

# Chapter XV

## THE DENTAL SERVICE IN THE AMERICAN EXPEDITIONARY FORCES IN FRANCE, 1917–1919: COMBAT

### *Introduction*

The dental service that Robert Oliver and his colleagues built in France experienced its most difficult test with the combat divisions of the American Expeditionary Forces (AEF). Never before in the history of the Army or its medical department had dental officers gone directly into battle as part of a combat unit. Thanks to Oliver's efforts and those of many others in the Dental Corps, the AEF had dental officers and assistants attached to all of its front line divisions, including infantry and engineer battalions in the trenches and field artillery batteries. Without the experience of any army in history to guide it, the AEF integrated the dentists into the fabric of the division in a variety of ways. While they were sometimes assigned collateral duties with little regard for their professional backgrounds, they were more often employed as auxiliary medical officers to assist the battalion and regimental surgeons and medical detachments on the battlefield. Regardless of their assignments, the dental officers and their assistants served their fellow soldiers in times of trial, a number of them winning awards for gallantry on the battlefield and others sacrificing their lives. Their performance ultimately won the soldiers' respect and the honored place in the Army Medical Department that dentists had so long sought.

### *Dental Officers at the Front*

While hundreds of the AEF's dental officers and their assistants were caring for both the wounded and for soldiers in need of dental work in the rear area hospitals and clinics, those in combat divisions faced situations that were not only more demanding and varied but also much more dangerous. At the front, the dental officers' responsibilities usually shifted from "dento-oral care" to assisting the Medical Corps' officers in the emergency treatment and evacuation of the sick and wounded. They often replaced unit surgeons who were killed, wounded, or gassed until replacements arrived. Dental officers were also frequently employed as surgical assistants and anesthetists in battalion and regimental aid stations and divisional field hospitals. For example, from October 4 through October 18, 1918, First Lieutenant George C McMullen with the 302nd Sanitary Train, 77th Division, served as the evacuation officer in the triage station. During the Meuse-Argonne offensive, First Lieutenant Bernard L Riley of the Dental Reserve Corps (DRC), then

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*Lieutenant ER Latham, dental surgeon, 305th Field Signal Battalion, 80th Division, in a dugout working under difficult conditions. Bethincourt, Meuse, France. October 5, 1918.  
Photograph: Courtesy of US Army Military History Institute. SC 24888.*

assigned to the First Army but formerly with the 2nd Supply Train, 2nd Division, “acted as surgical assistant in operating teams at hospital for seriously wounded” at Field Hospitals No. 15 and No. 23 of his former division. From November 1 through November 12, he was directly involved in operations on over 500 seriously wounded soldiers. During more peaceful times, division dental officers took over a wide variety of jobs, such as transportation, supply, or billeting officer, sanitary inspector, censor, or town major. In the 78th Division, for instance, two dental officers were responsible for the divisional ration dump and the operation of all of its trucks, and another acted as the adjutant of the 303rd Sanitary Train.<sup>1-13</sup>

Although the AEF’s division surgeons sometimes varied in how they organized and used their dental officers, most of them employed their dentists as auxiliary medical officers when their units were in the trenches. Dental work was exceedingly complicated due to the conditions on the front lines and the difficulty of getting even the stripped-down portable outfits near the trenches. Most dental officers had to rely on emergency kits to reduce pain and suffering from dental or oral problems. In the trenches, the soldiers’ concerns were more clearly focused on combat and survival than on dental care. The dental officers were most valuable in assisting the medical officers with the wounded.

The dental service of the front line divisions varied greatly based on whether the unit was in a training area, rest zone, or the trenches. In the rear training areas, the division’s dentists could set up their portable outfits in battalion or regimental infirmaries or clinics and conduct “high-class tooth conservation service, with

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*First Lieutenant Bernard L. Riley, Dental Officers' Reserve Corps, 2nd Division.  
Photograph: Courtesy of National Archives and Records Administration. SC 90755.*

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*Chauffeur Sam Egger, 307th Field Signal Battalion, 82nd Division, uses witch hazel in place of toothpaste , which is very scarce. Argonne Forest, Meuse, France, October 29, 1918.*

*Photograph: Courtesy of US Army Military History Institute. SC 31517.*

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a view to rendering all men dentally fit" for upcoming operations. Officers and soldiers could be surveyed, and dental records were prepared to guide priorities for follow-up treatment. Most major oral or dental health matters affecting a soldier could be addressed, and the division dental laboratory or camp hospital was usually available for more sophisticated work. When the divisions moved into combat zones, dentists' equipment and supplies were reduced to the minimum, so they could only provide emergency treatment to relieve pain and complete very simple dental service. Dental officers and their assistants carried emergency kits with them while on march and in the field to provide simple, immediate treatment that would allow soldiers to return to the front line without loss of time. However, some of the more enterprising dental officers actually moved their portable outfits into dugouts and bunkers in the support trenches and set up their "offices" to provide routine dental services for their units. Once the unit was pulled from the front lines and sent to a rest area, a fuller dental service once again resumed, but never to the extent that was possible in the training areas.<sup>14</sup>

On December 7, 1918, Colonel Philip W Huntington, Medical Corps (MC), who was division surgeon of the 79th Division, explained to students at the Army Sanitary School how he had organized and used his dental officers:

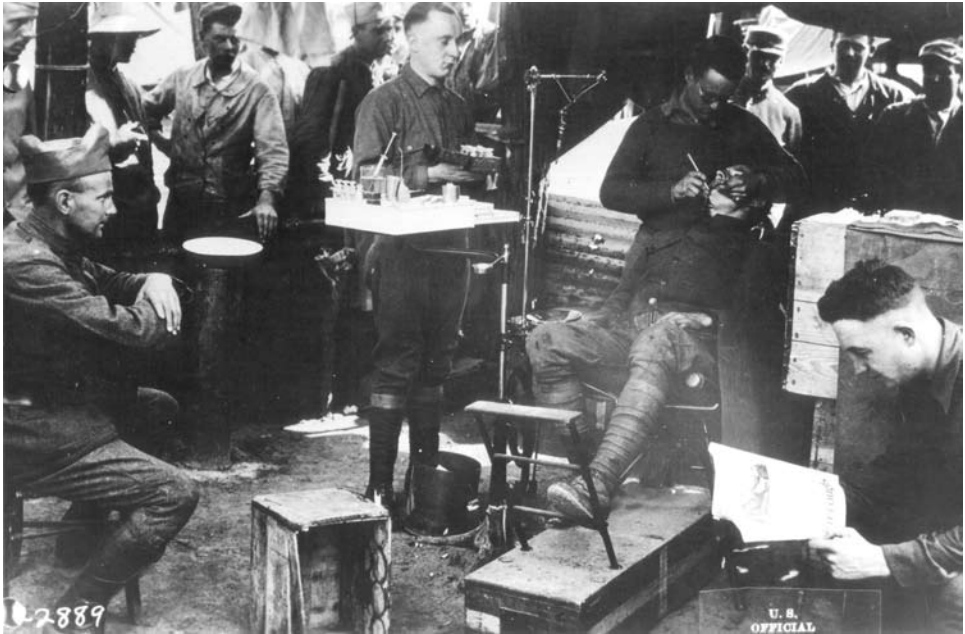


*Division dental surgeons assisted medical officers at battalion and regimental aid stations during combat operations. Here wounded from the 115th Infantry Regiment, 29th Division, are treated in the Bois de Consenvoye during the Meuse-Argonne offensive, October 1918.*

*Reproduced from: Reynolds, FC, McLaughlin, William F.*

*115th Infantry USA in the World War. Baltimore, Md: Read-Taylor; 1920.*

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*First Lieutenant John Mann, Jr, of the Dental Officer Reserve Corps, 302nd Supply Train, 77th Division, performing his daily duty in dentistry. The French soldiers look on. On the left is Mr CA Sampson, YMCA, a noted provider of all sorts of games for American soldiers at the front. Near Fere en Tardenois, France, September 5, 1918. Photograph: Courtesy of the US Army Military History Institute. SC22889.*

... what I have to say is mostly in regard to the medical work of the division in combat, but I think it will have considerable value in connection with the Dental Corps because—at least in my division—the dental officers during combat performed exactly the same duties as the medical officers. In the 79th Division the dental officers during combat serve as auxiliary medical officers. They were attached to the battalions and they went forward with the battalions and functioned in the battalion aid posts, regimental aid posts—or wherever their services might be needed—and performed exactly the same duties as medical officers, and I might say, as I told Colonel Boak, they performed very satisfactorily, very creditably, very well. I have been division surgeon ever since the Seventy-ninth was organized and am still, and the work of the dental surgeons has not been confined to dental work entirely. They were used in a military medical sense; I had that idea from the very beginning. . . .<sup>15(p1127)</sup>

Captain John M Hughes, Dental Corps (DC), division dental surgeon for the 29th Division, later wrote in his report to the chief surgeon of the AEF about the work of his dental officers and their assistants:

From the time of departure from Haute Alsace 23 September to return to rest area after 29 October very little dental work was accomplished by dental surgeons with

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the combat troops. Those who were with organizations in the rear were able to accomplish much good along this line. From the beginning of the drive on 8 October till the Division was relieved on 29 October dental surgeons with combat troops ceased to functionate [*sic*] as dental surgeons and automatically became medical officers and as such rendered untold service to wounded soldiers, and won for themselves splendid credit. They worked hard and long and on numbers of occasions attracted the attention of their fellow officers by their heroic deeds. Due credit must be given to the dental assistant, also, for they merged themselves with the sanitary detachments and rendered much assistance to the wounded.<sup>6</sup>

On August 31, 1918, Major Elbert Rushing, DC, the divisional dental surgeon for the 1st Division, expressed his views on dental service for a combat division in a letter to Lieutenant Colonel Rex H Rhoades, the First US Army's dental surgeon at the time. Rushing pointed out that:

Dentistry is almost an impossibility with the regiments when a Division is in action, as all the dressing stations, etc., are in dugouts, and practically no lights except candle and it is quite impossible to do Dental work. So in my opinion the only place, and as was experienced in the last fight, for Dental work was in the Field hospitals and very little done there as the hospitals were mobile and they were continuously under fire. However the Division had Dental Surgeons that did quite a bit of relief work with the Emergency Kits, but only at times, as they were doing first aid work and any and every little thing that would help. I had quite a few compliments paid the Dental Surgeons in this Division for their aid and it was very much appreciated. In fact a circular letter from Colonel Stark, Chief Surgeon, First Army, to this office complimented the Dental Surgeons for their work.<sup>16</sup>

In this same letter to Rhoades, Rushing also expressed his personal thoughts:

When I joined this Division, I found everything pretty rotten and disgusting. I got the cold shoulder all the way around. But I sat tight and am now carrying on pretty well. I was determined to do good or burst and I am not going to burst. I am beginning to get a little backing and am gradually winning friends and confidence and after a while I am going to have the full quota of Dental Surgeons in this division and more equipment. I am told at present, I can't have thirty-one Dental Surgeons but I'll get them all soon, it will take me a little time but I'll get them, if Col. Oliver will let me have the men. And he will, because he is behind us all, and we are for him.<sup>16</sup>

The division's dental officers were generally with the troops for emergency treatment, so no time was lost in sending soldiers to the rear for care. When a division moved, the dental surgeons accompanied the command and dental service was usually always available, even if for no more than pain relief. Cases were rarely evacuated to the rear, and in those instances, the cause was usually a complication requiring surgical attention. The field emergency kits that the dentists and their assistants carried consisted of the two Hospital Corps pouches, with a few selected instruments and appliances and a limited amount of supplies. In addition, the dentists and their assistants carried a cased dental engine, which weighed about 40 pounds. With this equipment, almost any treatment could be performed. The exact location of the dental surgeon was "determined by condi-

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*First Lieutenant RM McNulty, dental surgeon, 309th Field Artillery Regiment, 78th Division, with assistant Private JJ Cleveland, operates on a patient just back from the lines, Fey-en-Haye, Meurthe et Moselle, France. September 22, 1918.  
Photograph: Courtesy of US Army Military History Institute. SC 33390.*

tions and accommodations.”<sup>17</sup>

The dental officer of each organization usually accompanied his battalion to the front line trenches and located himself at the battalion aid station, where he performed “all emergency and semi-permanent dental work necessary.”<sup>18</sup> Troops in the trenches experienced a high percentage of alveolar abscesses and pulpitis, so it was advisable to have a dental surgeon available forward at all times. At the same time, the soldiers were little inclined to be concerned about dental work because they had, as Captain John Hughes, 29th Division dental surgeon noted, “more important things to think about.” Once the divisions entered active combat operations at the front, the battalion dental surgeons were unable to do much dental work. Instead, they assisted the surgeons in caring for the wounded in the battalion and regimental aid stations and supervised their evacuation and transportation. When units suffered many casualties or lost their medical officers, the dental officers took over the medical duty, often for days at a time. The dental officers in the reserve area were located at the infirmary of the battalion headquarters and were also attached to the field hospitals (but not ambulance companies) as-



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signed to the division's sanitary train. At field hospitals, dental officers were used principally to administer anesthetics, but they also did some dental treatment in quiet periods and in rest areas. After AEF General Headquarters issued General Order No. 99 on June 19, 1918, one of those field hospitals also housed a complete dental laboratory supporting the division's dental service. All the dental work was completed before patients were discharged from the field hospitals, including oral surgery when necessary.<sup>5,18,19</sup>

While working at aid stations at the front, the dental officers and their assistants were under constant threat of German artillery fire. Captain Walter E Lotz, DC, initially with the 310th Infantry Regiment and later division dental surgeon of the 78th Division, related how quickly disaster could strike:

While on duty in an aid station near Jaulny Oct. 3rd, Capt. J.L. Remsen and his assistant, John Becker, assigned to the 308th Machine Gun Bn. along with twelve others were severely gassed. A mustard gas shell hit the door of the dugout in which the aid station had been established and caused much havoc.<sup>20</sup>

The dental officer's most trying time came during combat operations and the frequent shifts into and out of the lines and movement between sectors. As American forces transitioned from defensive operations to the offensive in the Aisne-Marne sector, the Saint Mihiel area, and finally the Meuse-Argonne operations of late September to early November 1918, the life of dental officers in the combat zones became much more complicated. First Lieutenant Guy A Karr, DC, 129th Infantry Regiment, 33rd Division, described what this all meant for the dental surgeon and his patients:

From May 24th to October 25th, some 150 days, we moved 28 distinct times, marching 230 kilometers and spent 74 days in the front line trenches, making two hop-overs. During this time I treated 600 patients. Of the 74 days that the regiment has been in the front line trenches I have spent 55 days at the Battalion aid station, 10 days at the transport lines four kilometers back of the front and 9 days at regimental headquarters. In my opinion one dental surgeon should always go forward with an Infantry regiment with an emergency equipment for combat use, and at least one dental surgeon should remain behind to treat the men from the transport and men who the dental surgeon in the forward area sends back. When all the dental surgeons stay behind the men who are doing the fighting must suffer.<sup>21</sup>

Echoing similar sentiments, First Lieutenant Howard I Denio, DC, who served with the 23rd Infantry Regiment, 2nd Division, from November 1917 to September 1918, and then with the 2nd Ammunition Train until the division returned to the United States in the summer of 1919, summed up his experience in the combat zone in the fall of 1918:

In looking back I find that I have in a little over a year been stationed in about 45 different towns, in some for only a night, others for a week or two. I have slept in palaces and pup tents, in downy feathers and thorny briars, and many nights were spent on the road with a pack on my back. I have jumped from a cowshed to a castle and landed next day in a devastated town. Such are the fortunes of war—particularly this war. I have treated Frenchmen, Algerians, Belgians. Luxemburgers [*sic*] and

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*The dental infirmary of First Lieutenant Ralph F Krueger, dental surgeon, 302nd Engineers, 77th Division, near Abri du Crochet, Argonne Forest, France. October 29, 1918. Photograph: Courtesy of US Army Military History Institute. SC 42751.*

Germans.<sup>22(p121)</sup>

In his short history of the 26th Division's dental service, Major Charles W Lewis, DC, the division dental surgeon, described his introduction to dental care in the division and his visit to the front line "office" of Lieutenant George Long, dental surgeon with the 104th Infantry Regiment (for more on Lieutenant Long, see "In Their Own Words" below):

When I reported for duty with the 26th. Division, the Headquarters and Division Surgeon's Office were located at Couvrelles. I at once proceeded to acquaint myself with conditions especially regarding dental officers and their equipment. My greatest hardship was the lack of personal transportation, however I managed to make some inspections by accompanying the Division Sanitary Inspector. The dental officers were located throughout the area with their several organizations. Some were on duty with Camp Infirmaries, while others were located in Battalion Aid Stations. Lieut. Long, 104th. Infantry was serving with his portable outfit at a Battalion Aid Station in the trenches. His office was not far from Chemin-des-Dames. Lieut. Long's office in the reserve trenches was particularly well located in a dugout in these well built trenches. He was in a position to do considerable dental work at this place and visited

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the other battalions with his emergency outfit. This office was an exception. Most officers with the portable outfit were located with Camp Infirmaries and Field Hospitals.<sup>7</sup>

In his job as division dental surgeon, Major Lewis had difficulty getting around to all of his dental officers, especially those with front line units, to check on their work, assess their working conditions and problems, and to assist them, if possible. Often "the courtesy of other officers" allowed him to obtain transportation and get to the front. There he found his dental officers fully involved in every aspect of front line medical work and often overburdened with other duties:

Many of the dental officers were stationed at battalion aid and dressing stations and assisted with the evacuating of the wounded and dressing and applying splints. The dental officers serving with the 102nd. Infantry did very good work attending the wounded at the Battle of Seicheprey [20-21 April 1918]. . . . The first of July found the Division in the Chateau Thierry Sector to take part in the second battle of the Marne. The division relieved the Second Division who had very severe fighting at Belleau Woods. The dental personnel of the division performed many duties foreign to dentistry in this sector. The 103d Field Hospital was located at La Ferté and functioned as a hospital for seriously wounded. Lieut.



