality of topographical intelligence to the campaign of 1813-1814, which drove the French Army from the peninsula. Operating in mountainous and "previously unmapped terrain," the British Army was dependent upon trained surveyors and an intuitive translation of Wellington's vision into military orders by George Murray (p. 245). The campaigns showcase the value of several different intelligence sources, as well as the potential for disruptions and silences in the network to create a vulnerability.

The combination of Wellington's military genius with the evolution of a localized intelligence system of unprecedented effectiveness offers an opportunity to test the value of intelligence to combat operations. Intelligence made available a range of opportunities for Wellington to evade the enemy's concentration of force and push the advantages in areas where French forces were stretched thin. Intelligence could take little credit for the ongoing guerrilla operations sapping French strength in the Iberian Peninsula, or for the failed invasion of Russia that drained morale and elite fighting forces. Though Wellington's system adapted to mitigate the damage caused by slow and unreliable means of transportation and observational blind spots, interpretation and analysis also were subject to failure. The best that could be said for a good intelligence system was that it "made disaster considerably less likely, and success more probable" (p. 110).

In his exploration of the topic and his presentation of evidence, Davies brings to bear a great deal of familiarity with the intricacies of the Peninsular War and with Wellington's style of leadership. Davies incorporates a large amount of primary source evidence, quoting briefly and at length from the reports Wellington received. These are especially valuable in sketching the links between available information and the unfolding sieges, battles, and defensive positioning. Spying for Wellington offers a detailed view of the constant maneuvering for position and evaluation of the relative strength that pushed the armies together at Ciudad Rodrigo, at Badajoz, at Salamanca, and at Vitoria.

Spying for Wellington makes a valuable contribution to two fields. It illuminates the decision-making processes that contributed to Napoleon's defeat, sketching in the process of trial and error through which Wellington's intelligence network took shape. It also reveals the long history of ongoing debates regarding the dangers of politicization in intelligence. In assessing the strengths of Wellington's intelligence system, Davies uses parallels to modern intelligence studies. Terms such as "group think," "cognitive dissonance," and faulty "dissemination" leading to a lack of "timely" intelligence will sound familiar to audiences better versed in twentieth-century history (pp. 208, 49, 158). In achieving the objectives set out in the introduction, though, Davies is only partially successful. The insights readers might gain into the broader question of "intelligence organization in the early nineteenth century" are diminished in comparison to the story Davies tells of the uniqueness of Wellington's situation in the Iberian Peninsula and as a military commander (p. 6).

Hayley Fenton is a Ph.D. candidate at the Ohio State University, with a research emphasis on twentieth-century intelligence organizations in the United States and Britain. She currently works as a graduate research assistant with the U.S. Army Center of Military History.



River of Death: The Chickamauga Campaign, Volume One: The Fall of Chattanooga

By William Glenn Robertson University of North Carolina Press, 2018 Pp. xvi, 680. \$45

Review by Nathan A. Marzoli

On 18-20 September 1863, Maj. Gen. William S. Rosecrans' Army of the Cumberland clashed with General Braxton Bragg's Army of Tennessee in the rugged terrain along the banks of Chickamauga Creek, Georgia. In the largest engagement of the Western Theater and the second bloodiest battle of the entire war (only behind Gettysburg), Bragg's army delivered a stunning blow, sending the Army of the Cumberland back into the hills toward Chattanooga. More than 34,000 Union and Confederate soldiers were killed or wounded during the three-day bloodletting. Over the past 160 years, military historians have studied the battles around Chattanooga extensively. None, however, has thoroughly explored the entire five-week Chickamauga Campaignthe summer movements of the armies leading up to the battle-until William Glenn Robertson's first of two volumes.

Robertson has a longstanding interest in Chickamauga. In the early 1980s, when Robertson was a military history instructor at the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas, the director of the Combat Studies Institute asked him about the possibility of reviving the long-dormant staff ride program. Among the many viable battles available for study during the new ten-week course, Robertson chose Chickamauga-with its complex campaign and excellently preserved battlefield-as the vehicle through which to return the staff ride to the Leavenworth curriculum. His years of facilitating these staff rides at the battlefield drove Robertson to two conclusions that ultimately led to his work on River of Death. First, he believed the five-week campaign preceding the battle "was conducted over perhaps the most difficult terrain experienced by two contending Civil War armies" (p. xii). Second—and this conclusion comes from the first-he discovered no historian had adequately covered the operational planning, logistical challenges, and engineering feats required for both armies to conduct a campaign in such rugged terrain. Robertson collected an incredible array of primary sources during his time leading Chickamauga staff rides that "not only offered the opportunity to study this important campaign in depth, but also to illuminate a large number of subordinate issues in a new and more comprehensive way" (p. xiii).

Robertson frames his two-volume work of Chickamauga around three major points. First, he argues historians of the battle sometimes "conflated events and telescoped timelines in order to bolster their preconceived arguments" (p. xiii). To avoid these pitfalls, Robertson instead provides a more comprehensive picture of what each commander knew at any given time. River of Death, therefore, incorporates Rosecrans' intelligence journal-maintained by Capt. David G. Swaim—and the diary of Lt. Col. George W. Brent, Bragg's assistant adjutant general, to construct a more detailed narrative and analysis of the campaign. Second, Robertson tries to more thoroughly explore the work of staff officers in both armies during the campaign. He finds their importance during the battle (and the entire war) often has been underestimated, as poor wording of an order or faulty route-finding sometimes led to significant consequences in the outcome of events. Lastly, these volumes explore the important role technology played in the Chickamauga Campaign. Railroads, the telegraph, and bridge construction were all important factors in helping the Army of the Cumberland tackle tough terrain obstacles, primarily the steep Cumberland Plateau and the wide Tennessee River.

