

**U. S. ARMY CHEMICAL CORPS HISTORICAL STUDIES**  
**GAS WARFARE IN WORLD WAR I**  
**THE 42nd DIVISION BEFORE LANDRES-et-St GEORGES**  
**October 1918**



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The 42nd Division Before Landres-et-St. Georges

by

Rexmond C. Cochrane

GAS WARFARE IN WORLD WAR I

Study Number 17

U.S. ARMY CHEMICAL CORPS  
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The 42nd Division Before Landres Et St. Georges

Prepared by

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This is an accepted draft study on gas warfare in World War I



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### Foreword

This is a tentative study of the gas experience of the 42nd Division during World War I. This study is not presented as a definitive and official history, but is reproduced for current reference use within the Military Establishment pending the publication of an approved history.

The author was assisted in his research by Mrs. Charlotte M. Bolin, Mr. Guy F. Goodfellow, and Mr. George H. Dengler.

Note to Reader: Comments and suggestions relative to accuracy and adequacy of treatment are invited, and may be transmitted to the Chief, U.S. Army Chemical Corps Historical Office, Army Chemical Center, Maryland.

## THE 42nd DIVISION BEFORE LANDRES-ET-ST. GEORGES

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## THE 42nd DIVISION BEFORE LANDRES-ET-ST. GEORGES

The present study covers briefly the history of the 42nd Division in World War I, with some attention given its ordeal in the battle at the Ourcq, for the lessons learned there, before describing in detail the action of the division in the Argonne offensive. The lessons of the Ourcq were said to have been fully applied in the St. Mihiel campaign, but no such claim was made for the Argonne battle, where they would have been more applicable and profitable.

Both at the Ourcq and in the Argonne the enemy's machine guns and gas fire took characteristic high toll, and while the division learned one way to avoid extreme machine gun casualties -- by staying away from the enemy's guns -- in neither campaign did it learn to counter enemy machine gun or gas fire with gas of its own. Only when its infantry had become exhausted and could no longer attack was the artillery allowed to fire the gas that might have saved the men had it been used earlier.

In the Argonne offensive the 42nd Division followed the way blazed by the 35th and 1st Divisions before it. On 26 September, the 35th Division in its surprise attack advanced almost ten kilometers in two days before counter-attacking German forces drove it back to Baulny ridge. There the 1st Division relieved the mangled 35th on the night of 30 September - 1 October, and over the next ten days, at a cost of almost 9,000 casualties, advanced some six kilometers, to within three kilometers of the Kriemhilde Stellung, the last highly fortified enemy position in the Argonne.

"The turning point came [on 9 October]." said Group Argonne, the German corps on that front, "with the overrunning of Cornay, the capture of Lichtenauerhohe [Hill 272] and the Marienhohe [Hill 269]." These three points had been taken that day by the 82nd, 1st, and 32nd Divisions, respectively, and with their fall the enemy disengaged during the night and withdrew to the Kriemhilde position.<sup>1</sup>

On 12 October, with orders to break through the Kriemhilde position, the 42nd Division relieved 1st Division in its advance positions below Sommerance and in the Bois de Romagne. In the general advance two days later, the left elements of V and III Corps (42nd and 5th Divisions) had the principal missions, with the rest of the line supporting their attacks. The main attack forces failed to make much headway, but the 32nd Division on the right of V Corps, in "what was intended to be a holding and mopping up [action] actually made the most important progress....as the hostile third position [the Kriemhilde] was passed at a vital point and...an opening for further advances was gained."<sup>2</sup>

What had happened was that corps and Army artillery had gassed a vital point in the enemy chain of defenses, the town of Romagne, but unaware of its opportunity and worn out by gas and exhaustion, V Corps made the breakthrough

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1

Rpt, Gp Argonne to A.O.K. 5, 10 Oct (5th Army WD Annexes, items 14 and 48, in World War Records, 1st Division, German Documents, vol 4, Meuse-Argonne, 30 Mar 1933); Gp Argonne WD, 10 Oct (German Files Box 25, fol I). Note: German Files Box will hereafter be abbreviated GFB.

2

Rpt of 1st Army, quoted in U.S. Army in the World War, 1917 - 1919, IX, Meuse-Argonne (Hist Div, DA, Washington, 1948), p. 283.



without being able to exploit it.

This study describes the role of 42nd Division in that breakthrough.