*A French barn is used as a dental office by First Lieutenant Ernest R Latham, Dental Corps, 305th Field Signal Battalion, 80th Division. He and his dental assistant freeze and loosen the tooth of Sergeant McHugh before extracting it. Latham's regulation trench dental outfit is laid out for use. Beauval, France, July 31, 1918.*

*Photograph: Courtesy of US Army Military History Institute. SC 21591.*

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[Clifford W] Renth, the dental surgeon serving with this hospital was on duty as dental surgeon, anesthetist, supply and mess officer for the hospital. He worked valiantly, night and day as anesthetist in order to relieve surgeons and performed his own duties as well.<sup>7</sup>

C Franklin MacDonald, DRC, who served with the 11th Engineer Regiment (Railway), which was heavily committed in both the British and American sectors from November 1917 on, pointed out after the war that dental surgeons could do a considerable amount of useful dental work at the front, provided they were experienced, had good light and shelter, and good assistants.

As to actual dental work, a great deal of constructive dental work can be done and ought to be done in the combat zone. Amalgam, cement and gutta-percha fillings can be placed, teeth can be cleaned and gums treated. As a general rule, teeth with exposed pulps or abscessed conditions should be extracted. Root canal treatments or root fillings should rarely be attempted. Fractures of the jaws from whatever cause should never be treated by the ordinary dental officer in the combat zone. Temporary wiring, splinting or bandaging is all that is necessary. The patient should be promptly evacuated to a proper unit equipped to care for such conditions. . . . The fact that dental work is being done under adverse or difficult conditions is no excuse for poor dental work. Work may proceed more slowly and equipment may not be ideal, but decay can be completely removed, cavity margins carefully prepared, fillings well placed and properly dressed down so that there are no overhanging margins, contour and occlusion made correct, and a general finish produced worthy of inspection.<sup>23(p1243)</sup>

MacDonald cautioned that what could get done in the combat zone was entirely dependent upon "the capacity of the individual dental officer," who had to rely on his own resources and solve his own problems. Dental work in the combat zone required "men of some years of professional experience." Recent graduates and inexperienced dentists were far better assigned to rear areas, base hospitals, or training camps. "In the field, where conditions are not favorable and equipment often incomplete, the man of experience is needed, one who can get along with little, has confidence, skill, speed and sound judgment, the result of practice."<sup>23</sup>

As to the assistant, MacDonald stressed the importance of a carefully selected enlisted dental assistant in the combat zone.

The right type and temperament will prove of incalculable value under many different situations. A man who can find a wooden flooring when wood is not available, who can get a heating apparatus when stoves are not procurable, who can get coal or wood when such is not to be had, etc., is a gem. The wise dental officer also is he who asks no questions.<sup>23(p1243)</sup>

MacDonald concluded:

It is obvious that little in the way of rules for procedures can be laid down for the officer called on to do dental work in the combat zone. He will, for the most part, be obliged to formulate his own methods. As situations change, he must be able to change with them, adopting himself to new and, many times, unpleasant condi-

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tions. No matter how difficult the situations seem to be, dental officers who have the will and the desire to do so, will find that they can accomplish much in their small sphere of duty, toward sustaining the health, comfort and efficiency of the fighting men.<sup>23(p1247)</sup>

However, not all division dental surgeons believed that having the dental officers forward in the combat zone or the trenches was the best approach to take, regardless of their years of experience or maturity. For example, Major (later Colonel) Lee S Fountain, DC, division dental surgeon of the 77th Division, concluded:

The division went into action immediately on the Vesle. Here, we were up against an entirely different proposition. The activities were so intense that it was impossible to establish dental infirmaries very far in advance. After a few days something like twelve dental officers were able to operate part of the time. The others with their emergency kits were extracting a tooth or sealing in a treatment that might pass their way. From observations on the various fronts the conclusion is naturally made—no dental surgeon should ever accompany a battalion into action. The dental service required does not warrant this. Well do I recall a conversation I had with a British medical officer shortly after our arrival in France. When I explained that there were three dental surgeons to each regiment of infantry, he remarked “What a sacrifice of life that will be”. Thus far, dame fortune has treated us kindly, although many have had close calls. Even tho the lives are spared, the loss in misdirected energy cannot be measured. In the Argonne sector it was a similar experience.<sup>3</sup>

On November 1, 1918, in a lengthy memo to Colonel Boak at the Army Sanitary School, Captain John M Hughes, DC, division dental surgeon, 29th Division, supported Fountain’s position, a view that he subsequently altered in his “Dental History, 29th Division” of January 27, 1919:

The question of distribution of dental surgeons within a division during action at the front is one which has given me a great deal of concern since I have had opportunity to observe the condition associated therewith. The questions arising are whether dental surgeons will function as (a) dental officers (b) medical officers or (c) as surplus officers to do whatever is found convenient for them to do. At the front during action a dental surgeon cannot functionate [*sic*] except as a medical officer. If the intention is to convert dental officers into medical officers and put them in charge of dressing stations in the front lines where it is impossible to do other than the most urgent first aid work, to put them in charge of litter squads or to put them on any duty where they can serve in a capacity whereby medical and other officers are released for other duty, the intention is being carried out under the existing conditions. If dental officers are to remain dental officers, function as dental officers, restore and repair the masticatory apparatus of military personnel, and perform operations credit for which is given by the dental corps in its various branches and not by another corps, then, it is my opinion, that some modification or flexible arrangement by which this can be accomplished should be instituted. This is quite a problem.<sup>5,6</sup>

Despite the protests of Fountain and Hughes, the valuable contributions of the

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dental officers and their assistants in the rear and under fire at the front was not lost on many of their commanders and Medical Corps superiors. In his medical history report of November 27, 1918, to the division commander, Major Frederick W O'Donnell, MC, division surgeon, 89th Division, wrote of the work of the dental surgeons during the Meuse-Argonne operations:

Owing to the fact that the Division went into action short 16 Medical Officers, shortly increased by casualties to 23, it was necessary to use the Dental Surgeons in the battalion. To say they did their duty well is putting it mildly, and nothing but appreciation has been heard of their work under conditions in which, up to this time, they had had no experience.<sup>24</sup>

Major Fountain looked at the entire experience in a different way:

Without question the duty of the Dental Corps is to dentally equip each soldier as near as practicable and keep his mouth in such a condition that will render him a fighting man at all times. . . . Has the Dental Surgeon fulfilled his mission? Yes, and no. Yes, in that no body of men could have accomplished more than has been done under like circumstances. Time and again have I found a dental infirmary established where it seemed the impossible thing to do. As a concrete example, one dental surgeon's entire outfit suffered the effects of a direct hit from two Boche H.E. [high explosive] shells. The equipment was immediately replaced and he continued to function as usual. No, because only a small portion of his time has been utilized in the discharge of his professional duties, then under the most adverse circumstances where he could not do justice to the patient or himself. True, it may be said you were a jolly good lot of fellows. When we need an officer to take charge of a transport and bring supplies—you did it well. "After all is said and done, what did you do as Dental Surgeons to help win the war."<sup>3</sup>

In his division's dental history, Major Charles F Huber, DC, division dental surgeon for the 88th Division, concluded that despite all the hardships and difficulties, the Army dental service had achieved the recognition that dental officers had sought.

. . . it must be said that our experience has shown the most disagreeable features of the army life of a Dental Surgeon to be those in connection with the frequent moving that is always incidental to a Division on active duty at the front. The "breaking up" office, the packing up, moving, and the tedious and most always difficult task of locating a suitable place for "setting up" when once the move has been accomplished. In the smaller French towns it is almost impossible to find a room with light suitable for Dental Operations and our Dental Surgeons have often in this respect worked under conditions truly pitiful. . . . Thus considered, the quality and quantity of the work which they have done, and the spirit in which they have accomplished it should most certainly win them the approval of our entire military institution.<sup>25</sup>

### *With the 1st Division, 1917–1918*

Life at the front for a dental officer was a mixture of routine dental work and hectic periods of hazardous duty under German fire in the trenches. In a long let-

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ter of November 10, 1918, to his former colleagues of the Dallas County [Texas] Dental Society, Captain Allen N Kearby, DRC, detailed his experiences with the 18th Infantry Regiment, 1st Division, in France. He had reported for duty in late June 1917 and been sent directly to France, where he was assigned to his regiment at Haudelaincourt. There he was the only dental surgeon assigned to care for the regimental headquarters, supply company, and 1st and 3rd battalions—nearly 3,000 soldiers. Kearby was assigned an assistant, who he said “was a green man, but learned very quickly, so that now I am sure I am able to do 100% more work than I could possibly accomplish without him.” Their work was ample but simple:

The work consists of amalgam, cement and gutta percha fillings, treatment of putrescent root canals and consequent filling; devitalizing and extirpation of pulps; and filling of canals; removing salivary deposits; treatment of gingivitis and pyorrhea, extraction of teeth—(no plates, crowns, bridges or inlays)—as these cases are taken care of at the base hospitals, provided they are absolutely necessary.<sup>26(p9)</sup>

In January 1918 the 1st Division entered the front lines in the Toul sector.

On Jan. 16, 1918 our Regt. left Haudelaincourt—left for the front, going to the Toul sector, the Medical Officers being on the Colonel’s staff and mounted, the “doughboys” marching afoot. After two days march we reached Mansonville (Brigade Headquarters) where we stayed until the night of Jan. 19th, when we marched six kilometers to Beaumont (Regimental Headquarters) where we had out Regimental Aid Station in a dugout. Two battalions of “doughboys” continued their march to the front trenches two hundred yards beyond Seicheprey (Battalion Headquarters). I took with me nothing but extracting forceps, two excavators, a pair of dressing pliers and oil of cloves, as most of my work consisted of helping Medical Officers doing a little “first aid,” and a great deal of sanitary inspection of the villages, trenches, food, [canteens], kitchens, billets and mess kits.<sup>26(p9)</sup>

In March the 18th Infantry was pulled from the trenches and Kearby was able to obtain leave and visit Nice for 7 days. Upon returning, he was transferred to the 2nd Battalion, 18th Infantry, at Saint Joie. The 2nd Battalion went back to the front and entered the trenches at Villers-Tournelle, opposite the Germans at Cantigny, on April 21, 1918. The regimental and battalion aid stations there were located in cellars, and the battalion received a great deal of attention from the Germans.<sup>26(pp9–10)</sup>

. . . the village was industriously shelled by the d\_\_\_ Boches. It was here that I was rather badly gassed on the night of May 3rd, the Boches having put 15,000 shells over (estimated by the Intelligence Department) in four hours. There were seven officers billeted in our cellar, including the two battalion (2nd) surgeons, and the following night but two of us were left, the other five including the two medical officers having been evacuated to hospitals; and as other medical officers were not sent up until May 5th, I was the only medical with the Battalion for 24 hours.<sup>26(p10)</sup>

When the 2nd battalion was relieved on May 12, Kearby learned that the division surgeon, Lieutenant Colonel (later Colonel) Herbert G Shaw, MC, had ordered that no dental officers would go to the front with the troops. When his battalion

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reentered the lines a week later, Kearby remained behind at Maisoncelle working with patients from the 16th and 28th infantry regiments “with an emergency outfit consisting of alloy, cement, etc., but a hand engine instead of a foot engine, and no chair.” While there, Kearby also saw training for upcoming attacks: “I saw them rehearse the attack back at Maisoncelle, one day without tanks, and the next day with tanks—tanks were used in the real attack.”<sup>26</sup>

On June 5 Kearby rejoined the 18th Infantry at Poillart, 14 kilometers behind Villers-Tournelle. By July 14, the 2nd Battalion had moved up to the Compiègne forest in preparation for offensive operations.<sup>26(p11)</sup> During July and August 1918 the 2st Division was engaged in heavy fighting around Soissons as part of the Allied offensive against German forces in the Marne salient, and Kearby and the 2nd Battalion were deeply involved.

Began marching at 7 p.m. July 17th, and at 5 a.m. July 18th, after marching all night, we went into the attack at Conevres. At this place we established a Regimental Aid Station where I with the Major [and] the commanding officer of the Medical Detachment [Major Hiram E Ross, MC], stayed until 5 a.m. July 19th. We were kept so busy caring for the wounded (in a dugout) that we had no sleep at all and but little to eat. We turned over this station to another Division and moved forward to catch up with our own Regiment; walked eight kilometers over the battle ground, covered with every conceivable article of equipment from canteens to broken and abandoned Boche cannon, dead horses, mules, Boches, and alas—our own brave lads, reaching Chandun, a small village just in advance of our Regimental P.C. (Headquarters). Found a cellar, stuck out our Red Cross and again began caring for wounded. Here we stayed until 6 a.m. July 20th, at which time we turned our station over to an Ambulance Dressing Station, and moved forward as our “doughboys” had continued to push the Boches. This time we did not go but four kilometers, where we found a nice cliff between us and the Boches’ shells, so here we hung out the flag which the wounded soldier hails with joy, because after reaching this he feels his troubles are over.

Our two Battalion surgeons who were with me, soon pushed forward to get in touch with the other four Battalion surgeons of our Regiment, but ere long came back with some wounded, and it was here that Drs. [Captain David R] Morgan and Seigel [First Lieutenant HA Seigall] were wounded; the three of us at the time being engaged in cutting a wounded soldier’s clothing in order to dress his wounds. In the afternoon of this the 20th of July, our Regimental Surgeon received notice that two more Captains, [Sidney A] McCurdy and [Albert W] Lindberg, had been wounded and sent to hospitals, so but four of us were left. We were relieved by Scottish troops the night of July 22, the relief to be completed before daylight of the 23rd. The Medical detachment did not get out until long after daylight (5:30 a.m.) as we had two wounded men 2 ½ kilometers from the nearest point to which the ambulances came, and we had to get them down; so at midnight I took two sergeants and the only five men we had left (the others had been killed, wounded and gassed) and started out for them. A medical officer and a sergeant were with these wounded so the ten of us brought them back, reaching the ambulance evacuation point at 4 a.m. and believe me, carrying one fourth the weight of a man on a litter is the hardest work I have ever done. Our assembling point for the Regiment was at a distance of about 15 kilometers, which we footed, and after six days, with no sleep, and eating at irregular times, most of the food consisting of corned Willie and hard tack, taken from the packs of dead and wounded—that walk was a bit tiresome.<sup>26–28</sup>



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*Colonel Robert T Oliver, American Expeditionary Forces, 1918.  
Photograph: Courtesy of the National Library of Medicine.*

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On July 31 Kearby was ordered to the 1st Division's Field Hospital No. 3, which supported the 18th Infantry and where he could work steadily, "as I found there a complete portable outfit."<sup>26(p13)</sup> Promoted to captain in August, Kearby soon moved to the IV Corps and then II Corps Artillery Park.

### *A Dentist's Experience with the 2nd Division*

During September 1918 Colonel Oliver instructed all dental surgeons to write down accounts of their wartime experiences for preservation and potential use in a Dental Corps history of the World War. Oliver wrote:

It is very desirous that the Dental Corps keep a record of their work during this war. Though it may not seem important at this time to gather such information, yet in days to come it will be a wonderful asset to our profession, hence it behooves all of us to help in this matter. Therefore each dental surgeon will write an account of his experiences in the form of a history from the time of arrival in France to the present time and send in additions each month.<sup>29,30</sup>

In response to Oliver's directive, on October 19, 1918, First Lieutenant George E Staats, DC, 2nd Division, then at Ferme de Suippe, prepared a detailed report of his experiences with the division. After arriving in France in the fall of 1917, he was ordered to the 2nd Division Headquarters at Bourmont, which he reached by train "on a cold and stormy November night" after a few days "stop over to 'see Paris.'" He was assigned to the 5th Regiment, US Marine Corps, which had its headquarters at Brouvannes, and formed the division's 4th Infantry Brigade along with the 6th Regiment, US Marine Corps. At the post dental office Staats met Alexander G Lyle, US Navy dental surgeon, described by Staats as "a royal good fellow," who he assisted while waiting for his requisition for a "complete portable dental outfit" to be filled. He commented:

It surely was a remarkable sight to see the lads lined up outside the door of the office awaiting treatment, while inside three dentists were working their heads off; one with his patient in the chair; another, calling an improvised chair into service; and the third with his patient on the floor (or deck as the Marines call it), mouth wide open, and head between the operators legs having a lower molar, broken beyond repair, extracted.<sup>31</sup>

The companies of Marines were lined up on the street and given complete dental examinations. They were then divided into the following classes:

- Class A: requiring immediate treatment with extractions or exposed pulps;
- Class B: not as urgent but in poor condition;
- Class C: good condition; and
- Class D: perfect.

Staats had still not received his dental equipment but continued to assist Dr Lyle until he was reassigned.<sup>31</sup>

Staats recalled one Thanksgiving at Brouvannes:

One event during my sojourn with the Marines is noteworthy and that the Thanks-

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giving dinner we had on that day. The same being served to both officers and men. Uncle Sam saw to it that his boys in France should have turkey with stuffing, cranberry sauce, sweet corn (very seldom seen over here), pumpkin pie, and all the usual "fixin's" which practically every American is accustomed to on that day. Believe me it surely was some feast and enjoyed and appreciated by all.<sup>31</sup>

On December 17, 1917, Staats was ordered to headquarters at Bourmont to assist Lieutenant Colonel Rex H Rhoades, the division dental surgeon, who had an infected finger. He described his experience with the future chief of the Dental Corps:

I, having no equipment and Col. Rhoades having a sore hand, did what I could to help out; but was always in extreme fear that I would either do something to displease him or injure his equipment. He had a very nice office, there, on the top floor of the school house and we did considerable work. However, there was one difficulty and that was in securing fuel to keep the place warm. We had to continually request the Q.M., and almost beg him for the very smallest allowance.<sup>31</sup>

On January 2, 1918, Staats received orders to report to the dental section of the Army Sanitary School at Langres to attend the school's second class. When class began the next morning, it was so cold the students had to keep their overcoats on. Staats remarked that Langres was a "cold, cold Place in the winter time with nary a place to warm up." He returned to Bourmont on January 15 and was assigned to Camp Hospital No. 3. His portable outfit finally arrived, and he was assigned a room in the "clinic building," which had been planned for "Dental and Oral Surgery." The engineers had not yet completed the plumbing. Staats wrote:

What a mess that clinic building was, with a trench thru which the pipes were to run where the hall and waiting room were planned and all the rooms filled with earth taken from the ditch. It was rather difficult to hustle those engineers to finish the job and I suppose they really thought I didn't mean business until they found out otherwise, but I got them to lay sufficient pipe in order that the ditch could be filled in front of the door of what was to be my operating room, thus giving me access to the room and getting all of the earth out of that room. Hastening to set up the equipment and starting to operate, apparently caused the engineers to think that I did mean business and they hustled up their work so that within a few days I had running water in the room. I had a bench, table, desk, and bookshelf built and a stove set up. This made a very comfortable office, operating room and laboratory and one in which I could do all kinds of work except vulcanite. The vulcanizer took rather a long time to arrive and only reached me after moving to several other areas.<sup>31</sup>

Staats took "great pride in the office" he had established. "That little room proved to be the busiest place in the whole hospital and we performed all kinds of dental operations. I pointedly said 'we' because Col. Rhoades assigned an assistant to me who assisted me remarkably well in establishing and maintaining the work there." He immediately began ordering supplies from C Ash & Sons in Paris (gold, solder, facings, and porcelain crowns), even though they were not on the government list. He telegraphed in the orders and they arrived by post in a few days, allowing him to render a "distinctive service," (eg, repairs to crowns and bridges, inlays, cast gold and porcelain crowns).<sup>31</sup>

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*Captain Robert H Luce. Dental Officer Reserve Corps, dental surgeon, 305th Engineers, 80th Division, who was billeted in the building adjacent to those destroyed by aerial torpedo. His own room was completely demolished. Beauval, France, July 18, 1918. Photograph: Courtesy of US Army Military History Institute. SC 17388.*

When the division moved to Ancemont, Staats's office was set up in the "Petit Chateau" and later moved to the "Grande Chateau," which had a waiting room that doubled as his bedroom, an operating room, and a laboratory. Here he also endured his first enemy attack when the medical staff came under bombardment and the house next to the "Petit Chateau" (from which they had just moved) was destroyed.<sup>31</sup>

The division was relieved and moved to Robert Espagne not far from Bar-le-Duc. The dental office was established in an uncompleted chateau. The division moved to Chaumont-en-Vexin next and set up a dental office. During the stay at Chaumont-en-Vexin, the vulcanizer at last arrived. The division then moved to Meaux, where Staats had "stormy and historic days in the line and little attention was given dental troubles unless very acute and severe."