Volume One incorporates all three of these main points in an extensive narrative of the period lasting from 4 July 1863-the end of the Tullahoma Campaign-until the Army of the Cumberland's occupation of Chattanooga on 9 September. (Volume Two will cover 10 September 1863 to mid-October 1863, including the actual battle, the withdrawal of the Federal Army to Chattanooga, and the relief of Rosecrans from command.) In deft prose, Robertson chronicles the Union movements over the Cumberland Plateau and the Tennessee River, as well as Bragg's struggles to guess Rosecrans' intentions while simultaneously dealing with his cast of recalcitrant subordinates. The amount of detail in the book is stunning; a look into the more than a hundred pages of notes attests to the author's extensive research. Robertson also does an excellent job in dismantling perpetual falsehoods and misunderstandings about the campaign. Historians often have faulted Rosecrans for moving too deliberately, for example, but the lush detail in Volume One: The Fall of Chattanooga vindicates the Union commander. Robertson's thorough documentation of the difficulties of crossing the Cumberland Plateau and the wide Tennessee River with a tenuous railroad supply line helps prove to the reader Rosecrans was not overly cautious during the campaign.

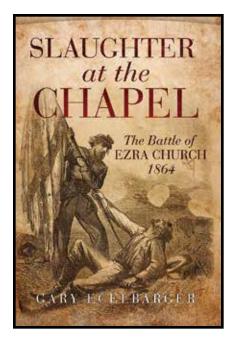
Unfortunately, the amount of detail in this volume might also be its greatest stumbling block. Robertson is following a recent trend in the field; as historians have thoroughly covered the traditional "drum and bugle" history of the Civil War, the logical next step has been to write exhaustive and meticulous tomes about campaigns (see D. Scott Hartwig's recent study of the Antietam Campaign-also slated for two volumes-for example). Although the most hardcore Civil War enthusiasts undoubtedly will welcome this comprehensiveness, more casual fans of Chickamauga may not want to delve into 500 pages of army movements with little study of actual combat.

The book's readability occasionally suffers because of this level of detail. For example, the author introduces us to the Chickamauga Campaign by first providing brief biographies of every

corps, division, and brigade leader, as well as important staff officers, in each army; some readers might find it difficult to make it past even these first couple of chapters. The book might benefit from a more concise edit to make these sections a bit less tedious, even at the expense of the overall detail of the campaign study. When trying to read cover to cover, one may become overwhelmed by the minutiae and glaze over some of Robertson's painstaking research and tremendous analysis.

Robertson's study is so well written and researched, however, that it is still an excellent addition to the historiography. But unless the reader is a serious student of the battle, this reviewer recommends reading *Volume One: The Fall of Chattanooga* in small doses, or using it as excellent reference material. This suggestion should not deter those who are interested in the Battle of Chickamauga, however—the book is so well produced that it left this reviewer anxiously awaiting Robertson's completion of the second volume.

Nathan A. Marzoli is a staff historian at the Air National Guard History Office, located on Joint Base Andrews. A U.S. Air Force veteran, he completed his bachelor's degree in history and master's degree in history and museum studies at the University of New Hampshire. Mr. Marzoli's primary researching and writing interests focus on civil-military relations in the Civil War North. He is the author of "A Region Which Will at the Same Time Delight and Disgust You:' Landscape Transformation and Changing Environmental Relationships in Civil War Washington, D.C." (Civil War History); as well as several articles in Army History, including "We Are Seeing Something of Real War Now:' The 3d, 4th, and 7th New Hampshire on Morris Island, July-September 1863" (Winner of the 2017 Army Historical Foundation's Distinguished Writing Award); "Their Loss Was Necessarily Severe:' The 12th New Hampshire at Chancellorsville;" and ""The Best Substitute:' U.S. Army Low-Mountain Training in the Blue Ridge and Allegheny Mountains, 1943-1944."



Slaughter at the Chapel: The Battle of Ezra Church, 1864

By Gary L. Ecelbarger University of Oklahoma Press, 2016 Pp. x, 275. \$26.95

Review by J. Britt McCarley

Over the past three decades or so, the American Civil War's 1864 Atlanta Campaign has received increasing attention from military historians. The resulting studies have produced an ever-richer campaign historiography, which now includes Gary L. Ecelbarger's Slaughter at the Chapel: The Battle of Ezra Church, 1864, as well as historian Earl J. Hess' The Battle of Ezra Church and the Struggle for Atlanta (Chapel Hill, N.C., 2015).1 Though appearing only one year after Hess' work, Ecelbarger stakes an early claim in his treatment as an Ezra Church revisionist: "This account revises the understanding of the battle and the decisions and movements leading up to it with a new and more strongly supported battle history" (p. 6). He also lays out a chapter structure that closely resembles the U.S. Army's orderly battle analysis methodology, long an educational staple of leader development in the service's schoolhouses. In ten chapters and three appendixes, Ecelbarger begins by cogently framing the strategic and operational settings, then microscopically details the tactics of the battle itself, including correcting our previous understanding of the location of the engagement's key terrain-later known appropriately as Battle Hill. He concludes with an analysis that both challenges and supplements earlier received wisdom on the 28 July 1864 fight at Ezra Church.