"A certain amount of instruction"

The 42nd (Rainbow) Division was organized on 1 August 1917 and its concentration completed at Camp Mills, New York, on 13 September.<sup>3</sup> Its first commander, Maj. Gen. William A. Mann, was succeeded in mid-December by Maj. Gen. Charles T. Menoher, a classmate of Pershing, soon after arriving in France.

The 83rd Brigade of the Rainbow, under Brig. Gen. Michael J. Lenihan (relieved in October 1918 by Brig. Gen. Henry J. Reilly), comprised the 165th and 166th Infantry; the 84th Brigade, under Brig. Gen. Robert A. Brown (relieved in August 1918 by Brig. Gen. Douglas MacArthur), comprised the 167th and 168th Infantry. The 67th Field Artillery Brigade, made up of the 149th, 150th, and 151st FA, trained under Brig. Gen. Charles P. Summerall (succeeded by Brig. Gen. Charles H. McKinstry on arrival overseas, and in July 1918 by Brig. Gen. George G. Gatley). Three machine gun battalions, the 117th Engineers, a signal battalion, a cavalry troop (that saw little action), and sanitary, supply, and ammunition trains completed the organization of the famed 42nd.

The division, with its well-publicized Fighting 69th Regiment of New York (the 165th Infantry), chaplained by Father Francis P. Duffy, was an organization

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<sup>3</sup>

Organization file in 42nd Div Box 3, 13.6

of celebrities. It included Capt. Joseph M. Patterson, vice-president of the Chicago Tribune; Pvt. Charles G. MacArthur, a Tribune reporter; Sgt. Joyce Kilmer, of Headquarters Company; Col. William J. Donovan, later better known as "Wild Bill" Donovan, 165th Infantry commander; and Brig. Gen. Douglas MacArthur, who came over as Chief of Staff, took over the 84th Brigade in early August, and became the division commander on 10 November when Menoher was made VI Corps commander.<sup>4</sup>

In October 1917 the 42nd Division sailed for France, having been preceded by the 1st, 26th, and 2nd Divisions. These latter divisions comprised Liggett's I Corps, and it was intended to make the 42nd the replacement and training unit for the corps. But the division, made up of National Guard units from 26 states, had received tremendous publicity at home; General Mann, its commander at the time, was an active politician in the States; its Fighting 69th came from a section of New York hostile to the President; and the division had many friends throughout the country likely to resent bitterly a replacement status. The

4

For notes on these celebrities, see Brig Gen H. J. Reilly, Americans All. The Rainbow at War. Official History of the 42nd Rainbow Division in the World War (Columbus, Ohio, 1936), pp. 51, 209, 399, 524, and passim.

Almost half of this 888-page book is made up of quotations from books, letters, and diaries of 42nd Div personnel not found in archival records, many of them gratuitously edited in the peculiar English of Gen. Reilly. Gas references are meager in this volume, hereafter cited as History, and gas casualties are invariably concealed under "wounded."

Also consulted for this study were R. M. Cheseldine, Ohio in the Rainbow [166th Inf] (Columbus, 1924); W. H. Amerine, Alabama's Own in France [167th Inf] (New York, 1919); J. H. Taber, The Story of the 168th Infantry, 2 vols (Iowa City, 1925).

42nd was reluctantly designated a combat unit.<sup>5</sup>

In early December, still uncertain of its status and stripped of all surplus equipment in order to supply the 2nd and 26th Divisions, the 42nd crossed France to the AEF training area near Toul. There, 2nd Lt. Charles H. Gorrill (later Captain) was appointed Division Gas Officer and four recent officer graduates of British gas schools arrived to begin the gas training of the division. But neither gas masks, nor pistols, steel helmets, or machine guns were issued until almost three months later, in February. After a little more than two months at Toul, the division entrained on 14 February for the trenches in the Lunéville-Baccarat area in Lorraine (Map No. 1).<sup>6</sup>

The troops had just been issued their masks, they had had "a certain amount of [gas] instruction," and "about 30 percent" had been through the gas chamber. Without masks or authority, Lt. Gorrill's training efforts had been uphill work, and he had found it necessary "to first create interest and finally to sell gas defense methods to officers and men alike...by no means an easy task prior to [the first encounter with] offensive gas."<sup>7</sup> The encounter was not long