Being somewhat off the regular lines of evacuation the Division Surgeon was confronted with the problem of not having an evacuation hospital but successfully solved the problem by securing the Hôpital du Colleg de Juilly at Juilly, but not having sufficient force there, surgical teams were organized from the division and sent there. When there I served as anaesthetist on Captain Eichenberry's team [and] as Admissions and evacuation officer until Platts relieved me, Also wired a considerable number of

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cases of fracture of the mandible and maxilla. There it was that I realized the purport of the courses in bandaging, and oral surgery given us at the Sanitary School. Talk about busy, why, the whole bunch were certainly kept on the jump, forty-two hours was my first round of duty without any sleep. . . . The boys effectually stopped Fritz on his "march to Paris" and were driving him back in the Bois Belleau, Boureschs and Vaux so we were all sent to La Ferte to establish and operate a hospital for seriously wounded with F.H. #23, as a nucleus. Many surgical teams from the Base Hospitals had previously arrived at Juilly to relieve us. At La Ferte Curry and Brann also joined us. My assistant effectively took care of my equipment during this period and had it transported under orders from Col. Graham [2nd Division dental surgeon replacing Lieutenant Colonel Rhoades] with the Medical Supply Depot property from Meaux to La Ferte. At that hospital my duties were principally as an anaesthetist but when Captain Brennan's operating assistant left him I assisted him in that capacity for several days until another arrived. Also wired a number of Jaw fractures.<sup>31</sup>

As the 26th Division relieved the 2nd Division, a 26th Division field hospital relieved Staats's group. The 2nd's Field Hospital No. 23 moved up to Mery and while there Staats and Lieutenant Cole examined and began treating the hospital staff. The next stop was Taillefontaine, where the dentists again worked at "receiving patients, giving T.S. [tetanus serum, also called ATS, anti-tetanus serum] and bandaging." After moving to Nanteuil, Staats was transferred to Field Hospital No. 16 and assisted Lieutenant Saunders for a few days. He was later transferred to the 5th Machine Gun Battalion stationed at Bregy, where he worked as the battalion dentist. The next move was to Nancy, where the battalion conducted practice. The division went back into the line after leaving Nancy and Staats went to Ville-au-Val where he procured toothbrushes from the Red Cross representative and issued them to the troops who did not have one (because of the shortage of brushes, the supply officer had previously issued only one brush for each squad). Staats considered this to be the "most equitable way of distribution." He worked on the companies rotated in the sector and held sick call in a dugout near Pont-à-Mousson, going up to the line every morning as the division prepared for the Saint Mihiel offensive. He was ordered to Field Hospital No. 15, but after only 2 days the division moved forward to Thiaucourt. Things seemed to be quiet there until Staats and two other officers were walking up the road to get their shaving gear from the trucks.

"Whizz-bangs" started coming over but landed quite a distance away and they thought the Germans were firing at one of the Allied batteries at the edge of the adjacent woods. Then about the fourth or fifth came over, (whizz-bang) exploding about 10 feet from us wounding Hilton slightly and severely wounding a lad from the 9th Infantry up the road. While Harper and myself were lifted from our feet and thrown into the ditch. Crawling up the ditch found ourselves among a battalion, dug-in on the roadside in the support position. After the wounded lad was dressed to stop the blood, Harper got an ambulance to take them to the hospital in the town. That evening the Germans started to throw big ones into the town and we were forced to operate in a dugout which was wonderfully adapted for the purpose being formed into an operating room and ward.<sup>31</sup>

After being relieved by the 78th Division, Staats pitched an officer's wall tent

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and again resumed dental practice until the division moved to Champagne, where it set up a hospital at La Vouve. This in turn was ripped down and reestablished near Suippes where the dental equipment was set up in the admissions tent so that emergency work could be provided quickly. While there, Staats also functioned as an anesthetist on one of the surgical teams. The next stop was at Sommepey, where the hospital was established about 3 or 4 kilometers behind the front lines, near seven cross roads, a bridge, ammunition dump, artillery camp, and artillery positions, all of which were targets for German gunners. During one of the frequent shellings, a round came through one of the ward tents and another broke one of the guy ropes of a tent nearby. Both were “duds.” Staats recalled:

Many splinters, of course, of those which didn’t; and quite so close were heard “whizzing” thru the air. It sure was strange working and giving anesthetics, under canvas, while the shells came “whizzing” over. Unconsciously every one around the operating table would stoop as we heard the shells “whizzing” over. It surely was working under trying conditions having come out of the line I have again resumed dental practice under canvas.<sup>31</sup>

### *Lieutenant Colonel George D Graham: Division Dental Surgeon, 2nd Division*

Division dental surgeons strove to maintain the highest level of dental service possible, despite the constant movements into and out of the line. On March 10, 1918, Lieutenant Colonel George D Graham, DC, became the 2nd Division’s dental surgeon, replacing Lieutenant Colonel Rex Rhoades, who was appointed supervising dental surgeon for the advance section of the services of supply. Graham, one of the original Dental Corps officers from 1911 who retired as a colonel in August 1945, is one of the few division dental surgeons who left a personal account of his tenure rather than a dental history of his division. His comments provide a unique look at the problems confronting a division dental surgeon in a heavily engaged combat division.<sup>22,32,33</sup>

The 2nd Division was unique in the AEF, as well as in the history of the US Army, because it was a mixed (today referred to as “joint”) division of US Army and US Marine Corps units, under Army and later Marine Corps command. As a result, dental support for the Marine Corps elements of the 4th Infantry Brigade (5th and 6th Marine regiments and the Marine’s 6th Machine Gun Battalion) was a blend of Army and Navy Dental Corps officers, with Army dental officers working in Marine units from the first days of the division’s arrival in France in 1917. When Graham arrived, the division had 16 Army and 3 Navy dentists assigned, and those numbers fluctuated throughout the war as dental officers became casualties, fell sick, or were transferred. All dentists “were equipped for field service” and a dental laboratory provided support. According to Graham, the mission of the dental officers in the division was twofold: (1) to prevent to evacuation of the trained military personnel for oral and dental reasons, and (2) “to accomplish such less urgent and more elaborate service as conditions and equipment permit.”<sup>22,34</sup>

From late March through November 1918, the 2nd Division was actively

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involved in major operations on the Verdun defensive sector (March–May), the critical Aisne-Château-Thierry defensive operations and Aisne-Marne Offensive around Soissons (June–July) that stopped the German offensive and threw it back, and later operations in the Saint Mihiel and Meuse-Argonne offensives (September–November).<sup>22,34</sup> 2nd Division infantry typically deployed a battalion of each regiment to the trenches and the others to the reserve positions to the rear. Dental officers with the advanced elements had only emergency dental kits, consisting of four cloth rolls of equipment, medicines, and supplies in two pouches (see Chapter 13: The Dental Service in the American Expeditionary Forces in France, 1917–1919: Organization, Administration, Personnel, Training, and Supply), but the kits were always in short supply and easily lost during combat operations. Those dentists with the reserves in more tranquil settings used the modified portable field dental outfits, although not all dentists or organizations had the authorized equipment.<sup>22,35</sup> Once the 2nd Division began mobile offensive operations in the summer of 1918, the dentists faced a more fluid situation.

Dental officers were installed in towns, in which troops were temporarily billeted, in dugouts, in tents and occasionally by the roadside, wherever their organizations happened to be, often under shell fire. The character of the service rendered and the equipment used was determined entirely by local conditions, and these changed from day to day, and week to week, through the course of the campaign, and it was therefore rarely possible to anticipate what tomorrow's problem in this respect would be. There was no sharp demarcation.<sup>22(pp116–117)</sup>

Dental officers in the 2nd Division were actively involved in all aspects of the division's medical operations. Graham later commented:

A particularly gratifying feature of the service of the dental personnel through the different engagements of the Division was its utilization in the various functions of the Medical Department. Dental officers were not confined strictly to dental service, but when combat conditions precluded their functioning as dental surgeons, they were immediately available and were employed as utility officers of the Medical Department, where their services were of considerable practical value, and they therefore, to the credit of the dental service with combat troops, were not held in abeyance until the troops were withdrawn from the front line. They were a constant and practical part of the Medical Department personnel with their respective organizations, and were present at all times to render their own special service or to be employed otherwise as occasion required.<sup>22(p117)</sup>

During operations at Château-Thierry, the division added eight surgical teams to its Field Hospital No. 23 then at La Ferté-sous-Jouarre, where it received the most seriously wounded directly from division triage at Field Hospital No. 1. Each of these teams had a dental surgeon as an anesthetist. One dental surgeon, First Lieutenant Charles H Cole, DC, recently assigned to the field hospital from duty with the 5th Marines, administered anesthetics for 18 straight hours. Thereafter, dental officers were assigned to the field hospital as anesthetists in ensuing operations.<sup>22</sup>

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Dental officers in the rear area of the division with the ammunition, supply, and sanitary trains, especially the field hospitals and dental laboratory, provided important but often unnoticed services to conserve the division's fighting strength. They gave uninterrupted dental care to soldiers and thus kept many troops with oral and dental problems from being evacuated out of the division as non-effectives. Graham wrote that "it was not the quantity of service accomplished at these times that was of most importance. . . . It was the fact that it was always available when required, and therefore saved from evacuation effectives that were urgently needed." In this respect, the dental laboratory was particularly important for the divisional dental service. The dental laboratory was first assigned to one of the field hospitals of the 2nd Sanitary Train, but was later moved to the division headquarters where it was in the center of activity and more easily reached.<sup>22</sup> Graham believed that the dental laboratory was critical because it:

. . . functioned during the entire tour of the Division in the combat area and not only repeatedly saved both commissioned and enlisted personnel from evacuation, but cared for replacements that came to the Division, and who could otherwise not have been retained. A number of vulcanite dentures were made for the purpose of mastication and in a number of cases enable men to wear gas masks. These men would otherwise have been evacuated.<sup>22(p120)</sup>

In a memo issued on September 10, 1918, Graham urged the dental surgeons to "make every effort to accomplish dental service wherever possible." In camp, dental surgeons were expected to render treatment quickly because portable dental equipment could be "unpacked or packed within an hour." Even on marches when units were halted for only 24 hours, the dental surgeons had to be ready to work as needs arose. Under no circumstances should "an officer or soldier ever be dismissed without necessary attention." Such responsiveness was the dental surgeon's "duty and obligation," and was to be "carefully observed." If temporarily absent from their units, the dental surgeons directed their assistants to tell patients when they would return and be able to render emergency treatment.<sup>36</sup> Soldier care was an ever-present concern not only of the division dental surgeon but also of each dental officer with the troops in the combat zone. Graham proudly noted that the Army and Navy dental officers of the division were highly decorated for bravery and included two Navy Medal of Honor recipients (see "Awards for Heroism" below).

### *In Their Own Words: Personal Experiences of Dental Officers at the Front*

A number of dental officers prepared accounts of varying length and detail on their experiences in France and along the western front in response to Colonel Oliver's request. However, the pressures of daily duty, constant movements, and combat operations were much more critical for most front line dental officers, and compliance with Oliver's request was limited. Thus, the number of memoirs eventually received and now preserved in the National Archives was small compared with the number of dental officers serving in France. The personal recollections that follow come from a handful of divisions that apparently stressed the comple-



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*First Lieutenant PE Gilley, 4th Division Train, Dental Officer Reserve Corps, giving free treatment to a French civilian in a small town where there are no French doctors left. Rimacourt, France, August 20, 1918.*

*Photograph: Courtesy of US Army Military History Institute. SC 21818.*

tion of these narrative accounts—the 26th, 29th, 78th, and 82nd divisions. In the following excerpts, AEF divisional dental officers vividly relate their stories “in their own words,” often recorded within weeks of the events.

*First Lieutenant Herbert W Huff, 2nd Battalion, 114th Infantry Regiment; 114th Field Hospital, 104th Sanitary Train; and 3rd Battalion, 115th Infantry Regiment, 26th Division*

After being located here [Courcelles, France] for about three weeks we again hiked to Vaux where we entrained and rode all night and reached Morvillers where we left the train and hiked about four miles to a small town called Meziere. This place afforded a very good location for a dental office and I put up my outfit on the second floor of a large school-house. The light was very good here and I accomplished quite a bit here also. After remaining here for about two weeks we left one evening about nine o'clock with the battalion [3rd] and hiked quite a distance to a rather good sized village called Montreau Chateau and here located in a building the French had used for an infirmary before we arrived. At this place we had a very good location for our office, light very good and plenty of room. While here I treated a number of civilians and finished

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work on a number of our men. From Montreau Chateau we had a long hike leaving about nine P.M. and arriving at Ritzwiller about three A.M. and went into barracks which the French had used for their infirmary. This building evidently had not been put up with expectations of a dentist locating there as the windows were made of paper material and very little light came through. On account of this we put our equipment in the yard under a large tree in clear weather and when it rained put it in the building, but could do only emergency work here as it was too dark. After leaving here we hiked through Dannemarie into Hagenbach which was counted as the third line at that time. Reaching there at nine-thirty and I was assigned to a dressing station in the trenches at Englengen, arriving there with my assistant and four bandsmen as litter bearers at about ten-thirty P.M. Of course, we could only do emergency work of a dental nature here as the dugout was very dark and dental outfit had been left at the battalion infirmary at Hagenbach. The emergency outfit was only carried with us into the trenches. After spending three or four days here I was relieved by a 1st Lieut. of the Medical Corps and reported to the infirmary in Hagenbach where we put up our equipment and did good work. After staying here for about ten days we were relieved and hiked back to Manspach. After camping here all day we left at night and hiked into Montreau Chateau and put up our outfits in the same office as we had had before.<sup>6</sup>

*First Lieutenant Bernard R Thornton, 327th Infantry Regiment, 82nd Division*

[September 14, 1918] An order came for two companies to get in contact with the enemy at five P.M. Each company must have one Medical Officer with four medical men within twenty paces of the rear. They were to go over behind a smoke screen. I was sleeping until five when the Major came in with the order. He said that he had only one Medical Officer to send and I volunteered to be the second. In five minutes we were going down the road behind the companies and the beautiful smoke screen began to rise from our shells. In a couple of minutes the German artillery put down a barrage just behind and in the smoked screen and caught our boys in the act. They most heroically advanced and when we reached our first trench the wounded began to come in in quantities. The first chap was a clean cut fellow from New York City and had his arm shot away at the shoulder joint and you could see at least four ribs. He was not bleeding at all as some one had wrapped his shoulder with a leather string. He was bright and cheerful. We found a piece of corrugated iron to get under and work and with blankets stopped the cracks so that it was light proof. We worked here as fast as possible until twelve o'clock. Had every kind of wound to treat that shrapnel and bullets could make. I did my part of this work and the Battalion Commander came and stayed three hours with us. After he watched us work a couple of hours he suddenly said to me "Boy, you are a dentist, I did not know that you could do this kind of work." I afterwards heard that he boosted me up at Regimental Headquarters and my status changed from that day on in my battalion from a figure head to that of necessity. The lieutenants that were always throwing GUFF changed their attitudes at once. Some of them got a sample of my work and said that the Dental Corps was with them until the end. . . . [September 30, 1918] Just at daybreak the boys began moving around and pretty soon the Germans put a terrific shell fire over on us. Shells killed men on all sides of me, and I went down to the foot of the hill and found some elegant iron huts and found so many had been wounded a battalion surgeon established an aid station, and for two days and nights we were busy with the dead and wounded from the front. The Germans were most desperate in their resistance and it was a nasty job for our boys. Many of our officers were wounded here. Our battalion was ordered over the top one afternoon from Château Chéhéry [Châtel-Chéhéry] and we followed them into the town and established an aid station at the edge of the

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town next to the line. We reached this place at dark and had work just as soon as we were ready. We put 240 men badly wounded through our station by ten o'clock the next day, and not only the dentists worked to their utmost but also the chaplain and Y.M.C.A. man done a full size man's job. We had some very bad wounds to treat at this place and there is no time to sleep these busy days. . . . I saw many machine gun emplacements that were elbow to elbow and many of the gunners were killed on the job. I saw a number of our boys, all were lying where they fell, apparently on the run for the Germans. There were wounded everywhere and a fellow could not get any place for giving first aid to the boys in the way it should be given. . . . I met my assistant on this road, he had been lost from me, and we worked a while on the wounded. Then I learned . . . our battalion aid station was back behind a hill and we looked them up. The days that followed were busy. The most disastrous that I ever dreamed of. At one time there was only one of our line officers left for duty in our battalion and reports say only 34 men. I would not dare quote those figures, but it was nothing but bloody work from October 6th until the 26th, then it subsided. . . . Our medical detachment has received much praise for its work and the Dentists have been given an equal share of it all. In the recent emergency they proved to be the most valuable part of the Medical Department as they demonstrated their ability to do anything the doctors did and to do dental work besides. . . . I have the honor at present of being the only officer that has been on every hike and every move and every place that my battalion has made since it has been in the A.E.F.<sup>37</sup>