Following two-and-a-half months of an inconclusive campaign of maneuver in north Georgia in late spring and early summer of 1864, the Confederate Army of Tennessee's newly appointed leader, General John B. Hood, sought decisive battle in and around heavily fortified Atlanta against Union army group commander Maj. Gen. William T. Sherman. On 20 and 22 July, at the Battles of Peachtree Creek and Bald Hill (Atlanta), Hood unsuccessfully attacked Sherman and lost especially heavily in infantry in both encounters. As Sherman now changed direction, approached Atlanta from the north and west simultaneously, launched a supplementary cavalry raid well to the south, and threatened to capture the critical railroad junction at East Point about half a dozen miles south of the city, Hood devised another plan to assault the Federals as they neared Atlanta's last viable rail supply line. As Ecelbarger outlines, "Hood had a two-day battle plan employing six divisions of infantry," essentially a "fix and flank" effort, that resulted in the Battle of Ezra Church (p. 51). On the first day, Lt. Gen. Stephen D. Lee-recently promoted and reassigned to direct Hood's former infantry corps-would use two of his three divisions to seize the Lick Skillet Road and check (i.e., "fix") the progress of the Federals on that thoroughfare as they headed toward the East Point area. To do so, Lee would occupy the nearby high ground overlooking the key road half a mile north at a primitive meetinghouse called Ezra Church. During the second day, Lt. Gen. Alexander P. Stewart's infantry corps of three divisions, reinforced by a separate Rebel foot division from still another corps, would march west on the road, envelop (i.e., "flank") the open Union right side, and destroy in place a substantial portion of Sherman's total force. It was indeed an ambitious plan.

Because Lee's divisions had a late start, Sherman's simultaneous movement, executed by Maj. Gen. Oliver O. Howard's Union Army of the Tennessee, reached and occupied the Ezra Church heights before the Confederates—but only just. One of Howard's brigades removed

pews from the church to augment its fieldwork, establishing a hasty defense that characterized the entire Federal line that day, with no improved position rising above twenty inches from the ground. According to Ecelbarger, "Soldiers filled these [church] benches with [their] knapsacks to create the most solid breastwork of any in the [Union XV] corps, given that no entrenchment tools were at hand [for a while to come]" (p. 63). With Rebels in division strength rapidly advancing north from the nearby big bend area of Lick Skillet Road at the same time that Northerners were arriving on a ridgeline and series of hills adjoining Ezra Church along Chapel Road, a classic meeting engagement was in the offing. In keeping with his spirited nature and his awareness of his likely fleeting numerical advantage, Lee immediately chose to assault with whole divisions and even individual brigades. Ecelbarger continues: "Desirous to trap his opponent by the element of surprise, General Lee ordered [Brig. Gen. John C.] Brown's attack before his other available division had any chance to deploy" (p. 76). These multiple and disjointed Confederate assaults established a piecemeal pattern for the rest of the battle, in which neither Lee nor Stewart achieved the potential decisiveness of mass.

About noon, Ecelbarger maintains, two opposing infantry brigades engaged in close combat for possession of an eminence since known as Battle Hill, the "highest ground on the battlefield," whose possession "would likely determine the outcome of the contest" (p. 88). Battle Hill was clearly this engagement's key terrain, a fact recognized in the moment by Ecelbarger's personal Civil War hero, Maj. Gen. John A. Logan, then commanding the Union infantry's XV Corps, who personally led reinforcements to secure the Northern hold on Battle Hill. Shortly after 1300, the numerous Confederate frontal assaults had already resulted in around 1,500 Southern casualties compared to some 300 Northern ones-a disastrous five-to-one loss ratio that continued for the remainder of the fight.

Ecelbarger claims that also near midday, Hood "obliterated his two-day plan in the revised effort to keep the [Lick Skillet] road" free from Federal interdiction (p. 135). Hood did so by hastily sending

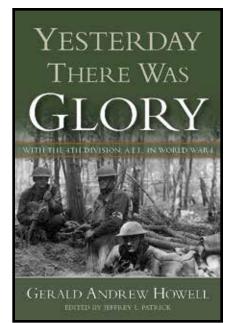
Stewart with only two of his divisions west along that same route to aid Lee in his assaults against the Union's Ezra Church stronghold. As Ecelbarger asserts, "No known evidence exists to indicate that Hood assigned Lee or Stewart as the nominal field commander once their troops united" (p. 136). Therefore, the Rebel attempt to secure victory for the rest of the battle manifested disunity of command, as its earlier piecemeal character continued to demonstrate disunity of effort. The effect at the small-unit level of this stand-up, close-range infantry slugfest was devastating, perhaps no better exhibited than when Maj. Gen. Edward C. Walthall's Confederate division of Stewart's corps conducted, according to Ecelbarger, "the sixth and largest coordinated assault of the day" (p. 154). As an example of the human dimension of conflict, Walthall's combined 46th/55th Tennessee Infantry Regiment entered the contest at 1445 with 250 men under arms. After a mere fifteen minutes of direct attack, the regiment had suffered 150 (60 percent) total casualties, including losing its commander and unit flag to capture. Overall, Ecelbarger concludes, Walthall's division incurred a total of 1,152 casualties and both "suffered the most of the three engaged [Southern] divisions [and] accomplished nothing" for the sacrifice (p. 168). Shortly thereafter, while trying unsuccessfully to commit the fourth and final Rebel division to the engagement, both Stewart and the division's commander were wounded, which virtually closed the battle. Around 1630, Hood sent his remaining corps commander, Lt. Gen. William J. Hardee, and his staff to try to redeem some part of the situation by achieving at least unity of command. Hardee did not assume overall direction on the battlefield, and soon the nearly six continuous hours of largely infantry combat ended in unmistakable but ultimately indecisive Union victory. Lee and Stewart had sustained at least 3,300 casualties, while Howard incurred no more than 620 losses, a disparity "reversing that at [the Battle of] Kennesaw Mountain one month earlier," according to Ecelbarger (p. 188).