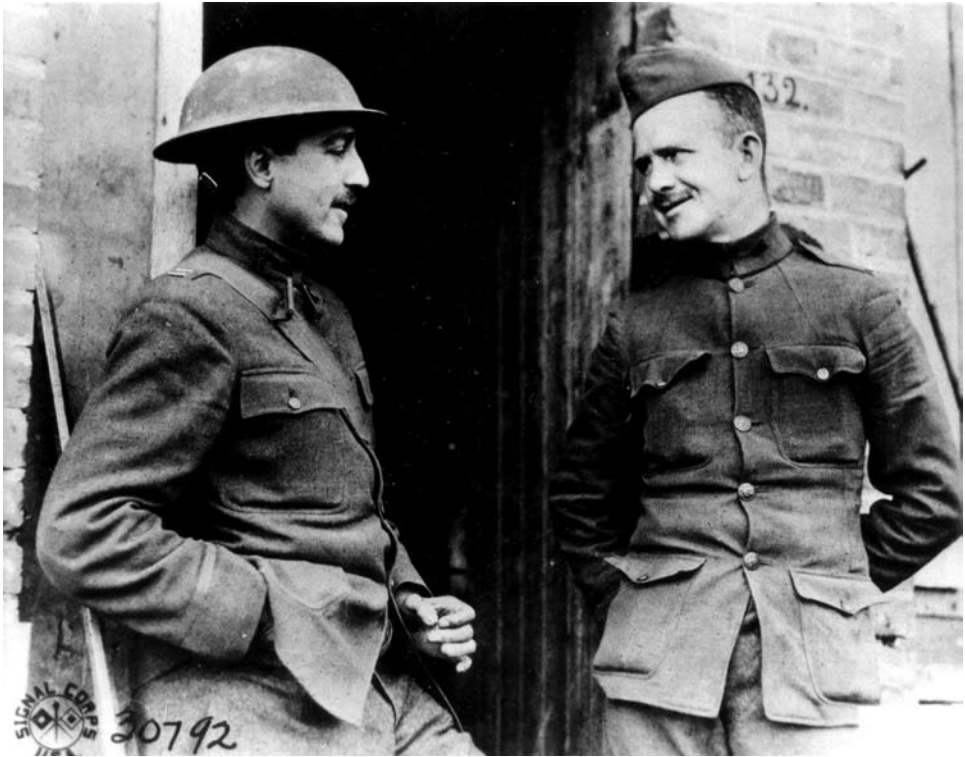
*Captain Walter E Lotz, Division Dental Surgeon, 78th Division*

On Sept. 12th the great drive began. The first dental aid station was established by Lieut. S.B. Crasson in the Bois de Mort above Limey. A field chair and chest were opened and a covering was made of shelter halves. A few days later Lieut. G.L. Haman established an office in a dugout in the same woods and operated until the division was relieved Oct. 5th. . . . Not far away Lieut. B.J. Connolly found a convenient German dug-out suitable for operating. Using a big old fashioned plush chair, he was able to relieve many cases, especially the men coming out. . . . Lieut. H.W. Lester, advancing with the infantry, discovered a German outfit in an abandoned German hospital at Jaulny. He immediately set to work, dug it out, cleared out a room and was on duty within a kilometer of the German lines. . . . Each dental officer, with equipment, established as best he could, but dental services were of short duration. Medical officers were being lost and first aid work fell upon the dentists. . . . Mention must be made of the work of Lieut. Robert Millington. His work in a dressing station near Grand Pre was favorably commented on by the regimental surgeon and regimental commander in a letter recommending a decoration. Exposed under shell fire, Lieut. Millington remained on duty 72 hours and was willing to continue longer when relief arrived.<sup>20</sup>

*First Lieutenant BJ Connolly, 303rd Field Signal Battalion, 78th Division*

After leaving here [Menil Park Farm], we came to the town of Chattel, where we settled down for a few weeks stay. Our medical detachment got real ambitious and cleaned up a shack in great shape and I again set up the outfit and was open to all comers, and comers came from all organizations, balloon service, ammunition trains, signal, infantry, etc. It was at this place that on the hills close by time bombs had been concealed and at intervals would explode with a terrifying noise. After about ten of these explosions and numerous shells within fifty feet of our shack, it seemed to me to be a queer place for a peaceful dentist to be plying his trade, but I was getting

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*Captain HA Granelli (right, wearing cap), Medical Corps, surgeon for the 303rd Field Signal Battalion, 78th Division, and First Lieutenant BJ Connolly, Dental Corps (left, wearing helmet), dental surgeon, 303rd Field Signal Battalion, at Châtel Chéhéry, Ardennes, France, October 27, 1918.*

*Photograph: Courtesy of US Army Military History Institute. SC 30792.*

hardened to war by now and air fights and burning balloons became common and only received a casual glance. Three weeks of intermittent work was our record here, and it then became necessary to follow in the wake of the infantry in the last big push that cleared out the Huns in this section of France. . . . [with the armistice he was billeted in French countryside and turned to] doing conscientious and satisfying permanent dental work on the deserving boys of the 78th Division, endeavoring to send them dentally fit, back to the good old U.S.A.<sup>38</sup>

*First Lieutenant J Iredell Wyckoff, 2nd Battalion, 309th Infantry Regiment, 78th Division*

When we arrived in the Bois de Rupt [September 15, 1918, in the Saint Mihiel sector], after being shelled a little, it was very dark and no one seemed to know very much about the place so finding a small building here I took the men with me and decided to stay in here until it got light enough to see where we were. A short time after we got in here the Huns shelled the woods and one shell hit the end of our building and blew it off but did not hurt any one. . . . A short time after this someone called for the Medical

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Detachment and on going out found a number of wounded men in a dugout so turned it into an aid station and after dressing their wounds went out to find the ambulance collecting station. The woods [were] shelled every little while and we had to duck quite often but I finally located the place and at two o'clock in the afternoon had all the cases evacuated. By the time we got them off in the ambulance we had twelve cases. . . . When we got back in the Reserve I got a shack built and finding an old chair near by set up a dental office where I was kept busy until the Division was relieved and then acted as Battalion Surgeon until another Medical Officer could be sent to us.<sup>39</sup>

*First Lieutenant Clautus L Cope, 1st Battalion, 327th Infantry Regiment, 82nd Division*

At 6.00 P.M. [October 6, 1918] we were marched to the front line position near la Forge and [were] ready to go "Over The Top" that night. Several were wounded and on one occasion I was sent for an ambulance, but failed to get one and returned. Patients were carried on litters to the nearest station. Another Medical man and myself layed [sic] out in the mud under heavy shelling machine gun fire. The next morning at 5.30 o'clock my battalion went "Over The Top." The battalion Surgeon and myself went forward and established a dressing station which was in an old brick building with no cellar and consequently no protection whatever. At 8.00 o'clock no ambulances had arrived so I volunteered to go see if I could get an ambulance and to replenish our exhausted supplies of dressing. The road was being shelled incessantly with high explosive shells and was by machine gun bullets. I reached the regimental aid station but could not get an ambulance to go up this road under such shelling, but did manage to get a few bandages. . . . About 4.00 o'clock three shells hit out dressing station, killing one man who was being dressed and wounded several others. The shelling was so incessant until we had to move someplace else. There was no dugout near so we moved to the place that such work could be done with a degree of safety which was back near regimental aid station. The next day the battalion Surgeon and I went out and established another dressing station in an advanced position in a dugout where we worked two days. . . . [October 12, 1918] On Thursday I was told to report to the 2nd Battalion and by doing so I learned that they were getting ready to advance. In the afternoon the 2nd Battalion went forward past a village called Fléville and "dug in" the banks of the road side for the night. The next morning at 3.00 o'clock we went forward after hiking three kilometers. The medical men were told to drop out. We "fell out" on one side of the road. I never realized that we were so close to the Germans as it was dark. We soon found out that we were sitting in "No Man's Land"; the Germans on one side of the road and the Americans on the other. The German snipers were so close that all we could do was to sit there as quietly as we could. We captured five snipers about 9.00 A.M. . . . The air was full of gas and I got enough to make me feel sick for several hours. The next day I worked at regimental aid station, and continued to administer first aid until the regimental aid station moved out. . . . For a few days I worked in an Ambulance dressing station at Fléville. After it moved out I did first aid work at regimental aid station and also took care of many dental cases which reported for treatment, using the emergency dental kit which I had carried through the above described drive.<sup>40</sup>

*First Lieutenant Junius F Emerson, 2nd Battalion, 328th Infantry Regiment, 82nd Division*

We were ordered to follow the Infantry over the top that night, the order was luck for me it read at the top—Friday, Sept 13th, 13 o'clock, order No 13. That night we established our aid station at Orangeries which is a little patch of woods where one

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of the Companies [sic] P.C. [command post] was, it was during the day our men went over and at daybreak to the town of Norroy under shell fire. . . . Just before getting into Norroy the earth opened up before me and I felt a swathing on my right leg, a runner on my left broke his leg and another man on my right got a flesh wound. My wound was only a flesh case but the runner we got him into a passing ambulance. My walking stick was ten feet away, it had a hole in the handle and only scratched my hand, in my belt over my abdomen I had a Boche canteen that I had found the day before, a piece of shrapnel bent it double but saved me from what might have been a serious wound. The ambulance came up O.K. but minus Lerner, he had been hit in the back while dressing a wounded man. That night they put over shells with gas for four hours, and we remained in town with our masks on for four hours. Several men were overcome. We had several wounded and I helped what I could. They shelled all night long, later we learned that they were coming from the outer fortifications of Metz.<sup>41</sup>

*First Lieutenant William N Crowl, 2nd Battalion, 325th Infantry Regiment, 82nd Division*

On leaving our position [near Varennes] on the night of October 9th, we were advanced up the railroad tracks, south of Châtel-Chéhéry, to the position we were to attack from the next morning, and all the way up we were shelled very heavily with gas, high explosives and shrapnel. Many casualties inflicted and one of our battalion doctors being injured. I took charge of a part of our Medical Detachment, and dressed the wounds as we followed behind the battalion. This was a very difficult task to do on account of the darkness and working most of the time in a high concentration of gas, also shellfire. That morning I was ordered by the battalion surgeon to go to assist in the aid station in Châtel-Chéhéry, and that night went on up to rejoin the 2nd Battalion. . . . [October 11, 1918] In the morning our battalion moved forward and the Medical Detachment followed with it, finally establishing with the 1st Battalion Sanitary Detachment, in the aid station a few hundred yards behind the front lines, where we all worked without stopping hardly for the next few days and nights. We had very little protection and were under almost constant shell fire and machine gun fire, and also had no shelter from the weather. The casualties were very heavy and I was unable to be of much assistance in dressing them, our battalion having now only one doctor. We were shelled very heavily the night of October 13th, and had 12 casualties among our own Sanitary Detachment including my dental assistant. . . . The regiment having advanced further our dressing station was moved forward also, where we had to work under still greater handicaps, having no shelter from the rain, and mud, and dressing the wounded at night in the darkness as best we could. I continued to help in the dressing and evacuating of the wounded until October 18th, when I was sent to the hospital. . . . Evacuated to the hospital too sick and exhausted to do duty.<sup>42</sup>

*Captain William E Paul, 2nd Battalion, 327th Infantry Regiment, 82nd Division*

[May 1918] My work here [Frenlue, France] was my first work as a battalion Dental Surgeon, for all of our regiment had worked together while in the States, and had taken the patients just as they came from all three battalions. There at Frenlue I found that I had more enthusiasm regarding my dental work than I had while at Camp Gordon, for since I had examined the whole battalion here in France, I was anxious to get each company completed of its needed dental work. I thought that some day I might get all the work completed and then would have only the emergency to look

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after. But the longer the work the more I realized that such was an impossibility, for to take care of the mouths of 1000 men was a job for more than one dental officer. For me the task of putting the mouths of a company into a first call condition was an endless task. . . . [July 1918] While stationed at Annienville, I received my first baptism of shell fire. Quite a few shells fell in the village every day. The first shell I heard while working, I dropped handpiece and mouth mirror, and the patient I was working on and I had a race for the nearest dug-out. After several days of this work and run schedule, I came to the conclusion that little or no dental work could be accomplished if we tried to hide from all the shells. Quite a few shells fell near us during the stay there but we did not run to a dug-out, but kept on working. We were not always successful in keeping the patient in the dental chair. . . . [September 29, 1918] About one mile before we reached Beurney we received a heavy shelling from the Boche, which caused us heavy casualties, one man in every ten being left on the field either killed or wounded. With the two Medical Officers with our battalion, we were on the extreme left. We thought we saw a near cut, so left the troops, and started running across the field. We had gone only a few yards when we found that the Boche gunners were making a supreme effort to get us with their artillery. The Officer just ahead of me got struck in the head with a piece of shrapnel, but luck was with him and he was not seriously hurt. After climbing through three stretches of wire, and at the same time dodging shells, we reached a ravine and took cover under a bank with some men of the 35th Division. These men were lying in small fox holes which offered little protection from the shrapnel. In making the near cut across the field, we became lost from the rest of our battalion. After waiting in these holes for a few minutes I saw one of our companies advancing over a hill just ahead of us, so we started to overtake them. We could see numerous men fall as they were struck with shrapnel and machine gun bullets, but we kept on. It was while going up this hill trying to overtake this company that I wondered what they intended to use a dentist for going over the top with the men. I was of no use whatever, either as a dentist or Medical Officer for my emergency outfit had been thrown away a few minutes before, and there was not a bandage or drug of any kind nearer than two miles. I had just come to the conclusion that the Dental Section of the Army Sanitary School would soon have an occasion to add another name to their honor roll, when the General sent word to the company ahead of us from advancing further. We were all told to take cover, for the attack had been called off.<sup>43</sup>

*First Lieutenant Thomas N Page, 3rd Battalion, 326th Infantry Regiment, 82nd Division*

[June 18, 1918] I was ordered away to the Army Sanitary School (I know not where) and did not get to do any work at Chaudeney. After one day travel I found the school which was at Langres, and remained there until July 6th, listening to the Birds of the S.O.S. [services of supply] tell their experiences doing squads right and left and getting lectures from able lecturers which has been a great help to me. Of course while there I learned to evacuate patients and everything I had never dreamed would be the duty of a dentist. . . . [July 7, 1918] I left the school and joined my battalion, or rather started to join when I reported to the Regimental Commander and he ordered me to set up my hardtack box at his station as there was no need of a dentist being up at the front just to get shot up. My orders had been previously issued by The Division Dental Surgeon that I would join my battalion at the front where (Whizzbangs) come and go, but I was very easily persuaded by the Colonel to stay at this P.C. [command post] which I knew must be safe as the Chaplain, Personnel Officer, and one French Captain had also established themselves there (. . . Brigade Headquarters was near). I set up and began work when it was decided that a dentist would make one more

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at the front if nothing else and we were to go up with as much of our equipment as we could get up. . . . [August 18, 1918] The next day were backed into a little town on a beautiful river which was named Belleville. This river being the Moselle. . . . This proved to be a quiet sector for the time being and I set my complete outfit up out in the open near the entrance of a shell proof dugout, where I could seek refuge in case old Jerry should put over a little. There was little to do at this time as the men were not thinking of teeth trouble they were writing letters, reading some worn out magazines and listening to the rats run around. . . . [October 4, 1918] We set out marching (as usual) to get into the fight, and for two days we trotted along, I taking with me only my engine and emergency kit (which was known to all dentists as the fatigue kit). On the second day we passed into the territory which had been held since 1914 by the Boche and it was a sight to look at entanglements, of what had been entanglements and see so much destruction, but we were going to be introduced to the real thing the next few days. We stopped for orders just west of Varennes, near Apri de St. Louis (A famous German dug-out). On the night of October 7th, we plodded forward in the rain and mud almost to the knee and came to Montblainville, where we stopped for dark again, as it was necessary to march under cover of darkness now. [October 8, 1918] We went into the line (or front) to relieve the 28th. Division. Of course, the fighting Battalion was selected to go in first and we hit the train, going it seemed into the very jaws of death. About 11.00 P.M. we were ordered to fall out behind the hill and little did I know that just beyond that hill was German galler, and the first thing I know I was knocked down by the explosion by a whizzbang, but unhurt, although frightened to death. This shell got one man although it did not kill him. Never was I so excited in my born days, I lay down on the wet grass with Lt. Weatherford and Mr. Harrison a Y.M.C.A. man and shells poured all around all night. We did not sleep as we were wet and cold and only two blankets for three of us. Next morning I was told that there was a little village nearby, in which we could establish a dressing station and I was surely glad to know there was a house left in that dismal forest, but when we came into the town it was not houses, but half houses and a few walls, although they were high enough to hide behind to dodge the shells. I was with Capt. Hays, M.C., Battalion Surgeon, when we made our way into the little shattered village of Châtel-Chéhéry, on the morning of October 9th, when our battalion attacked the Boche at 5.00 P.M. we established our dressing station in an old cellar where the Surgeon of the 28th. Division, had his and was ready for emergency, and they began to come in from all angles, as the machine guns of the Boche were hidden so much that the men fell fast before them. On this date I had the only fractured jaw I have had. It was a machine gun bullet through the maxille on the right side and tearing it completely in two pieces. I could only give first aid, which I did and evacuated the man. While here we had many casualties and worked hard. In the afternoon I found a little cellar in which I could get a few hours sleep and I was almost all in, when I awoke it was next morning as this was the first night that I had opportunity of sleep for four or five days and I did not mind shelling or the many dead bodies that were within ten yards of men (both American and Boche). We had no food so some one told me that the ration dump was only about a mile away and that we might get some canned goods there so I set out to find it with an enlisted man and the shelling was pretty fast and machine gun bullets whizzed by, but we went on, finally finding our reward only to be coffee, sugar, and bully beef. I was wise and only took the coffee and sugar, as I had my Pip burner along and could steal gasoline off an ambulance if one happened along. Everything worked well and we had hot coffee that afternoon and several afternoons. . . . [October 10, 1918] We left Châtel-Chéhéry and advanced with our battalion which had pushed away ahead. We dug in on a little bank with no shelling except a good way off and let us sleep on the ground and fortunately it



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was not raining that night. Next day was a busy day as the second [2nd Battalion] advanced and tried to take St. Juvine [*sic*], but was compelled to withdraw with heavy casualties. This was the memorable 11th of October and I cannot forget it as in the evening about 7 P.M. we were ordered to march to the river Aire and ford it under heavy shell fire. I was in the middle of the river freezing, so I thought, waiting for the men to pull up ahead on the opposite side. I had been forced to leave my engine behind with the regimental infirmary or dressing station and helped lug the litters carrying the first aid dressing splints and my emergency equipment, with a few blankets we could find off dead men or from the discarded packs. We marched a few hundred yards to a ravine and it was raining a little when we went into this ditch and almost to our knees, some times water knee deep. We were told to go to sleep (just like a man can sleep in a living hell of shells and machine gun bullets). I spread out a litter and put up for the remainder of the night, so I thought, when along four whizzbangs which didn't miss me more than an inch I thought, and I took to the banks where some men were busy digging in, and I borrowed a shovel and within five minutes I thought I was safe when in reality as I discovered the next morning I was only in a nice place to be put under cover by a shell, but thanks to a higher power none came within ten feet of me. At six A.M. old Jerry let loose on us with renewed energy, for he knew the third battalion of the 326th was in that very ditch, and that I was along and he thought he knew just where I was but missed my hiding place just a few steps and killed several men in one of the companies beside me, and wounded many.<sup>44</sup>

*First Lieutenant George L Long, 104th Infantry Regiment, 26th Division*

On or about the first of May [1918] we were sent over to the right to relieve another regiment. This place was not near so satisfactory for dental work as we were situated between the first and second lines and received very heavy bombardments daily. At this place we remained until the middle of June at which time we were relieved by another regiment and sent well back of the lines for a short repose. On June 16th 1918 we received a heavy shelling, killing many men and wounding several. At this time I was able to assist the surgeons in dressing the wounded as there were many facial wounds. . . . On August 25th 1918 we were ordered to entrain at Châtillons. After a short trip we detrained in the vicinity of Bar le duc and started on a long hike—marching by night and remaining hidden in the woods by day. Finally arrived at some woods facing the St. Mihiel Salient. On Sept. 11th 1918 we advanced to the Regt. Aid Station and on Sept. 12th we handled a large number of wounded men. This station was in advance of the aid station established by the battalion in reserve and so we received the brunt of the work. During the day we made several expeditions between our station and the front lines searching for and bringing in the wounded. The following day following close to the retreating boche we arrived at the town of St. Maurice which had been evacuated by the Germans only a short time before. At this place we established an aid station and took care of the wounded both Americans and boche. From there we held the sector to the left and was there able to accomplish some fair satisfactory dental work. We remained in that sector until ordered to take up a part of the Verdun Sector. We proceeded in the night marches for eight or ten days during which time it was impossible to do any dental work other than to temporarily relieve some soldier suffering from tooth ache. On the 14th of October 1918 we were placed in the trenches some two hundred yards from the front line at which place we received many wounded as this station was advanced beyond the two battalion stations not in the lines and was well known as it was Regt. Aid Station. We remained in this sector ten days and

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*Lieutenant (junior grade) Weedon E Osborne, Dental Corps, US Navy, was awarded a posthumous Navy Medal of Honor for his heroism while assigned to the US Marines of the 2nd Division on June 6, 1918.*

*Photograph: Courtesy of National Archives and Records Administration. SC 90759.*

**EXHIBIT 15-1**

**WEEDEN E OSBORNE: MEDAL OF HONOR AND DISTINGUISHED SERVICE CROSS RECIPIENT**

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Weeden E Osborne was born in Chicago, Illinois, on November 13, 1892, and graduated from Northwestern University Dental School in 1915. On May 8, 1917, he was appointed a dental surgeon in the US Navy with rank of lieutenant (junior grade). He was detailed to duty with the 6th Regiment, US Marines, on March 26, 1918, and joined them on May 14, 1918, at Doucey (Marne), France. He was posthumously awarded the Medal of Honor and the Distinguished Service Cross for heroism in combat with the enemy during the advance on Bouresches, France. Although his profession gave him every justification for remaining in the rear, he volunteered for general rescue work and aided the wounded. While carrying an injured officer to safety, he was struck by a shell and killed instantly. He was the first commissioned officer of the US Navy to be killed in action during land fighting overseas.

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Data sources: (1) General order no. 518, 1920, Navy Department. (2) US Navy Bureau of Medicine and Surgery. *The Medical Department of the United States Navy with the Army and Marine Corps in France in World War I: its Functions and Employment*. Washington, DC: Bureau of Medicine and Surgery, USN; 1947: 203.

during this time we were continually shelled and gassed and it was useless to think of attempting even emergency dental work. We were relieved for a short repose of a few days and then sent to the left of our former sector. There we remained for days at which place there was very little to do. We were relieved and moved back a short distance only to be ordered back into the lines above Bois Haumont about November 9th, 1918. Here an aid station was established and on the morning of November 11th, 1918 we advanced under considerable shelling by the boche to the town of Beaumont where at 11 o'clock the most welcome news reached us that the armistice had been signed, and that all hostilities were over. We soon realized it was true when at 11 o'clock every gun of the whole front stopped firing.<sup>45</sup>

*Awards for Heroism*

Often working under extremely hazardous and trying combat conditions, many dental officers were cited for their courage in battle and dedication.

*Medal of Honor*

In the 2nd Division, the Marines of the 4th Infantry Brigade came with assigned US Navy medical and dental officers and enlisted corpsmen.<sup>22</sup> Two US Navy dentists serving with the 2nd Division received the Navy Medal of Honor. Lieutenant (junior grade) Weeden E Osborne, DC, US Navy, 6th Marines, was cited "for extraordinary heroism in actual conflict with the enemy under fire, during the advance on Bouresches (France), on June 6th 1918, in helping to carry the

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wounded to a place of safety. While engaged in this heroic duty he was killed. He was at the time attached to the 6th Regiment, U.S. Marines.<sup>46-48</sup> Osborne was also awarded the US Army Distinguished Service Cross for his actions,<sup>48</sup> as well as two citation stars for the Victory Medal (redesignated the Silver Star Medal in 1932, with an oak leaf cluster for a second award) from the US Army. The citations for his awards are as follows.

- Lieutenant (junior grade) Weeden E Osborne, DC, US Navy, 6th Marines.

Risked his life to aid the wounded when the advance upon the enemy of June 6th (1918) was temporarily checked by a hail of machine-gun fire. He helped carry Capt. Donald C. Duncan, to a place of safety when that officer was wounded and had almost reached it when a shell killed both. Having joined the regiment but a few days before its entry onto the line and, being new to the service, he displayed a heroism worthy of its best traditions. This on June 6, 1918.<sup>48</sup>

For extraordinary heroism in stemming the German advance in this region and in thrusting it back from every position occupied by the Fourth Brigade from June 2d to 11th inclusive. This northeast of Chateau Thierry (France), June 2-11, 1918.<sup>48</sup>

On December 29, 1919, the Torpedo Boat Destroyer, Osborne, was launched at Bethlehem Shipbuilding Company in Squantum, Massachusetts, and named in his memory.<sup>48</sup>

The second Navy Medal of Honor was awarded to Lieutenant (junior grade) Alexander G Lyle, DC, US Navy, 5th Marines. Lyle also received a citation star (Silver Star Medal), US Army, for the action.

- Lieutenant (junior grade) Alexander G Lyle, DC, US Navy, 5th Marines.

For extraordinary heroism and devotion to duty while serving with the 5th Regiment, U.S. Marines. Under heavy shell fire on April 23rd 1918, he rushed to the assistance of Corporal Regan, who was seriously wounded and administered such effective surgical aid while bombardment was still continuing as to save the life of Corporal Regan.<sup>48(p200)</sup>

Did, under heavy shell fire, on April 23, 1918, rush to the assistance of Cpl. Thomas Regan, 5th Regiment, U.S. Marines, who was severely wounded, effectively controlling hemorrhage from the femoral artery before bombardment had finished and at the very peril of his own life, saving that of Cpl. Regan. This in the Verdun Sector, April 23, 1918.<sup>48</sup>

He received a second citation star for "gallantry in action against the enemy in the Soissons Sector."<sup>48</sup> Lyle became the first flag officer in the Navy's Dental Corps when he was promoted to rear admiral in 1943, and served as the chief of the US Navy Dental Corps from 1945-1946. Upon his retirement in 1948, Lyle was promoted to vice admiral and became the only military dental officer ever to reach three-star rank.<sup>49</sup>

Another Navy dentist, Lieutenant Commander (later Rear Admiral) Cornelius H Mack of the 6th Marines received the Navy Cross. Mack also received six US Army citation stars (Silver Star Medal and oak leaf clusters) for heroism in various actions in June and July at Château-Thierry and Soissons. In addition, Mack had the unique distinction of serving as the division dental surgeon of the 2nd Division

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*Lieutenant Commander Cornelius H Mack, Dental Corps, US Navy, served with the 2nd Division in France during World War I and received the Navy Cross for valor. Photograph: Courtesy of National Archives and Records Administration. SC 90758.*

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from November 1918 until the summer of 1919.<sup>22</sup> This was the only time in Army or US Marine Corps history that Army and Marine units were combined into a single division, commanded eventually by a Marine Corps major general.

- Lieutenant Commander (later Rear Admiral) Cornelius H Mack of the 6th Marines.

For extraordinary heroism and devotion to duty with the 6th Regiment, U.S. Marines. In the action at the Bois de Belleau, (France), on June 12, 1918, when his dressing station was subject to a heavy gas bombardment, he remained on duty and carried on the evacuation of the wounded, refusing to leave until all wounded and Hospital Corps men had been removed to a place of safety; as a result he was severely gassed. In the action at Vierzy (France), on July 19, 1918, he accompanied the advance and was exposed for fifteen hours to the fire of machine guns and artillery, performing his duties with marked coolness and precision.<sup>48(pp200-201)</sup>

On October 15, 1918, Mack wrote a short letter to Lieutenant Colonel Graham, the 2nd Division's dental surgeon, for Oliver's dental history. The letter described his activities during these months:

On June 1st. 1918 my battalion entered the town of Lucy-la-Bocage taking lines in front of the Bois de Belleau at which front our regiment was more or less continually engaged actively until July 4th 1918. During this time I was engaged in dressing station work, one week in Lucy at the Battalion Dressing Station, one week at the culvert dressing station and the remaining time at advanced battalion dressing stations. All of these stations were practically at all times under violent enemy artillery fire. On June 12th the station was heavily bombarded with gas shells during a time we were evacuating many wounded and it was necessary to work without a gas mask on account of the long period over which the gas attack extended. It was necessary to evacuate the Battalion Surgeon and all the hospital corps men as they had all succumbed to the gas. . . . From the 4th July until July 16th the regiment occupied support trenches back of Montreuil and Bezu and on the latter date we left in camions for the Soissons front entering the lines on the 19th beyond Vierzy where we had a very heavy day's action, and suffered extremely high numbers of casualties. During this engagement I established the advanced dressing station of my battalion. . . . On July 20th after our relief I was evacuated for influenza and the effects of gas inhalations received during the day of June 14th.<sup>50</sup>

### *Distinguished Service Cross*

In the divisions of the AEF, six Army dentists and one enlisted assistant were awarded the Distinguished Service Cross for extraordinary valor. The complete citations of their actions follow:

- William L Davidson, Captain, Dental Corps, 1st Battalion, 114th Infantry Regiment, 29th Division.

For extraordinary heroism in action north of Verdun, France, October 12, 1918, Captain Davidson, while attending wounded under heavy fire, was himself wounded by several pieces of shell fragments. Regardless of his own wounds he continued in his care of the wounded, refusing to be treated until his regiment was relieved from the line, when several pieces of shell were removed from his head and shoulders.<sup>51</sup>

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- Lee M English, First Lieutenant, Dental Corps, 314th Infantry Regiment, 79th Division.

For extraordinary heroism in action near Montfaucon, France, September 29, 1918. Although he had received a very painful wound two days previous, he remained on duty at an aid station under heavy shell fire until it was completely destroyed and many of the inmates and attendants killed and wounded. He assisted in caring for these wounded and directing their evacuation and then dressed the wounded on the field until an aid station could be located farther to the rear.<sup>52</sup>

- Otto LH Hine, Captain, Dental Corps, 2nd Battalion, 139th Infantry Regiment, 35th Division.

For extraordinary heroism in action near Chaudron Farm, France, September 29–30, 1918. Upon his own initiative, Captain Hine (then first lieutenant) went to a dressing station in advance of the line, after the infantry had withdrawn, and worked under heavy bombardment of gas and high explosive shells, dressing the patients and directing their evacuation. That night he returned to our lines through heavy artillery and machine-gun fire to arrange for ambulances and litters. Later he made another trip to the rear for the purpose of securing an artillery barrage to protect his dressing station. Through his exceptional courage and energy all the wounded men were safely evacuated.<sup>53</sup>

- Robert E Motley, First Lieutenant, Dental Corps, 125th Infantry Regiment, 32nd Division.

For extraordinary heroism in action near Chateau-Thierry, France, July 31–August 7, near Verdun, France, October 14–16, 1918. Realizing the need for medical attention at the front, Lieutenant Motley went beyond the scope of his duties as dentist by advancing with the Infantry and establishing and maintaining dressing station with the leading elements of his command. For seven days, from July 31 to August 7, he safely evacuated many patients by his prompt and fearless action. He again volunteered and went forward in the attack of October 14–16, and on the later date, carried a message back to the supply officer, requesting food for the men. Although wounded and badly gassed, he accomplished his mission, refusing evacuation until the food was started for the lines.<sup>54</sup>

- Robert O Smith, First Lieutenant, Dental Corps, 356th Infantry Regiment, 89th Division.

For extraordinary heroism in action near the Meuse River, France, November 6–11, 1918. After all the medical officers of the battalion had been wounded, Lieut. Smith for six days efficiently performed the duties of a medical officer, repeatedly moving his first-aid station forward, and administering to the wounded under perilous shell fire. After caring for the wounded, he personally searched the field of action for further casualties.<sup>55</sup>

- Richard J Walsh, First Lieutenant, Dental Corps, 303rd Engineer Regiment, 78th Division.

For extraordinary heroism in action near Marcy, France, October 18, 1918. Voluntarily acting as battalion medical officer, Lieut. Walsh, although severely gassed, administered first aid to injured men under heavy shell fire. He worked constantly until all the wounded were removed to place of safety. Philadelphia, Pennsylvania.<sup>56</sup>

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- Frederick Yannantuono (posthumous). Private First Class, Dental Assistant, Medical Detachment, 13th Machine Gun Battalion, 5th Division.

For extraordinary heroism in action near Cunel, France, October 14, 1918. Private Yannantuono voluntarily went forward and administered first aid to wounded Infantry soldiers under heavy shell and machine-gun fire, in plain view of the enemy, being killed in the performance of this self-sacrificing mission.<sup>57</sup>

US Army award citations usually provide few details of the action for which the award was given. In the cases of Captains William Lee Davidson and Otto LH Hine, additional details are available that provide significant insight into their actions—on Davidson from his personal recollection and on Hine in the official report of First Lieutenant John F Coffman, Jr, battalion surgeon of the 2nd Battalion, 139th Infantry Regiment.

William Lee Davidson, who remained in the Dental Officers' Reserve Corps after the war, was the only Distinguished Service Cross recipient to describe his experiences as a dental officer in France and in the action for which he was recognized:

My trip from the States was uneventful, but a very delightful one, and I landed at Brest as a "casual" with my assistant, Private Harry M. Damon, (who is a graduated dentist). We landed on 6 August 1918, with thirty-eight other dental surgeons and their assistants and were quartered in the historic Ponlaneizer [Pontanezen] Barracks. One week later we were ordered to St. Aigon Noyers, and all officers reported twice daily, hoping to receive orders assigning them to their future berths. . . . On 28 August 1918, I was ordered to report to the Commanding General, 29th Division for duty and started the following day for Montreau Chateau. I reported 2 September 1918 and was assigned to the 1st Battalion, 114th Infantry. . . . From Montreau Chateau, on the night of 7 September, we left for Manspach, only to march the next night into the trenches.

. . . . And at this stage of the game, a dental surgeon wither ceases to be a dentist, or becomes both—a dentist and a physician—giving first aid and help wherever his services are needed. The object of a dental surgeon is not only to relieve pain in his line, but to keep the teeth of his men in such condition that the smallest percentage of them will be kept out of the trenches—where they are most needed—on account of dental diseases, etc. . . .

Since leaving the trenches it was impossible to do any dental work other than to relieve pain. On 30 September we were ordered to Nubercourt, only to leave there the next night for a woods, known as Vadelaincourt and we camped there for four days, going to Bois-de Sartellie, only to leave the next night for Bois Burros. Our next move was the next night for Cumeires, where we camped for two nights. At Cote-de-Roches on 11 October we received our first real baptism of shell fire, only to march into Bois-de-Ormont on the same night and go "over the top" the following morning.

All Red Cross men and officers had their hands full from the night of 11 October. We were relieved in the 30th inst. We started to work on the wounded that first night and I had no sleep for seventy-two hours following. On 12 October it was my good fortune to give assistance I could in the way of first aid to our boys who were wounded and for five hours I was in my first barrage. And at some time that morning I was hit



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by shrapnel. I was fortunate enough to get the men I had dressed to a place of safety without any serious mishaps to any of them. For at this time the enemy was flooding our area with gas.

For six days our dressing station was under constant and heavy shell fire, but we lost only six patients after they reached the dressing station. Our battalion was ordered to Ravine Malville on the 20th, where we stayed until relieved. Our dressing station being in the front line there also. . . . From 11 October to the day we arrived at Bussy-la-Cote no patients presented themselves for dental treatment, which shows what the Dental Corps has done in the way of preparedness.