In a lengthy final chapter and several appendixes, Ecelbarger reaches numerous important conclusions. Because Hood remained in Atlanta's defenses and away from the battlefield mainly for fear of Federal attack from the north or northwest, Ecelbarger contends that "Confederate leadership ultimately spelled Southern doom at Ezra Church" and that the absent General Hood was the Rebels' "primary culprit" in the 28 July defeat (p. 201). Ecelbarger continues that Sherman henceforth could "engage in siege tactics without fear of Hood launching any further offensives against him" for the foreseeable future (p. 196). In one of his most important findings, Ecelbarger holds that the "defeat at Ezra Church broke the fighting spirit of the Confederate infantrymen at Atlanta," which the campaign's final battle at Jonesboro in late August and early September conclusively demonstrated (p. 208). And last, Ecelbarger's groundbreaking work on mapping the Ezra Church battlefield has given the reader an intricate set of maps detailing the fighting often down to the regimental level and considerably expanding our understanding of the battle's physical geography. Proof of that expanded geographic vision is Ecelbarger's relocation of the key terrain of Battle Hill to a different and higher hill to the west of the previously accepted position, as this reviewer knows well from his 1980s published driving tours of Atlanta's Civil War battlefields.² In the end, Ecelbarger's Slaughter at the Chapel adds considerably to the historical reputation of this critical battle in the Civil War's arguably most consequential campaign.

Dr. J. Britt McCarley holds a Ph.D. in history from Temple University. After working for the National Park Service, he came to the Army History Program in 1988 and is now the U.S. Army Training and Doctrine Command (TRADOC) chief historian and the TRADOC Military History and Heritage Program director.

1. See Mark L. Bradley's review in *Army History* 106 (Winter 2018), pp. 53–54.

2. J. Britt McCarley, *The Atlanta Campaign: A Civil War Driving Tour of Atlanta-Area Battlefields* (Atlanta: Cherokee Publishing Company, 1989).



Yesterday There Was Glory: With the 4th Division, A.E.F., in World War I

By Gerald Andrew Howell Edited by Jeffrey L. Patrick University of North Texas Press, 2018 Pp. xi, 347. \$29.95

Review by Brandon J. Gillett

One hundred years after the last cannons thundered along the bloody trench lines of France in the First World War, Yesterday There Was Glory tells a chronological history of the 4th Infantry Division through the eyes of a soldier who experienced it. Gerald Andrew Howell, a private serving primarily in Company B, 1st Battalion, 39th Regiment, 4th Infantry Division, wrote Yesterday There Was Glory: With the 4th Division, A.E.F., in World War I in 1946, with prose and syntax intended to relate to the soldiers who had just returned home from World War II. He believed it was time for the "down-trodden doughboy" to have his story heard, since the "generals and pseudo captains have written their memoirs telling us how they won the war... but never mention[ed] their mistakes" (p. 31). Howell reviewed his journals and conducted diligent research in an attempt to portray how the American Expeditionary Forces (AEF) mustered, trained, deployed, fought, and occupied Germany from 1918 to 1919 with the perspective of a "buck private in the rear rank" (p. 35). Remarkably, a book intended to relate to World War II veterans is still relevant a century later. The idiosyncrasies and ways in which the Army conducted

business in 1918 are not too different than the ways in which it still operates.

Howell spins a narrative chronologically portraying his sixteen-month experience in the AEF from his enlistment in March 1918 through his discharge in August 1919. He creates characters based upon real soldiers with whom he served to help tell his tale-from being drafted, surviving the horrors of trench warfare, and occupying the German city of Coblenz on the Rhine River. The use of regional colloquial prose indicates many of the soldiers fighting for General John J. Pershing in the AEF were first- or second-generation Americans, or this was the first time "many of the boys had ever been outside of Podunk, U.S.A." (p. 60). Yesterday There Was Glory allows readers to put themselves in the boots and puttees of the doughboys' march from debarkation in Brest, France, to the raging combat of the Marne, St. Mihiel, and Meuse-Argonne Offensives, to occupation duty after the 11 November Armistice. The acts of heroism and valor, intertwined with anecdotes of buying French wine and stealing food from the mess sergeant, give the whole book a surreal feeling of dissonance. Howell's description of combat, in which he and his peers were "no longer just soldiers but demons intent on only one thing-to kill or get killed and have it over with," contrasts so starkly with doughboys' desires "to fraternize . . . pretty frauleins preferred" that the inherent mental resilience of those warfighters of an earlier generation shines through (pp. 195, 266). The reader is left with a true appreciation for the hardships these seemingly forgotten warriors and patriots endured.