We were billeted in the last named village for fifteen days and once more I went back to dentistry and was able to accomplish a little along that time. (Some bits of shrapnel were removed from my wounds here). We marched to the village of Varincourt on 15 November, staying there three days, then going to Guerport where it was my pleasure to receive a Divisional citation from the commanding general. Our next move was the twentieth—going to Nancois where we entrained for Passavant, detraining of the twenty-first, marching at once to Chatillon-sur-Saone where officers and men have received the advantages of dentistry once more.<sup>6</sup>

On November 28, 1918, Captain John J Halnan, MC, 114th Infantry, wrote to Captain John M Hughes, DC, the division dental surgeon, about Captain Davidson's heroism on October 12:

On said date he voluntarily remained for five hours under a heavy barrage of high explosives dressing and caring for the wounded, with utter disregard for his own life. . . . During this barrage he was wounded but refused to go to a place of safety until all wounded had been evacuated. . . . He remained on duty in the first aid dressing station until his regiment was relieved, working for seventy-two hours without rest or sleep and only allowing his wounds to be thoroughly treated after his regiment was relieved.<sup>58</sup>

On January 5, 1919, First Lieutenant John F Coffman, Jr, MC, battalion surgeon for the 2nd Battalion, 139th Infantry Regiment, 35th Division, to which Otto LH Hine was assigned as dental surgeon, submitted his report of the battalion's operations from September 25 to October 2, 1918, in the Meuse-Argonne offensive. The battalion's objective on September 26 was Vaquois Hill and the vicinity, resulting in a large number of casualties who were treated in the battalion's battlefield aid stations.<sup>59</sup> He wrote:

This work was performed under an almost continual artillery and machine gun fire. 2B [aid station] was established in a trench which had been widened out and made fairly comfortable by Bosche prisoners and the supervision of our Dentist, Lt. Hine, and his assistant [Private William C Myers]. He also used German prisoners as litter bearers and from here evacuated 19 casualties. One hour prior to establishing this Aid Station Lt. Hine was on the North side of Vaquois Hill and, after following the board walks past large, well constructed concrete caves and dug-outs, he noticed a crowd of men through the fog about 30 meters ahead of him. Not being able to distinguish who they were, he turned to his assistant, Private Wm. C. Myers, who was following him, and asked him if he thought they were Bosche. As the assistant affirmed his suspicions, Lt. Hine held up his revolver which he had in his hand, and while trying to make up his mind as to exactly what course to pursue, the Germans

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saw him and all held up their hands and started toward him. There were some steps leading up to the trench that led back over the knoll between Lt. Hine and the Germans, so he waved to them to go up the steps and counted 32 of them. Falling in behind them he took them across the valley and up into the trenches from where he had started that morning, turning them over to guards who were returning with other prisoners.<sup>59(p162)</sup>

Operations continued over the next several days, and the sanitary detachment kept pushing its aid stations forward with infantry until, by the 29th, they had passed Saint Quentin and reached Baulny.

At 9:00 A.M. Lt. Hine established Aid Station 9B at Baulny, from here evacuating 16 casualties and then returned to St. Quenteen. At 10:30 A.M. Herbert Stoffle, one of our personnel, who had been detailed with G Company and was serving with them on the front line, and was afterwards captured by the Germans, came in and said that he knew where there was a dressing station with lots of wounded, but they were being taken care of; but as there were quite a few of these men, thinking that he could be of assistance, Lt. Hine with his assistant accompanying him to Chaudron Farm, where he established Aid Station No. 10, evacuating altogether 80 casualties. There, after going into a room which was about half full of wounded men and asking if there were any who had not been dressed and receiving the reply that none of them had been dressed since coming from the field, he began to work. The first two or three he dressed and tagged, then to speed up with the dressing, he quit tagging, but soon the litter bearers brought them in so fast and as he was the only medical officer there at that time, he could only devote his time to placing them. That room, which was about 75 feet long and 20 feet wide, was filled and another room of the same dimensions and yet another and then the sheds and the barn received their portion. During this time heavy shelling was going on and the report that the line was falling back necessitated the withdrawal of several officers and men. By this means Lt. Hine sent back word of his plight with the urgent request for help and for means of evacuation. Two gas attacks were also put over, which necessitated the adjustment of gas masks for the wounded that had them or could be supplied.<sup>59(p163)</sup>

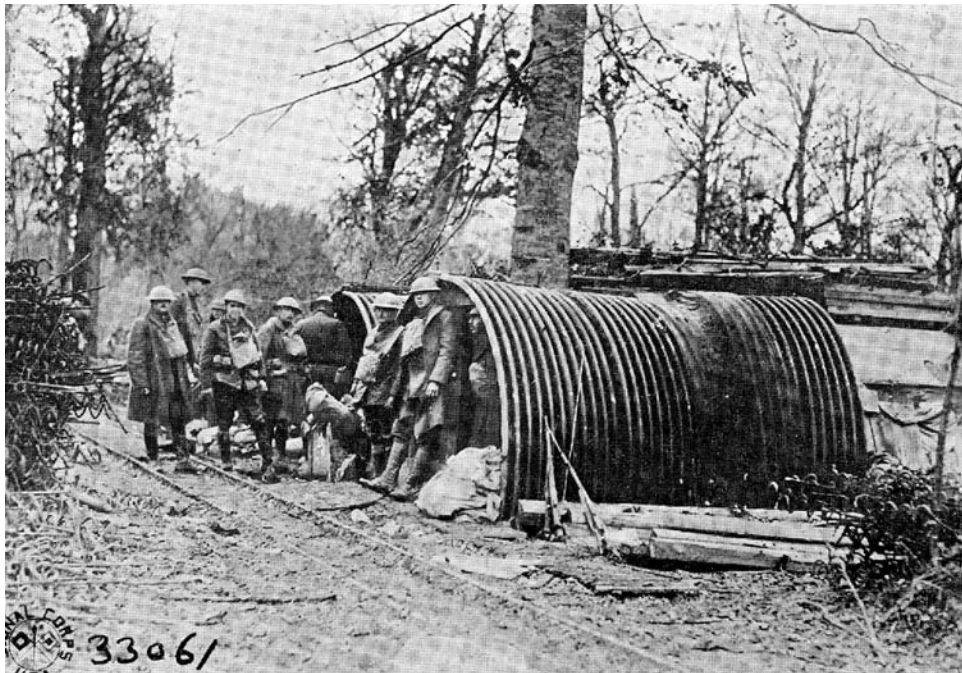
Only with great difficulty was Hine able to locate enough litter bearers to remove the wounded from his aid station at Chaudron Farm. His task was complicated by the withdrawal of the American forward line, of which he learned only when Captain Randall Wilson of the infantry company holding the line in front of him told him at about 10:00 PM: "Hell, Doc, you have got to get these men out of here by daylight. There are only 25 men between you and the Bosche. The main line has fallen back to the top of the hill about a half mile behind you." At midnight, "after deciding that there was no help coming and that something had to be done, Lt. Hine got on a mule, which was in the barn of the farm, bare backed and with a rope halter, started back to get help or protection, and if possible both." After a frenetic night of riding from unit to unit and headquarters to headquarters, Hine succeeded in obtaining litter bearers and troops to protect the aid station. By 5:00 PM on the 30th, Hine reported that the American and German casualties had been evacuated from the aid station.<sup>59</sup> Coffman continued:

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"Then came a three day march from the lines, and being nearly overcome from dysentery, bronchitis, diarrhoea [*sic*] and a slight attack of gas, Lt. Hine was evacuated to a hospital."<sup>59(p164)</sup>

### *Citation Stars (later Silver Star Medals)*

On July 9, 1918, Congress authorized Army personnel to wear a small silver star (3/16 of an inch in diameter) on the service ribbon of a campaign medal to indicate "a citation for gallantry in action, published in orders issued from headquarters of a general officer, not warranting the award of a Medal of Honor or Distinguished Service Cross." Originally designated as citation stars, one of these silver stars was soon authorized for wear on the World War I war service medal, the Victory Medal, as well as on service ribbons of campaign medals for each citation. The citation star awards were often called Silver Star Citations, although that term had no apparent official approval. On August 8, 1932, Congress authorized the Silver Star Medal for Army personnel to replace the former citation star for all holders of the award.<sup>60-62</sup> At least 16 Army dental personnel received citation stars "for gallantry in action" during World War I. So far, 14 Dental Corps officers and two dental assistants have been identified as having received citation stars.



*115th Infantry Regiment, 29th Division First Aid Station, Consenvoye Woods (World War I).*

*Reproduced from: Reynolds FC. 115th Infantry U.S.A. in the World War.*

*Baltimore, Md: Read-Taylor Company; 1920.*

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Apparently, neither the AEF chief surgeon nor the chief dental surgeon maintained a central list of the recipients of citation stars from the Army Medical Department, because none has been found in the records of the AEF in the National Archives. General Headquarters, AEF, issued citation stars in citation orders in 1919–1920, and after General Headquarters disappeared, the War Department issued citation stars in its general orders. In addition, any commanding general officer could award citation stars for gallantry in divisional and brigade general orders, which vastly multiplied the problem of identifying recipients, especially among the enlisted personnel. Moreover, while Dental Corps officers were usually identified by branch in such orders, that was not always the case. Dental assistants were listed only as members of the medical or sanitary detachment of a divisional unit. Without meticulous and time-consuming analysis of divisional rosters of dental assistants, if such documents even exist, it is almost impossible to identify citation star recipients even in the published General Headquarters, AEF, citation orders. Only Private Abel W Emmonds, a dental assistant in the Sanitary Detachment, 316th Infantry Regiment, 79th Division, and Private First Class William C Myers, 139th Infantry, 35th Division, have been clearly identified as citation star recipients.

The dental personnel identified as citation star recipients and their citations are as follows:

- Captain George N Abbott, Dental Corps, US Army, 371st Infantry Regiment, 93rd Division.

For gallantry in action on Sept. 30, 1918, in Champagne Sector, in aiding the wounded under heavy enemy fire.<sup>63</sup>

- Captain Waldo J Adams, Dental Corps, US Army, 364th Infantry Regiment, 91st Division.

For gallantry in action near Very, France, 26 September 1918, in caring for the wounded.<sup>63</sup>

- Captain Daniel Bratton, Dental Corps, US Army, 115th Infantry Regiment, 29th Division (2 awards).

For gallantry in action near Bois de Consenvoye, Brabant, France, October 10–25, 1918. Having found a battalion first-aid station without medical officers, due to casualties, he voluntarily took charge and upon several occasions went out in the face of severe enemy artillery and machine-gun fire and brought back badly wounded men.<sup>64</sup>

For gallantry in action at Bois de Consenvoye, France, October 12, 1918. Acting as regimental gas officer upon the evacuation of both surgeons attached to the 1st Battalion, 115th Infantry, then in the assault position, he volunteered for duty as surgeon and cared for the wounded of the command. He displayed rare courage and devotion to the sick and wounded, thereby greatly contributing to the successful operations of the regiment.<sup>65</sup>

- First Lieutenant Harry W Burns, Dental Corps, US Army, 30th Infantry Regiment, 3rd Division.

For gallantry in action at Crezancy, France, 15 July, 1918, in caring for the wounded under heavy enemy fire. General Headquarters AEF, Citation Orders No. 1, 3 June 1919.<sup>66</sup>

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- First Lieutenant Frank J Canning, Dental Corps, US Army, 320th Infantry Regiment, 80th Division.

For gallantry in action at Bois des Ogons, France, 9 October, 1918, in administering first aid to the wounded under severe shelling.<sup>66</sup>

- First Lieutenant John C Curry, Dental Corps, US Army, Second Ammunition Train, 2nd Division.

At all times paid the strictest attention to his duties, and has rendered valuable service to this organization in his professional capacity. During a recent campaign, upon the death of a line officer, Lieutenant Curry executed the duties of a line officer with efficiency.<sup>67(254)</sup>

- Private Abel W Emmonds, Sanitary Detachment, 316th Infantry Regiment, 79th Division.

For gallantry in action at Montfaucon, France, September 26 to October 1, 1918, in carrying messages under heavy shell fire.<sup>68</sup>

- First Lieutenant Owen P Gillick, Dental Corps, US Army, Medical Detachment, 23rd Infantry Regiment, 2nd Division (2 awards).

For gallantry in action during the advance from Côte de Châtillon to L'Tanne, 8 October, 1918, in promptly giving first aid.<sup>68</sup>

Attached to the Third Battalion, 23rd Infantry, accompanied the battalion in all attacks and under heavy machine gun and artillery fire operated in conjunction with the battalion surgeons an aid station on the front lines. Through his personal efforts many wounded were promptly given first aid and evacuated. This during the advance from Côte de Châtillon to L'Etanne.<sup>67(pp231-232)</sup>

- First Lieutenant John J Heverin, Dental Corps, US Army, Medical Detachment, 9th Infantry Regiment, 2nd Division (2 awards).

For gallantry in action in the vicinity of Nouart, 2 November, 1918, in administering to the wounded under heavy shell fire.<sup>68</sup>

Accompanied an advanced party through the German lines in the vicinity of NOUART on the night of November 2, 1918, and displayed great courage and disregard of personal safety in rendering assistance and administering first aid treatment to the wounded while under violent machine gun and artillery fire.<sup>67(p225)</sup>

- Captain Creighton L Lane, Dental Corps, US Army, 7th Infantry Regiment, 3rd Division.

For gallantry in action near Le Rocq Farm, France, July 14, 15, and 25, 1918, while attending the wounded under fire.<sup>69</sup>

- First Lieutenant Robert EF Millington, Dental Corps, US Army, Medical Detachment, 311th Infantry Regiment, 78th Division.

For gallantry in action during the Meuse-Argonne Offensive, France, 14 October 1918, in voluntarily rendering first aid to the wounded under heavy shell fire. General Headquarters AEF, Citation Orders No. 3, 3 June 1919.<sup>70</sup>

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- First Lieutenant Clyde R Modie, Dental Corps, US Army, 126th Infantry Regiment, 32nd Division.

For gallantry in action near Château-Thierry, France, 31 July, 1918, in going to the assistance of three wounded soldiers under heavy shell fire.<sup>70</sup>

- First Lieutenant Charles A Musgrave, Dental Corps, US Army, Medical Detachment, 314th Infantry Regiment, 79th Division (2 awards).

For gallantry in action near Moirey, France, 1–11 November, 1918, in voluntarily caring for the wounded under heavy machine-gun and artillery fire.<sup>70</sup>

For gallantry in action at Fayel Farm, Montfaucon, France, September 29, 1918. With a total disregard for his own personal danger and under heavy enemy shell fire Lieutenant Musgrave went to the assistance of a wounded soldier who had crawled into a shell hole and was calling for help. Lieutenant Musgrave remained with the wounded man, under fire, giving him first-aid treatment until with the assistance of another soldier he carried the wounded man out of the line of fire in order that better medical attention could be given. Lieutenant Musgrave later placed the wounded man on a truck and sent him to the rear.<sup>71</sup>

- Private First Class William C Myers, Medical Detachment, 2nd Battalion, 139th Infantry Regiment, 35th Division.

The Division Commander takes great pleasure in citing in General Orders the following Officers and Enlisted Men, for gallantry in action during the six days' battle from September 26th to October 1st. . . . Displayed wonderful determination and courage in rescuing the wounded under heavy shell fire, rendered great assistance in dressing and evacuating the wounded, securing litters and litter bearers over difficult terrain, where it was impossible for ambulances to operate.<sup>62</sup>

- Captain William T Roberts, Dental Corps, US Army, attached to 5th Marine Regiment, 2nd Division.

For gallantry in action against the enemy in the Champagne Sector.<sup>47,72</sup>

- Captain John A Sites, Dental Corps, US Army, 148th Infantry Regiment, 37th Division.

For gallantry in action October 31, 1918. Voluntarily accompanying the Medical Detachment of the 148th Infantry throughout an engagement with enemy forces, he displayed great courage and devotion to duty, rendering first aid to wounded men under intense enemy fire. He was poisoned by enemy gas and evacuated to hospital.<sup>65</sup>

- First Lieutenant Robert P Stickley, Dental Corps, US Army, 2nd Battalion, 116th Infantry Regiment, 29th Division.

For gallantry in action at Molleville Farm, France, 10 October 1918, in administering first aid to the wounded under heavy shell fire.<sup>73</sup>

Stickley's personal narrative provides more details on his experience and the actions underpinning his citation star:

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Upon our arrival at Revigny, we entered the Verdun Sector, in which we undertook the greatest of our operations in France. After detraining we spent a half day in the woods and then hiked twenty-five kilometers to Seigneulles, arriving at midnight of the 24 September. . . . During the operations and movements of the battalion the position of the dental surgeon was not definite, except as to the work expected of him. It was his problem to see that his outfit was transported, and open ready for business when the battalion rested. It was also expected that dental attention be administered along the route, and this attention was given. The dental surgeons hiked and carried his pack and his sole purpose was to be with his battalion at all times. . . . On the morning of the 8 October at 5 o'clock, the zero hour, the troops advanced. Our battalion being in reserve, and advancing behind support. For the first hour the enemy responded very little with their artillery and only the advancing battalion received the brunt of their resistance. They enemy then laid down a barrage in which our battalion was caught. I advanced through the barrage and established an aid station in a partially protected shell hole. From this station I received and evacuated many wounded, being assisted by my dental assistant and four sanitary men. From this time forth, I gave up all thought of administering dental treatment and devoted my efforts to first aid work. During the first day it rained nearly all day, only letting up to hail. . . . The next day I advanced one kilometer and established another aid station, evacuating my patients from this location. On the third day I advanced two kilometers and spent the night with battalion headquarters and on the following morning went forward and established an aid station 300 yards behind the front lines. The medical officers who had also advanced with me and had established an aid station joined me and we formed a battalion aid station. . . . From this time on, myself and assistant, remained constantly with the battalion surgeon, aiding him in every way to the best of our ability. . . . We went over the top three times in the advance, the last time being with our battalion headquarters, who reached the objective with the front line of the battalion. . . . On the night we were to be relieved, by some mischance, we did not make connections with the battalion and had to spend the night in a very small dugout. The Germans threw gas shells all around us, and we were all gassed, five of the twelve in our detachment having to go to the hospital, although not going until we were relieved from the front.<sup>6</sup>

### *Croix de Guerre*

The British, French, and Belgian governments also often cited dental officers and enlisted personnel with various classes of their national awards, including the French Croix de Guerre (War Cross) for heroism. No unified list of these awards for Army Medical Department personnel has been located, so it is not known how many dental officers and assistants received them. However, in its official history of the Navy Medical Department in France in World War I, the Bureau of Medicine and Surgery, US Navy, provided information on three Army Dental Corps officers in the 2nd Division who had received the France's Croix de Guerre. Their names and citations are as follows:

- First Lieutenant Mortimer J O'Hara, Dental Corps US Army, attached to 6th Machine Gun Battalion, US Marine Corps.

He volunteered for several perilous missions under an intense bombardment. Order No. 13,505-D, Croix de Guerre (Silver Star).<sup>72</sup>

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- Captain William T Roberts, Dental Corps, US Army, attached to 5th Regiment, US Marine Corps (also recipient of a citation star).

From October 2-6, 1918, near St. Etienne-à-Arnes, he worked without respite under a violent bombardment bandaging the wounded and effecting their evacuation. His assistant having been sent to the rear, he displayed remarkable coolness and bravery. Order No. 13,562-D, Croix de Guerre (Silver Star).<sup>72(p310)</sup>

- First Lieutenant Hugo M Vollmeke, Dental Corps, US Army, 4th Machine Gun Battalion.

On October 7, 1918, at Blanc Mont, heedless of his personal safety, he took care of the wounded and evacuated them to the rear under a violent fire of the enemy artillery and machine guns. He remained at his post without shelter in order to continue his work. Order No. 12,514-D, Croix de Guerre (Gilt Star).<sup>47,72(pp315-316)</sup>

Not all self-sacrificing actions were recognized with awards for gallantry under fire. On November 3, 1918, Lieutenant Colonel RC Turck, MC, division surgeon for the 35th Division, wrote to the division commander recommending citations for medical personnel who "did their duty and in many instances more than their duty, but they do not talk much about what they did. Without exception, the medical officers and men, particularly of the infantry and machine gun battalions, worked closely up with their troops, under all the fire the troops received, frequently without rest day or night." From the 137th Infantry Regiment, he singled out "The Dental Surgeons, Drs. [First Lieutenant Waller W] Harrell and [First Lieutenant Arthur J] Buff, assisted at whatever they could and established independent aid stations wherever the need for such was urgent. Their work was well performed and their willingness to do their part constantly apparent. . . . Dr. W. Harrell was gassed and obliged to go to the rear, where he was of valuable service at the hospital."<sup>74</sup> For "an exceptionally fine performance of duty under fire," Turck also noted:

Private Errett P Scrivner, dental assistant, Sanitary Detachment, 137th Infantry, for exceptional gallantry in action on the engagement of September 26th to October 1st, 1918 when he was counted missing in action. Private Scrivner repeatedly went out under heavy shell fire and machine gun fire in the area immediately behind the advancing front line and administered first aid, assisted men to the dressing stations. On the morning of October 1st, 1918, he did not return from a call and has since been counted missing in action.<sup>74</sup>

There is no record of these 35th Division personnel, other than Private First Class William C Myers, receiving citation stars from the AEF.

### *The Distinguished Service Medal*

Two Dental Corps officers and one civilian dentist in France received awards for distinguished service from the War Department. Colonels Robert Oliver and Seibert Boak were awarded the Distinguished Service Medal for their work in getting the AEF Dental Corps effectively organized and trained.<sup>75</sup>



EXHIBIT 15-2

DENTAL CORPS OFFICERS KILLED IN ACTION

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- First Lieutenant Lisle P Ambelang, Dental Corps, 125th Infantry Regiment, 32nd Division. Killed August 6, 1918 by a direct hit on the battalion aid station in the vicinity of Saint Giles, France, during the Château-Thierry campaign. In recommending him for the Croix de Guerre, First Lieutenant Clyde R Modie, Dental Corps, acting division dental surgeon, described him as "always displaying calm, cool courage and excellent judgment under great stress."
- First Lieutenant Walter P Desmond, Dental Corps, regimental dental surgeon, 18th Field Artillery Regiment, 3rd Division. Killed October 6, 1918, near Montfaucon, France. Desmond had originally been commissioned in the Canadian Army Dental Corps and transferred to the US Army Dental Corps upon successful examination in 1918.
- First Lieutenant Howard M Morrissey, Dental Corps, 3rd Battalion, 360th Infantry Regiment, 90th Division. Killed November 1, 1918, by enemy artillery fire northwest of Bantheville, France, during the Meuse-Argonne offensive operations.
- First Lieutenant Joseph L Parsons, Dental Corps, 313th Machine Gun Battalion, 80th Division. Killed October 4, 1918.
- First Lieutenant Lester A Stone, Dental Corps, 103rd Infantry Regiment, 26th Division. Killed October 17, 1918, by enemy shell while in his dugout in the vicinity of Bras, France. Major Charles W Lewis, Dental Corps, the division dental surgeon, noted that "Lieut. Stone was an accomplished dental officer and had served untiringly with the division since its arrival in France."

The loss of another Dental Corps officer on October 9, 1918, Captain Melvin M Augenstein, then with the 313th Infantry Regiment, 79th Division, in the vicinity of Rupten-Woevre, France, resulted from an accident and was described in *The History of the Seventy-Ninth Division, AEF, during the World War, 1917-1919*:

A tragic accident marked the first day of the 313th Infantry in its new sector. Two officers, Captain Timothy L. Barber, Medical Corps, and Captain Melvin M. Augenstein, Dental Corps, were reconnoitering some old German mine galleries near the Second Battalion P.C. [command post], in search of a location for a first-aid station. Captain Barber accidentally dropped a match which set fire to a large quantity of flares and other pyrotechnics left behind by the enemy, and both officers were so badly burned that they died a few days later.

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Data sources: (1) National Archives and Records Administration. Record Group 120. First Lieutenant Clyde R Modie, Dental Corps, acting division dental surgeon, to commanding general, 32nd Division, January 5, 1919. File 210.5, Commendations, Surgeon, 32nd Division. Box 3685. Entry 2144. (2) Wythe G. *A History of the 90th Division* (1920). Whitefish, Mont: Kessinger Publishing; 2005. (3) National Archives and Records Administration. Record Group 120. Casualty card, Lieutenant Joseph Parsons. Box 4. Entry 31. (4) National Archives and Records Administration. Record Group 120. Casualty card, Lieutenant Lester A Stone. Box 5. Entry 31. (5) National Archives and Records Administration. Record Group 120. Major Charles W Lewis, Dental Corps; "History of the Dental Service 26th Division." Medical Dept. 26th Division. Box 3585. Entry 2144. (6) *History of the Seventy-Ninth Division A.E.F. during the World War: 1917-1919*. Lancaster, Pa: Steinman and Steinman; 1919: 186.

EXHIBIT 15-3

ENLISTED DENTAL ASSISTANTS KILLED IN ACTION

- Private Oscar Schroeder, 79th Division. No information on date or location of death.
- Private Phillip J O'Connell, 39th Infantry Regiment, 4th Division. Killed August 1, 1918.<sup>1</sup>
- Private First Class Henry E Williams, 3rd Battalion, 326th Regiment, 82nd Division. Killed October 14, 1918.<sup>\*2</sup>
- Private Anthony Bayarski, 3rd Battalion, 326th Infantry Regiment, 82nd Division. Killed October 14, 1918.
- Private Linten W Brush, Medical Detachment, 325th Infantry Regiment, 82nd Division. Killed October 28, 1918.<sup>3</sup>
- Private Frederick Yannantuono, 13th Machine Gun Battalion, 5th Division. Killed October 14, 1918. Awarded Distinguished Service Cross posthumously.
- Private James C Peak, 167th Infantry Regiment, 42d Division. Killed July 17, 1918.<sup>‡4,5</sup>
- Private Harry P Morrison, Medical Detachment, 114th Infantry Regiment, 29th Division. Wounded by artillery fire, October 12, 1918, died of his wounds, October 13, 1918.<sup>6</sup>
- Private Samuel W Gaddy, Medical Detachment, 60th Infantry Regiment, 5th Division.<sup>7,8</sup> No information on date or location of death.

\*In his personal recollection, First Lieutenant Thomas M Page, Dental Corps, provided the following information on the death of the 31-year-old Williams:

Imagine me under shell fire with an emergency dental kit and a 45 caliber revolver in my pocket with the Boche coming or rather trying to come. I cast aside my kit and loaded my 45 ready for action with the [dough]boys whom I must help but about this time the battalion Adjutant came along and said some men needed attention as they had been wounded, so I gave up my 45 to a soldier and went to them. I learned from him that the 325th Infantry had a dressing station about 300 yards away up the ravine so I jumped up out of the ditch, hailed a man and put a wounded man on a stretcher and went along up the bank carrying him under machine gun fire, but fortunately we were not wounded. From that time on I was very busy doing first aid work and evacuating the wounded, and we had to remain in this ravine until the morning of the 14th of October, when we made an attack on old Jerry, and lost many men killed and wounded but drove him back. I did not have any dental work to do as the men were not weak enough to give into the teeth ache, so my emergency kit did me no good, except being around to make me keep nearer the ground. . . . My assistant [Henry Earl Williams] was killed by shell fire [as] he was being evacuated to the hospital for treatment of shell shock. I remained at the front till October 20th when I was evacuated to the 325th Field Hospital being exhausted.<sup>9</sup>

†In his personal report, First Lieutenant William E Paul, Dental Corps, provided additional information on the death of Private Bayarski, his dental assistant, in the vicinity of Saint Juvin, France, during the Meuse-Argonne Offensive:

It took several hours to evacuate our wounded, as there [were] so many of them. Our dressing station had several narrow escapes from shells that morning while the patients were being loaded. It was while assisting in loading the ambulances that my assistant, Anthony Bayarski, was struck by a shell and instantly killed. The shelling never ceased during that day, and they fell so near our dugout that we would not permit any of our men to attempt to move the body of my assistant. Several other men were struck and killed just in front of our dressing station. Quite a few of the wounded arrived at our station with gas masks that had been ruined by getting wet, for the

(Exhibit 15-3 continues)

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### Exhibit 15-3 *continued*

majority of the wounded had to be carried to the river. We supplied these men with masks taken from the dead that lay near the dressing station. . . . We experienced some hardships while in this dressing station. Our first was that we had no rations. For two days the only rations we could obtain were those that we took from the packs of the dead. Our second hardship was that we [had] little or no chance to sleep on account of the wounded arriving hourly, day and night.<sup>10,11</sup>

\*Records indicate that the dental assistant to First Lieutenant Luther C Whitlock, 42nd Division, 167th Infantry Regiment, was killed in action on July 17, 1918, but he was not identified by name. Based on available information, it was likely that he was Private James C Peak.<sup>45</sup>

Data sources: (1) National Archives and Records Administration. Record Group 120. Casualty card, Private Philip J O'Connell. Box 4. Entry 31. (2) National Archives and Records Administration. Record Group 120. Casualty card, Private Henry E Williams. Box 11. Entry 31. (3) National Archives and Records Administration. Record Group 120. Casualty card, Private Linten W Brush. Box 1. Entry 31. (4) *Annual Report of The Surgeon General, 1919*. Vol. 2. Washington, DC: Government Printing Office; 1919. (5) Amerine WH. *Alabama's Own in France*. New York, NY: Eaton & Gettinger; 1919. (6) National Archives and Records Administration. Record Group 120. Captain John M Hughes, Dental Corps; "Gains and Losses of Dental Personnel, 29th Division, American EF, France (from July 1st 1918 to November 16th 1918)." Memo. In: Returns, Personnel, Dental Surgeon, 29th Division. Box 3645. Entry 2144. (7) National Archives and Records Administration. Record Group 120. Major LB Schrader, division dental surgeon; "History of the Dental Corps of Fifth Division from May 8th to October 25th 1918." In: Folder 6, Medical History of the Dental Corps, Dental Surgeon, 5th Division. Box 3475. Entry 2144. (8) National Archives and Records Administration. Record Group 120. Major LB Schrader, division dental surgeon; "History of the Dental Corps of Fifth Division from October 25th to December 31st 1918, March 27, 1919." In: Folder 6, Medical History of the Dental Corps, Dental Surgeon, 5th Division. Box 3475. Entry 2144. (9) National Archives and Records Administration. Record Group 120. First Lieutenant Thomas M Page; "Dental Corps." [Report]. Folder 11, Narrative Reports, Dental Corps, Medical Department, 82nd Division. Box 3897. Entry 2144. (10) National Archives and Records Administration. Record Group 120. Captain William E Paul; "Dental Corps." [Report]. Folder 11, Narrative Reports, Dental Corps, Medical Department, 82nd Division. Box 3897. Entry 2144. (11) Buxton GE. *Official History of 82nd Division American Expeditionary Forces: "All American" Division, 1917-1919*. Indianapolis, Ind: The Bobbs-Merrill Company; 1919: 148-150.

- Colonel Robert T Oliver, Dental Corps.

For exceptionally meritorious and distinguished services. As chief dental surgeon he displayed remarkable ability in the performance of his numerous and exacting duties. He directed the personnel, equipment, and operations of his department with sound judgment, showing resourcefulness in solving new problems which confronted him.<sup>76</sup>

- Seibert D Boak, Colonel, Dental Corps, United States Army.

For exceptionally meritorious and distinguished services in a position of great responsibility. As director of the dental section of the Army sanitary school at Langres, France, from January to December 1918, he displayed organizing and training ability and accomplishments of the highest order, in successfully directing the classification and training of dental officers for field service, thereby rendering services of great value to the American Expeditionary Forces.<sup>65</sup>

In an unusual but highly appropriate recognition of his contributions to the dental service of the AEF and to many wounded American soldiers, the War Department also awarded Dr George Byron Hayes, who pioneered the maxillofacial

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service at the American Ambulance (later American Red Cross Military Hospital No. 1) in Neuilly, Paris, a Distinguished Service Medal on December 6, 1920. Prior to the American entry into the war, he had contributed his considerable talents to aiding wounded French soldiers (see Chapter 11: From a New Corps to a World War, 1911–1917). After the arrival of Pershing and his staff in the summer of 1917, the American Red Cross Military Hospital No. 1 was taken over by the Army, but Hayes remained as head of the dental service and supervised the work of five to seven dental officers assigned to him for the remainder of the war.<sup>77</sup> His citation read:

Dr. George Byron Hayes. For exceptionally meritorious and conspicuous services. An eminent dental surgeon who placed freely the advantages of his professional attainments and the full facilities of his complete clinic at Paris at the services of the American medical personnel. By the markedly distinguished record made by him in jaw and facial surgery among the wounded of the American Expeditionary Forces, and his able directorate of the school for instruction of dental personnel in maxillo facial and prosthetic surgery, he has rendered services of preeminent worth.<sup>78</sup>

### *Casualties Among Dental Personnel*

During the AEF's months in the trenches, the Medical Department lost 3,954 officers and enlisted personnel killed in action, died of wounds, wounded, gassed, and disabled due to hostile action and battle-related injuries.<sup>79</sup> Among them were five dental officers and seven dental assistants killed in action and two dental assistants who died of wounds resulting from hostile action. A number of other dental officers and assistants were wounded in action and gassed, often seriously enough to prevent them from returning to front-line duty. The *Annual Report of The Surgeon General* for 1919 listed 36 officers and four enlisted dental assistants as wounded in combat operations. However, it seems no accurate record was maintained, so the exact numbers and names cannot be determined (Exhibit 15-2).<sup>80–85</sup> The enlisted dental assistants shared the hazards of front line combat service with their dental officers, resulting in a number of soldiers who were killed in action and died of wounds (Exhibit 15-3).<sup>43,44,86–94</sup>

Combat was not the only claimant on the lives of Dental Corps officers, either in France or the United States. Disease, accidents, and other causes claimed the lives of another 56 dental officers, 11 in France and 45 in the United States, including 8 commissioned officers in the Dental Reserve Corps who were waiting to be called up to active duty. Of these, at least 31 were victims of influenza and its complication, pneumonia, during the influenza pandemic of 1918–1919.<sup>95–99</sup> No known accounting exists for the names and number of enlisted dental assistants who died from disease, accidents, or other causes (Appendix 1).

### *Quality Dental Work Resumes*

The months following the armistice were productive times for the dentists in the AEF's divisions. Freed from combat, the dental officers were able to provide the full range of dental care that front-line conditions had made impossible. As the Third US Army prepared to move into the American occupation zone in Germany,

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the First and Second armies settled down to wait for fighting to resume or for the end of the war. During these months, the dental officers continued performing quality dental work and prepared the soldiers to return home in accordance with Oliver's objective "to put the teeth of the men in first-class condition, prior to their return to the United States and release from service."<sup>100(p120)</sup>

As the newly activated Third US Army moved into the Rhineland on occupation duty in November and December 1918, the First and Second armies in France, Belgium, and Luxembourg, along with the remaining combat divisions, settled into quarters. In both armies, dental work picked up in November as the troops trained, took leave, and awaited further developments, and reached a high in February 1919 before the divisions began returning to the United States in the spring. The armies were largely able to maintain sufficient numbers of dental officers, assistants, and equipment throughout the period prior to their inactivations in April 1919 and the shipment of the divisions from France. The Second US Army retained enough dental personnel and equipment to remain at or near the authorized levels (Tables 15-1 and 15-2), allowing the dental officers to accomplish a considerable amount of oral and dental work during their remaining months in Europe (Table 15-3). The dental officers in the individual divisions were kept gainfully employed as long as the divisions remained in Europe, were in the ports of debarkation, or were on the troop transports as

**TABLE 15-1**

**DENTAL PERSONNEL AND EQUIPMENT, SECOND US ARMY, END OF MONTH, NOVEMBER 1918–FEBRUARY 1919\***

	November 1918	December 1918	January 1919	February 1919
Divisions	7	8	7	5
Dental officers	199	206	227	185
Dental assistants	186	211	242	188
Dental equipment				
Portable outfits	50	54	93	87
Modified outfits	89	117	127	91
Field outfits	6	7	0	0
Emergency outfits	20	32	1	0
Total	165	210	221	178
Dental laboratories	NR	4	7	9

\*The March 1919 report has no information on dental personnel or equipment because not all Form 57 reports of dental work had been received when American Expeditionary Forces General Headquarters closed the Second US Army headquarters early in April 1919.

Data sources: (1) National Archives and Records Administration. Record Group 120. Form 57, Dental work at Second Army, American E.F., Lieutenant Colonel GH Casaday, supervising dental surgeon, November and December 1918. In: Second Army Consolidated Dental Reports. Box 3295. Entry 924.