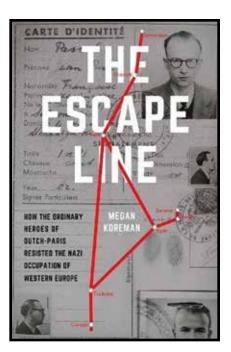
The author's intent writing this book was two-fold: he desired to create a lasting story incorporating the "experience of ordinary U.S. doughboys . . . their hardships, their joys and struggles," all the while producing a memorial to the 39th Infantry Regiment, 4th Infantry Division (p. 34). By the completion of the original manuscript in 1946, the 4th Infantry Division had become famous for its participation in the D-Day landings on Utah Beach, as well as the bloody close combat of the Hürtgen Forest. Howell wanted to pay homage to the regiments, which began the century-long legacy of soldiers wearing the four-sided Ivy patch of the 4th Infantry Division into combat. Yesterday There Was Glory goes to great lengths to chronicle the cities and towns through which Howell's service in the AEF carried him. The preservation of the 39th's regimental battle history provided a

connection for the returning soldiers—who had passed through many of the same areas in the recent war's European theater of operations—to the doughboys of an earlier generation.

In 1946, Howell failed to publish his manuscripts, and died of natural causes within fifteen months of the publisher's rejection. Nearly seven decades later, Jeffrey L. Patrick obtained the manuscripts and injected new life into Howell's long-delayed project. Patrick meticulously fact-checked Howell's claims and provided extra clarity through his use of footnotes. These annotations are an invaluable addition to the base narrative as they correct minor chronological inaccuracies, verify true points that may have sounded implausible in the text, provide the real names and biographies of the thinly veiled characters, and greatly enhance the reading experience. Additionally, Patrick's robust and well-rounded bibliography provides researchers with a diverse repository of primary and secondary sources to rediscover the American doughboys of the First World War.

Howell's focus on life as a doughboy marching through France and Germany still resonates one hundred years later. Although he includes exquisite commentary on the combat missions and primordial fear the soldiers felt as they fought the Germans, the book primarily focuses on the interpersonal relationships and idiosyncratic soldier values that make soldiering timeless: the chow and the sleeping conditions, who the good or bad leaders are, and where the rules can be skirted without drawing undue attention to oneself. This well-edited narration reminds us that as much as things have changed within the Army over a century, the soldiers who are trained and equipped to fight America's wars still "[carry] on to the best of their ability, for the honor of [their] country, and the glory of the flag" (p. 40).

Capt. Brandon J. Gillett is an active duty Army officer and currently serves as an intelligence officer for the Army Multi-Domain Targeting Center. He received his bachelor's degree in history from the United States Military Academy in 2013 and his master's in intelligence studies from American Military University in 2019. Commissioned as a field artillery officer and later transitioned to the military intelligence corps, he has served in multiple leadership roles and staff assignments through several combat and operational deployments.



The Escape Line: How the Ordinary Heroes of Dutch-Paris Resisted the Nazi Occupation of Western Europe

By Megan Koreman Oxford University Press, 2018 Pp. xiv, 410. \$29.95

Review by Nadine Ross

There are some moments that change your life. For Jean Weidner, one such moment came in July 1942 when he received a letter from one of his Jewish business acquaintances who feared deportation from Vichy France, to the East. It was then that Weidner, a Dutch businessman living in Lyon, and his wife, Elisabeth Cartier, decided to resist Nazism by using their personal and professional networks to coordinate the first of many escapes from France to Switzerland. Over the next three years, the escape network established in response to that fateful letter grew to encompass 330 ordinary men and women operating in Belgium, France, Spain, and Switzerland in order to assist Jews, young men fleeing forced labor drafts, and Allied aviators downed in occupied territories. The business owners, students, civil servants, pastors, and housewives who constituted this network, known as Dutch-Paris, helped 1,500 people escape Nazi-occupied territory and supported another 1,500 people living underground in France and Belgium during this period. The stories of these courageous individuals and how they developed and operated this rescue network are the focus

of Megan Koreman's newest work, *The Escape Line: How the Ordinary Heroes of Dutch-Paris Resisted the Nazi Occupation of Western Europe.* In this work, Koreman offers an informative and rich account of the lives of Jean Weidner and his colleagues in the Dutch-Paris Line, their resistance work between 1942 and 1945, and the personal and professional relationships that made this extraordinary endeavor possible.

Koreman is a historian and former associate professor at Texas Tech University whose current work is the most recent Englishlanguage monograph to reconstruct the operations of Dutch-Paris and the lives of its members. Based on her extensive research in thirty-two archives throughout Europe and in the United States, and her exclusive access to the Weidner Collection, Koreman provides fresh insights on this subject. In doing so, she brings the story of Jean Weidner and Dutch-Paris to a new generation of readers.

In its nine chronologically organized chapters, The Escape Line endeavors to achieve two aims. First, it describes how the Dutch-Paris network carried out the complex tasks of transporting individuals out of occupied territory and providing logistical support to individuals living underground. To carry out these missions, Dutch-Paris relied on a series of couriers, way stations, and document forgers located in key cities and towns along its routes to provide the information, shelter, and false papers required for both members of the escape line and their charges. Frequently, the individuals who volunteered to serve in these roles were able to perform their "illegal work within the bounds of their legitimate lives" (p. 36). Businessmen, like Weidner, already possessed legitimate travel documents, valid explanations for their frequent travel, and the air of respectability that accompanied traveling in a suit. The high foot traffic in shops and cafes provided an ideal cover for the owners and managers who used these businesses to provide temporary shelter for fugitives and Allied aviators or to serve as message centers for members of the network. Many of the civil servants involved in Dutch-Paris furnished important information regarding local policies and provided the official documents required to live in and travel through the restricted areas near the borders. Each of these essential tasks was complicated by the fact that Dutch-Paris operated in two languages and had to use five currencies in six districts with distinctive policies.

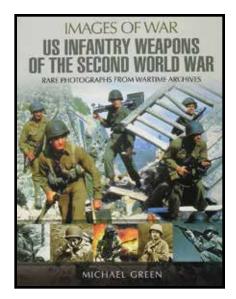
Second, the book aims to demonstrate the centrality of personal and professional relationships to this network. Although each member of Dutch-Paris volunteered for this dangerous work. Koreman notes their inclusion in the network was based on their relationships with its members or fugitives who benefited from its endeavors. For example, Raymonde Pillot met Jean Weidner and Elisabeth Cartier at an Adventist church in Lyon. After joining Weidner's textile business as his secretary, Cartier began typing illegal pamphlets at Weidner's request, and eventually served as a courier for Dutch-Paris delivering money and false documents on the network's behalf. Koreman contends this pattern continued even as the escape line expanded beyond Lyon and Haute-Savoie. As the reach of the network expanded, key personnel in these regions recruited helpers from within their social and professional networks to assist with the mission. John Laatsman, a Dutchman who helped to establish the Paris branch of the network, recruited three colleagues to join Dutch-Paris. Each of Laatsman's colleagues recruited several of their acquaintances and neighbors to provide room and board to fugitives in Paris, and to make introductions to forgers, merchants, and others essential to the Dutch-Paris mission. According to Koreman's analysis, Dutch-Paris was a network of networks working toward a common goal: contributing to the defeat of Nazism through unarmed resistance.

The author achieves her objectives in this monograph by weaving a narrative that highlights the mechanics of the Dutch-Paris' escape line and the people who took part in this noble mission despite the great risks to themselves and their families. Koreman strikes a delicate balance between describing the technical aspects of Dutch-Paris' work and portraying the people affiliated with this network. Each chapter includes contemporary photographs of selected Dutch-Paris members and the places where they conducted their illegal work, which brings the people and places Koreman describes to life and gives the readers a sense of some of the challenges this organization overcame.

For all of this monograph's positive qualities, it can be difficult to keep track of the various key players in each segment of the network owing to the sheer number of individuals who performed a variety of roles for the escape line. This is a challenge Koreman tries to mitigate by providing readers with two appendixes for the Dutch-Paris members, one organizing them by their country and their role within the network and one listing their pseudonyms. Furthermore, the author includes a timeline to help place Dutch-Paris' activities in the context of World War II and the occupation for readers who may be less familiar with the key events of the period.

Overall, Koreman deserves more praise than criticism for this important work. For someone looking to expand their understanding of resistance movements during World War II and gain a greater appreciation for the role of relationship networks in civil resistance, this informative account of the Dutch-Paris escape line and Jean Weidner's resistance work is an excellent starting point. Moreover, *The Escape Line* will certainly further research into this important topic as it has shed light on previously unreleased documents included in the Weidner Collection, which are now available through the Hoover Institution at Stanford University.

Lt. Col. Nadine Ross teaches history at the United States Military Academy. She holds a doctorate degree in modern European history from the University of Texas at Austin.



U.S. Infantry Weapons of the Second World War: Rare Photographs from Wartime Archives

By Michael Green Pen & Sword Military, 2015 Pp. 189. \$24.95

Reviewed by Jody Fraser

Since the close of the Second World War, a wealth of small arms books catering to the

collector, the researcher, and the enthusiast have entered the published domain. Many illustrate the weapons of all armies; others may show one or two photographs and deluge the reader with specifications. Few illustrate the weapons as they were used in the hands of U.S. soldiers and Marine infantrymen. Michael Green's U.S. Infantry Weapons of the Second World War: Rare Photographs from Wartime Archives is one such book. The book focuses exclusively on U.S. weapons used by the frontline infantry. For the reader wanting to see the weapons in use, this is a recommended book. Relatively light on text, Green's work relies on photographs from national archives to illustrate the small arms and supporting weapons used during the war. These fascinating depictions of training and combat are arranged with a keen eye to extracting details from the photographs. Rather than compacting too many images on each page, Green limits them to two per page.

The real value of this book is not just the photographs of the weapons themselves, but also details of how they were used in training and combat and how equipment and clothing were configured in response to varied environments. The book covers the entirety of the conflict from weapons existing in 1930 to those developed throughout the war. The observant reader will notice that the illustrations come from a wide range of locations, from North Africa to Sicily to the Pacific theater and Western Europe. These diverse environments, and their many weather variations, remind the reader war can be fought in any terrain and weather.

Although the book has few shortcomings, it does not have an index. Furthermore, even though it includes many variants and field modifications, those that have not been included become glaring by their omission. The Marine appropriation of the ANM2 .30-caliber aircraft tail gun-a design that lightened the standard M1919 and subsequently was modified by adding an M1 Garand buttstock, Browning Automatic Rifle sights, and bipod-famously became known as the "Stinger." Though only a very limited number were modified in the field, the weapon gained fame when it was carried by Iwo Jima Congressional Medal of Honor recipient Cpl. Tony Stein. Handguns seeing limited service early in the war, like the Colt and the Smith & Wesson Model 1917, are not in the collected photos.