(2) National Archives and Records Administration. Record Group 120. Form 57, Dental work at Second Army, American E.F., Lieutenant Colonel Rex H Rhoades, chief dental surgeon, January, February, and March 1919. In: Second Army Consolidated Dental Reports. Box 3295. Entry 924.

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they returned across the Atlantic. For example, the dentists of the 33rd Division, a National Guard division from Illinois, shifted from France to Luxembourg in December 1918, and then moved to the French port of Brest in April before returning to the United States. During the period from November 1918 through April 1919, the division’s dental officers spent countless hours at their chairs getting the soldiers ready for their homecoming (Table 15-4).<sup>101,102</sup> It was efforts such as these, clearly reflected in the reports of the 33rd Division and the Second Army, that led Oliver in early 1919 to commend the “the pleasing resumption of magnificent professional activity.”<sup>103–105</sup>

*Dentistry’s Contributions to the War and the War’s Contributions to Dentistry*

The front line combat service of dental officers and assistants, sharing the privations, dangers, and losses of trench warfare and modern combat with the soldiers, line officers, and also officers of the Medical Corps, finally won for the Dental Corps the long-sought recognition of its value to and role in the Army Medical Department and Army. First Lieutenant Robert P Stickley, dental surgeon with the 2nd Battalion, 116th Infantry Regiment, 29th Division, who received a citation star for his heroism in action at Molleville Farm, France, on October 10, 1918, perhaps

TABLE 15-2  
DENTAL OFFICERS PER DIVISION, SECOND US ARMY TROOPS  
NOVEMBER 26, 1918–MARCH 22, 1919

Organization	November 26, 1918	December 28, 1918	January 25, 1919	February 22, 1919	March 22, 1919
5th Division	X	28	26	32	31
7th Division	18	20	21	28	28
28th Division	21	21	21	21	X
33d Division	29	23	28	29	30
35th Division	22	29	29	X	X
79th Division	X	16	32	31	31
85th Division	17	7	X	X	X
88th Division	25	21	28	29	28
92nd Division	29	X	X	X	X
VI Corps	9	12	8	2	2
IX Corps	X	9	8	3	3
Second Army	10	19	22	27	24
Total	180	205	223	202	177

Data sources: (1) National Archives and Records Administration. Record Group 120. Colonel GH Casaday, Dental Corps; “Dental personnel and equipment, Second Army, November 26, 1918, and January 1, 1919.” Box 3295. Entry 924. (2) National Archives and Records Administration. Record Group 120. Lieutenant Colonel Rex H Rhoades, chief dental surgeon; “Dental Personnel and Equipment, Second Army, January 31, 1919, February 25, 1919, and March 24, 1919.” Report. File, Dental Personnel, Dental Surgeon, Second Army. Box 3295. Entry 924.

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best summarized the numerous contributions of the AEF's dental officers and assistants to the war effort when he wrote:

In conclusion, I would add, that the privilege of alleviating pain and suffering for the soldier, before the conflict, and in going through the conflict with him, and being at his side to dress his wounds, is worthy of the aspirations of any profession, and I claim this honor for the dental profession of the American Expeditionary Forces in France.<sup>6</sup>

As early as December 1918, the American dental press was already placing a much larger emphasis on the entire dental profession's contributions to the war. In the December 1918 edition of *Dental Register*, editor Nelville S Hoff outlined dentistry's many contributions to the war effort, followed by his views on what the war had done for dentistry.<sup>104,105</sup> Hoff believed that the war had proven the righteousness of the dental profession's long struggle for professional recognition and acceptance that was intertwined with the quest for dental services in the US Army and Navy:

Perhaps one of the most pronounced benefits our profession has acquired during the war is the legal acknowledgment of the claims our profession has made for many

**TABLE 15-3**

### **PATIENTS, SITTINGS, AND SELECTED DENTAL TREATMENTS AND OPERATIONS, SECOND US ARMY, NOVEMBER 1918–MARCH 1919\***

	November 1918	December 1918	January 1919	February 1919	March 1919	Total
Patients	13,707	17,219	20,784	14,117	8,484	74,311
Sittings	18,303	24,084	33,210	24,252	14,189	114,038
Dental caries	13,661	18,694	26,295	21,438	14,765	94,853
Dento-alveolar abscess	1,758	3,345	3,530	2,406	1,362	12,401
Fillings	11,778	13,911	25,279	21,477	14,962	77,407
Teeth extracted	3,510	4,781	5,330	4,151	2,190	16,802
Teeth treated	3,213	5,425	8,872	6,148	X	23,658 <sup>†</sup>
Calculus removed	2,503	3,483	3,706	3,446	1,535	14,673
Crown and bridgework	718	835	1,042	722	535	3,852

\*Not all dental officers had submitted their Form 57 reports when American Expeditionary Forces General Headquarters closed Second US Army headquarters early in April 1919.

<sup>†</sup>November 1918–February 1919 only.

Data sources: (1) National Archives and Records Administration. Record Group 120. Form 57, Dental work at Second Army, American E.F., Lieutenant Colonel GH Casaday, supervising dental surgeon, November and December 1918. In: Second Army Consolidated Dental Reports. Box 3295. Entry 924.

(2) National Archives and Records Administration. Record Group 120. Form 57, Dental work at Second Army, American E.F., Lieutenant Colonel Rex H Rhoades, chief dental surgeon, January, February, and March 1919. In: Second Army Consolidated Dental Reports. Box 3295. Entry 924.

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TABLE 15-4  
PATIENTS, SITTINGS, AND SELECTED DENTAL TREATMENTS AND OPERATIONS, 33RD DIVISION, SECOND US ARMY, NOVEMBER 1918–APRIL 1919

	November 1918	December 1918	January 1919	February 1919	March 1919	April 1919	Total
Patients	3,300	1,867	3,394	3,040	2,771	1,408	15,780
Sittings	4,688	2,268	5,339	4,970	4,504	2,286	24,055
Dental caries	3,417	1,678	3,237	3,625	3,790	1,848	17,595
Dento-alveolar abscess	377	174	403	462	365	178	1,959
Fillings	3,026	1,506	3,403	3,653	3,777	1,818	17,183
Teeth extracted	553	248	449	550	470	262	2,532
Teeth treated	1,445	844	1,758	1,263	1,230	425	6,965
Calculus removed	709	269	897	779	791	437	3,882
Crown and bridgework	193	97	181	148	151	102	872

Data sources: (1) National Archives and Records Administration. Record Group 120. Form 57, Consolidated Report of Dental Work at 33rd Division, American E.F., Major RW Pearson, Dental Corps, division dental surgeon, November and December 1918, January, February, March, and April 1919. File, Daily Reports, Dental Work, Dental Surgeon, 33 Division. Box 3705. Entry 2144. (2) National Archives and Records Administration. Record Group 120. Form 57, Consolidated Report of Dental Work at 33rd Division, American E.F., Major John M Evey, Dental Corps, division dental surgeon, April 1919. File, Daily Reports, Dental Work, Dental Surgeon, 33 Division. Box 3705. Entry 2144.

years for an equitable recognition of its professional standing by the United States Government. For years we have been humiliated because Congress refused to give our profession a dignified rank in the army and navy. The war emergency so clearly demonstrated the professional standing of dentistry that we easily acquired what before had seemed like a distant probability. From these most obvious facts we, as a profession, can feel that while the war has been a great calamity it has brought our profession considerable advantages which otherwise would not have materialized so promptly.<sup>107(pp553–554)</sup>

Hoff also enumerated what dentistry, as a profession, gained from the war, emphasizing the dentists’ practical, professional experiences and the benefits of working more closely with their medical colleagues:

First we can acknowledge our obligation for the wonderful opportunity the war gave us to demonstrate to the world the value of dentistry as an equipment for a good soldier. We have had the chance to show how much better fighting man is the soldier with good teeth. Incidentally we have had a chance to convince our medical associates of the fact that a well man is more largely dependent on good teeth than they have generally be-



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lieved. The war has given our dentists a chance to acquire unusual skill in surgical and prosthetic treatments and restorations that do not offer in civil practice in ordinary peace times. The experience and training some of our dentists have had opportunity to secure in the field hospitals in association with medical practitioners has been wonderfully rare and beneficial to them. It has brought the medical and dental men into intimate and profitable relations with each other and we are sure that dentists who have been privileged to have an extended experience of this kind will be better prepared for civil practice.<sup>107(p553)</sup>

In a March 1919 editorial, Otto U King, editor of the *Journal of the National Dental Association*, wrote of the importance of dentists in conserving fighting strength for the Army:

When the history of this war shall have been adequately written, with all the ramifications of the activities connected therewith, the fact will be apparent that dentistry has played no small part in keeping the men fit for the fighting lines. At the outbreak of the war, very many men were made eligible for military duty by reason of the work done for them by dentists—men whose services would have been lost to the army had it not been for this work.<sup>108(p275)</sup>

Referring back to the long, arduous, and obviously unforgotten struggle to gain dental service and commissioned status for dentists in the Army and Navy that stretched back to the Civil War, King welcomed the changes that the war had brought about:

The fact that the Government recognizes and appreciates what has been done by the profession, is clearly evident in the changed attitude of Government officials toward matters pertaining to dentistry since the war broke out. Today, they are cordially receptive to any advance suggested by the profession, where previously to this, it had been a slow, tedious process to obtain any appreciable or tangible reform. . . . The fact must be apparent to even the most casual observer that the status of dentistry has undergone a complete change in this brief period.<sup>108(p276-277)</sup>

APPENDIX 1

US ARMY DENTAL CORPS OFFICERS KILLED IN ACTION AND DIED OF DISEASE, ACCIDENT, AND OTHER CAUSES APRIL 1, 1917-JUNE 30, 1920

Killed in Action			
Name, Place of Origin	Assigned to	Location of Death	Date of Death
First Lieutenant Lisle P Ambelang Cascade, Wisconsin	125th Infantry Regiment 32nd Division, AEF, France	Vicinity of Saint Giles, France	August 6, 1918
First Lieutenant Walter P Desmond Medford, Massachusetts	18th Field Artillery Regiment 3rd Division, AEF, France	Vicinity of Montfaucon, France	October 6, 1918
First Lieutenant Harold S Morrissey Kenosha, Wisconsin	360th Infantry Regiment 90th Division, AEF, France	Vicinity of Bantheville, France	November 1, 1918
First Lieutenant Joseph H Parsons Erie, Pennsylvania	313th Machine Gun Battalion 80th Division, AEF, France	NR	October 4, 1918
First Lieutenant Lester A Stone Pittsfield, Massachusetts	103rd Infantry Regiment 26th Division, AEF, France	Vicinity of Bras, France	October 17, 1918
Died of Disease, Accident, and Other Causes			
Captain Melvin M Augenstein Hagerstown, Maryland	313th Infantry Regiment 79th Division, AEF, France	Vicinity of Rupt-en-Woevre, France	October 16, 1918
First Lieutenant Charles J Balbach Millville, Pennsylvania	NR	AEF, France	March 10, 1919
First Lieutenant Frederic A Ballachey Buffalo, New York	NR	Camp Dix, New Jersey	September 26, 1918
First Lieutenant Alexander D Baris Brooklyn, New York	317th Labor Battalion	AEF, France	February 28, 1919
First Lieutenant Horace A Birdsong Lulu, Mississippi	NR	Camp Mills, New York	May 10, 1918

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First Lieutenant Vance W Bliss Santa Cruz, California	NR	AEF, France	October 12, 1918
First Lieutenant Francis E Boazman Chappells, South Carolina	NR	Camp Sherman, Ohio	October 19, 1918
First Lieutenant Charles H Boisseau Smithton, Pennsylvania	NR	Camp Upton, Long Island, New York	October 12, 1918
Captain James E Cox Charlestown, Massachusetts	NR	Columbus, Ohio	April 11, 1920
First Lieutenant Oliver W Davies Los Angeles, California	NR	Hoboken, New Jersey	November 3, 1918
First Lieutenant Joseph R Earley New Castle, Pennsylvania	NR	Camp Stewart, Virginia	October 8, 1918
First Lieutenant Ralph H Fickes Vandergrift, Pennsylvania	NR	Fort Oglethorpe, Georgia	October 18, 1918
First Lieutenant Lionel G Fleming Saint Martinsville, Louisiana	NR	Camp Lee, Virginia	October 4, 1918
First Lieutenant Ronald E Fletcher Mount Vernon, New York	NR	Fort Oglethorpe, Georgia	December 21, 1918
First Lieutenant Gale Friday Fremont, Indiana	NR	Camp Sheridan, Alabama	November 14, 1918
First Lieutenant Roy S Glass Frackville, Pennsylvania	NR	Frackville, Pennsylvania	October 19, 1918
Captain Walter Grandage Bridgeport, Connecticut	NR	Camp Devens, Massachusetts	October 7, 1918
First Lieutenant Clark B Hannah Los Angeles, California	NR	Camp Fremont, California	October 18, 1918
First Lieutenant Winfred E Henshaw Peru, Illinois	NR	Chicago, Illinois	September 28, 1918
First Lieutenant Wade H Hoffman Oil City, Pennsylvania	NR	Camp Upton, Long Island, New York	October 14, 1918

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First Lieutenant Alexander H Jones Youngstown, Ohio	Field Artillery Training School	Saumur, AEF, France	October 1, 1918
Captain Earl P Jones Mansfield, Ohio	16th Engineer Regiment	AEF, France	October 17, 1918
First Lieutenant Albert L Kreitman New York, New York	NR	Camp Meade, Maryland	October 4, 1918
Captain Harry B Laird Tecumseh, Oklahoma	NR	Fort Sill, Oklahoma	May 5, 1919
First Lieutenant Frank S Leonard Indianapolis, Indiana	NR	American Red Cross Hospital No. 1 Neuilly, Paris, AEF, France	January 13, 1919
First Lieutenant William M Lubitz Brooklyn, New York	NR	Camp Dix, New Jersey	October 11, 1918
First Lieutenant Frank E McNett LaCrosse, Wisconsin	NR	Fort Oglethorpe, Georgia	December 18, 1918
First Lieutenant George W Mattox Elberton, Georgia	122nd Infantry Regiment 31st Division	AEF, France	October 15, 1918
First Lieutenant Samuel F Moffett Cottello, Texas	NR	Fort Bliss, Texas	January 16, 1919
First Lieutenant Adrian L Morin San Francisco, California	NR	Camp Fremont, California	October 18, 1918
First Lieutenant Max Neal Pittsburgh, Pennsylvania	Base Hospital No. 27, AEF	Angers, France	March 16, 1919
First Lieutenant Will C Niles Newton, Massachusetts	NR	Boston, Massachusetts	October 4, 1918
First Lieutenant Loy A Patterson Hennessey, Oklahoma	NR	Camp Beauregard, Louisiana	July 19, 1918
First Lieutenant Walter F Peterson Minneapolis, Minnesota	NR	Camp Custer, Michigan	September 6, 1918

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Major Merton M Postle Chicago, Illinois	NR	Camp Zachary Taylor, Kentucky	October 15, 1918
First Lieutenant Walter O Reinhard Rio, Wisconsin	NR	Camp Custer, Michigan	October 3, 1918
Lieutenant Colonel Mortimer Sanderson Philadelphia, Pennsylvania	NR	Camp Cody, New Mexico	July 30, 1918
First Lieutenant Francis R Simm Pierre, South Dakota	NR	Fort Oglethorpe, Georgia	October 7, 1918
First Lieutenant John S Simons Henderson, Minnesota	NR	Camp Tobyhanna, Pennsylvania	October 2, 1918
First Lieutenant Cecil C Smith Violet Hill, Arkansas	NR	Camp Travis, Texas	October 18, 1918
First Lieutenant Bernard F Staples Boston, Massachusetts	NR	Camp Devens, Massachusetts	September 24, 1918
First Lieutenant Delmar H Stocker Tunkhannock, Pennsylvania	Camp Hospital No. 21, AEF	Bourbonne-les-Bains, France	October 3, 1918
First Lieutenant Alfred G Wald Huntington, Pennsylvania	NR	Camp Jackson, South Carolina	October 15, 1918
First Lieutenant Raymond A Walker New Haven, Connecticut	NR	Camp Devens, Massachusetts	September 28, 1918
Captain Harrison B Wall Cleveland, Ohio	NR	Camp Custer, Michigan	March 28, 1918
First Lieutenant George E Wilcox Minonck, Illinois	332nd Machine Gun Battalion 86th Division	Southampton, England	September 28, 1918
Captain Fielding M Wilhite Parents, Kansas	NR	Fort Riley, Kansas	April 24, 1919
First Lieutenant Edwin B Zwink Eustis, Nebraska	NR	Camp Cody, New Mexico	November 7, 1918

Dental Reserve Corps Officers Who Died Prior to Entering Active Service			
First Lieutenant Lester J Allison	N/A	Iowa City, Iowa	April 20, 1918
First Lieutenant Ernst L Casselman	N/A	Effingham, Illinois	November 5, 1918
First Lieutenant Harry E Duwe	N/A	Arlington, Iowa	October 28, 1918
First Lieutenant Roy E Hanson	N/A	Cambridge Springs, Pennsylvania	November 25, 1918
First Lieutenant Carl R Henry	N/A	Cuba, Illinois	September 4, 1918
First Lieutenant John C Higgins	N/A	McAdoo, Pennsylvania	October 18, 1918
First Lieutenant Lloyd A Osborne	N/A	Fremont, Iowa	July 24, 1918
First Lieutenant Raymond M Weidert	N/A	Wilcox, Pennsylvania	November 7, 1918

AEF: American Expeditionary Forces

N/A: not applicable

NR: not reported

Data sources: (1) Medical Field Service School. In *Memoriam: The Medical Department of the United States Army in the World War*. Vol 1. In: *Supplement, Army Medical Bulletin* No. 27. Carlisle Barracks, Pennsylvania: DA; 1932: 10–26. (2) Lynch C, Weed FW, McAfee L. In memoriam. In: *The Surgeon General's Office*. In: *The Medical Department of the United States Army in the World War*. Vol 1. Washington, DC: Government Printing Office; 1923: 587–604. (3) In memoriam. *J Am Dent Assoc*. 1924;11:952–953. (4) Dental officers who died while on active duty. *J Nat Dent Assoc*. 1919;6:287–288. (5) Office of the Surgeon General. *Annual Report of the Surgeon General*. Washington, DC: OTSG; 1919: 1309, 1435–1438.

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