Green provides a condensed overview of each weapon included in the book, giving the basic history, manufacturing information, and usage. The overview is limited to significant information on the weapons, helping the reader to understand the adoption, use, and role of each one without delving into the minutiae better covered in more scholarly texts.

The subtitle emphasizes the large role of photographs in the book, with each of the three chapters comprised mostly of photographs. The first chapter on individual weapons numbers fourteen pages of text and fifty-two pages of photos. The second chapter on crew-served weapons contains ten written pages followed by thirty-eight pages of images. The infantry support weapons chapter has fifteen text pages and a whopping fifty-three pages of photographs. This last chapter is also the most wide-ranging one, containing recoilless rifles, bazookas, direct support artillery, and Marine Corps armor. Eight pages of color plates are an added benefit.

Much of the book concentrates on U.S. Army infantry weapons. Green takes pains to include Marine Corps infantry weapons, especially when they differ from Army infantry weapons. Primary examples include the Reising submachine gun and the Johnson light machine gun-although Green fails to point out that a handful of Johnson light machine guns made their way to the First Special Service Force. The book's emphasis is solely on infantry weapons, and anyone wanting a broad array should know that it does not include weapons used by combat service forces, the Army Air Forces, or the Navy. Thus, one will not find the Colt Commando, the Smith & Wesson Victory model, or other weapons modified for military use. Similarly, even though the text describes shotguns, even Model 97 and Model 12 Trench guns, no photographs are included. Green does include dedicated Army infantry support weapons generally not found in the Table of Organization and Equipment of an infantry company, starting at the regimental level. The inclusion of 75-mm. and 105-mm. pack howitzers, and the 37-mm. and 57-mm. antitank guns, expands the realm of infantry support, as does his inclusion of Marine armored vehicles in the direct support role.

The contents provide a broad expanse of weapon-related photographs. The book

includes noncombat training photos derived from the period. However, the book also includes posed World War II reenactors. Although most reenactors strive for authenticity, these are not actual photographs from the period and do not carry the same gravitas as a period photo. Moreover, Green does not credit each photograph, other than a reference to the National Archives or other source-a hindrance to further research to place the photographs in context. Other than reference to the United States Marine Corps Historical Company, the reenactor photographs lack reference to the specific reenactor group.

The photographs of modifications, improvisations, and field expedients provide rare insight into weapons and how they were improved at the user level. A prime example is a photograph of a soldier using a rifle grenade to lay communications wire over obstacles without exposure to enemy fire. A Browning M2 .50 caliber is portrayed in another interesting photograph. Resembling a 37-mm. antitank gun, the M2 is being towed behind a Jeep on an improvised carriage complete with frontal armor plating.

For those with an interest in World War II weapons, this book is a welcome addition to one's library. Although it is not comprehensive, the weapons included definitely constitute the infantryman's arms. The book's text presents an excellent primer on the photographed weapons. The inclusion of support weapons provides material often overlooked in other texts. This book should find its way to a coffee table for casual reference and for detailed study of the arms, uniforms, and equipment of the United States infantry in World War II.

Jody Fraser served in the Reserve and active duty Army for more than twenty years. He is currently a historian in Fort Bragg's Special Operations community. He received his master's degree from Johns Hopkins University and a graduate certificate from George Washington University. Previous publications include living history and museum publications. He has three sons, two in the military and one in law enforcement.



THE VIETNAM WAR PAMPHLET SERIES



KING

ENSIVE

BANSITION



945-1965











DEEPENING INVOLVEMENT, 1945–1965

Richard W. Stewart CMH Pub 76–1, Paper 2012; 68 pages, illustrations, maps, further readings GPO S/N: 008-029-00554-9

BUYING TIME, 1965–1966

Frank L. Jones CMH Pub 76–2, Paper 2015; 60 pages, illustrations, maps, further readings GPO S/N: 008-029-00588-3

THE U.S. ARMY BEFORE VIETNAM, 1953-1965

Donald A. Carter CMH Pub 76–3, Paper 2015; 56 pages, illustrations, maps, further readings GPO S/N: 008-029-00591-3

TAKING THE OFFENSIVE, OCTOBER 1966-SEPTEMBER 1967

Glenn F. Williams CMH Pub 76–4, Paper 2016; 88 pages, illustrations, maps, further readings GPO S/N: 008-029-00615-4

TURNING POINT, 1967–1968

Adrian G. Traas CMH Pub 76–5, Paper 2017; 80 pages, illustrations, maps, further readings GPO S/N: 008-029-00616-2

TRANSITION, NOVEMBER 1968-DECEMBER 1969

Adrian G. Traas CMH Pub 76–6, Paper 2018; 76 pages, illustrations, maps, further readings GPO S/N: 008-029-00628-6

THE DRAWDOWN, 1970-1971

Andrew J. Birtle and John R. Maass CMH Pub 76–7, Paper 2019; 72 pages, illustrations, maps, further readings GPO S/N: 008-029-00651-1

U.S. ARMY CENTEROF MILITARY HISTORY

CHIEF HISTORIAN'S FOOTNOTE

JON T. HOFFMAN

Personnel Updates



The Center of Military History (CMH) is in the initial stages of returning to normalcy after an abrupt change in operations because of COVID-19, though that promises to take some time yet. Meanwhile, we have continued to make progress on key elements of our mission.

Hiring actions have continued without interruption. The two centrally funded apprentice historians selected in the spring are both now officially on board. Dr. Mark Folse is a Marine veteran who recently wrapped up a two-year fellowship teaching at the U.S. Naval Academy. He joined the Histories Directorate and will cut his teeth working on an Afghanistan campaign pamphlet before starting on a Tan Book. Dr. Steven Elliott, a Revolutionary War scholar with National Park Service experience, will be working in the Force Structure and Unit History Division of Field Programs.

For the first time, CMH acquired allocations to use Direct Hire Authority to fill two vacant billets with recent graduates. This gave us an alternative to the normal hiring process through the USAJobs website. We sent a one-page flyer to twenty of the top military history graduate programs soliciting applications, which came directly to CMH rather than through the human resources chain. Not only did this produce an unusually well-qualified pool composed almost entirely of recently minted Ph.Ds., it also allowed us to cut the time it took from announcement to selection. The process of getting them on board (which rightly remains under human resources) is ongoing, but we expect them to join us in the near future. Dr. Wesley Hazzard, a former CMH graduate research assistant who did his dissertation on the 1965 intervention in the Dominican Republic, will join the Force Structure and Unit History Division. Dr. Kate Tietzen brings expertise in Arabic language and study of the Iraqi military prior to 2003. She will join the Histories Directorate and start work on a campaign pamphlet as a lead in to an eventual Tan Book.

We are also ramping up our contracting effort to supplement our civil service authors. Dr. Kevin Boylan won the solicitation to complete the final combat volume of the Vietnam series, covering July 1970 through March 1973. His prior publications in the field include *Losing Binh Dinh: The Failure of Pacification and Vietnamization, 1969–1971*, released in 2016 by the University Press of Kansas. Dr. John Mortimer won the solicitation to research and write the campaign pamphlet covering Afghanistan from January 2009 through July 2011. His dissertation dealt with the Middle East during the Reagan administration. As a CMH graduate research assistant in 2018, he assisted the author writing the monograph on the Army in the Persian Gulf, 1991–2001.

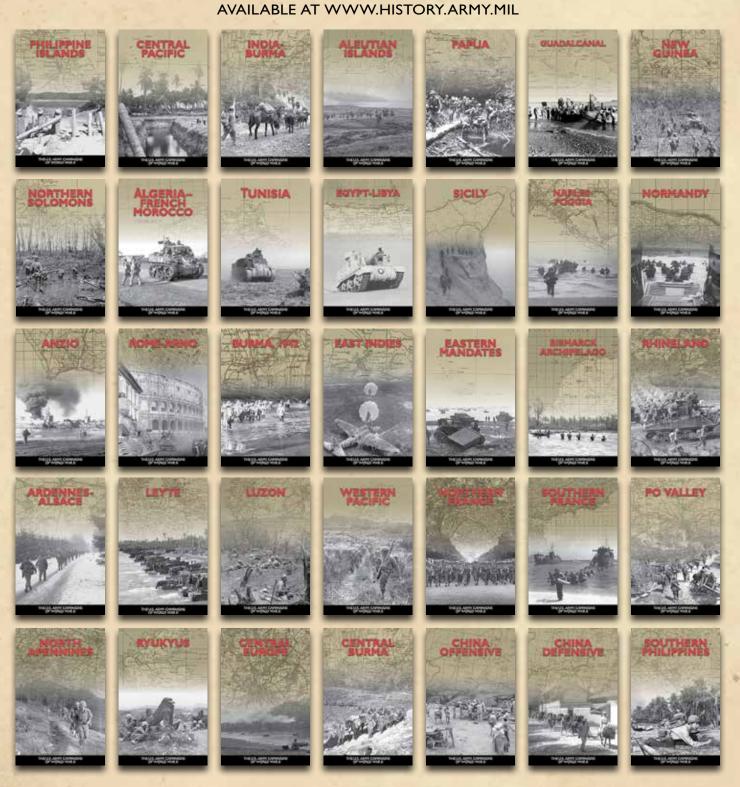
Our third group of graduate research assistants has wrapped up their year at the Center. As usual, they have done great work that materially aided our civil service historians. Hayley Fenton from Ohio State focused her dissertation on twentieth-century spy memoirs, which made her a natural fit to work with Dr. Thomas Boghardt on wrapping up the first book and starting the second volume on Army intelligence in the occupation of Germany. Texas A&M's John Wendt is writing his dissertation on the Army's logistics system during the Indian campaigns in the mid-1800s. He assisted Dr. Mark Bradley in completing revisions to his forthcoming book on Army logistics during the first half of the Vietnam War. Joe Beard of Texas Tech came with a varied and unusual background. An Army veteran who served in the human intelligence field in Iraq, he speaks Chinese and wrote his dissertation on American, British, and Chinese trade relations in the late 1700s through the mid 1800s. He worked in the Field Programs Directorate, where he coauthored our forthcoming staff ride guide, The Lincoln Assassination; did research in support of a staff ride being developed on the Army's mobilization for World War II; and helped conduct numerous staff rides.

This year's contingent of graduate research assistants did not receive the full experience of the program because the new coronavirus cut short professional development activities, closed all archives, and imposed other difficulties. Nevertheless, they learned a great deal about official history and what it entails. At the beginning of August, a new crop of three graduate research assistants reported aboard to fill the big shoes of their predecessors. We hope to find money in the Fiscal Year 2021 budget to restore the program to five schools, so we can continue to develop talent that will meet the needs of the Center and Career Program 61 in the years to come.





WORLD WAR II 75TH ANNIVERSARY EPUBS





PIN: 207171-000