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5

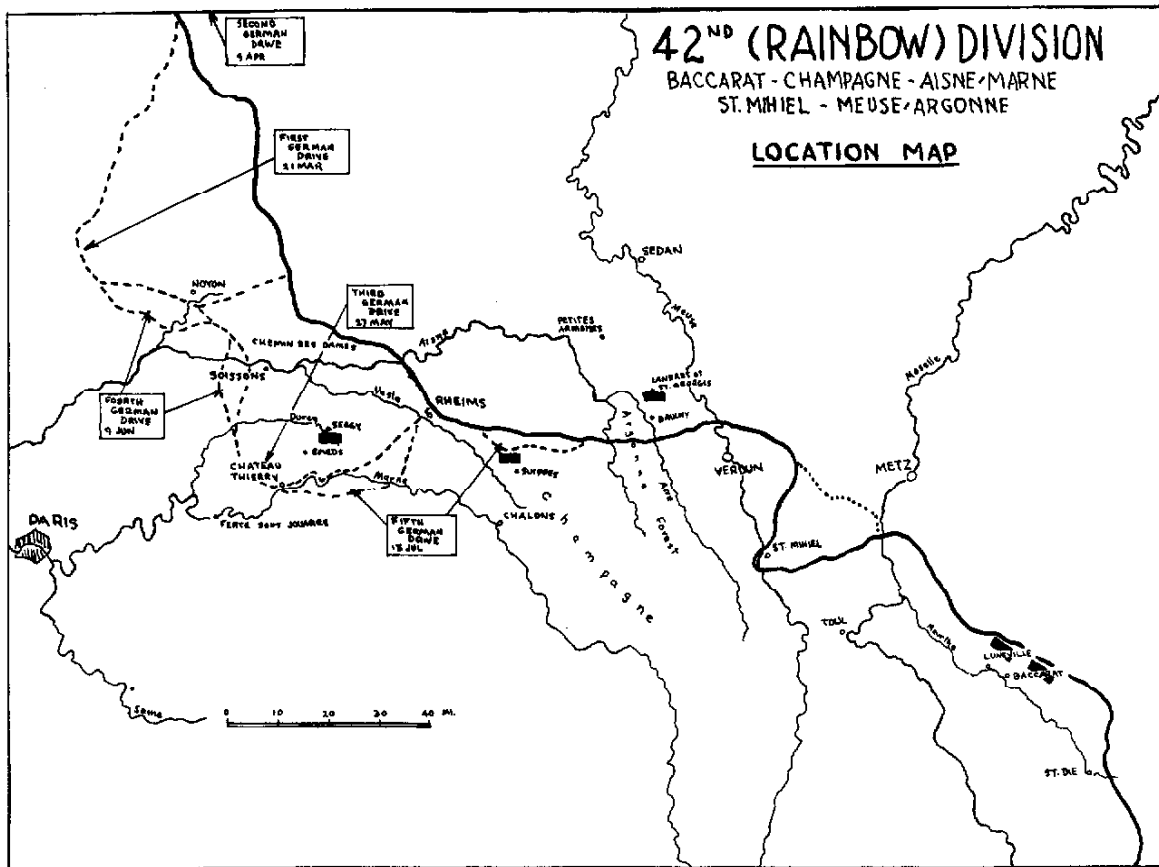
USA in the WW, III, Training, pp. 665 - 670; History, pp. 97 ff.

6

Ltr, G-in-C to CG I Corps, 12 Feb, and atchd corresp (42nd Div Box 17, 41.5); Ltr, 1st Lt C. M. Neff DGO 42nd Div to C CWS, 30 Jan 1919, sub: Rpt as per Circ Ltr 89 (GAF - 42nd Div); History, p. 517.

7

Gorrill, Rpt on the Work of the CWS in the 42nd Div, 25 Nov (42nd Div Box 97, fol 470); G - 1 Memo-51, 42nd Div, 22 Feb (42nd Div Box 1, 10.2).



MAP NO. 1

coming.

Within a week after arrival for training in trench warfare with the VII French Corps, an enemy projector attack fell on a sector occupied by a small unit of the 42nd. An estimated 750 phosgene drums resulted in 30 casualties, six of them fatal, but aside from some temporary confusion, the attack caused no great concern. Casualties among the French holding the greater part of the sector were not reported. Scattered gas shells over the next several weeks accounted for an additional 44 gas casualties, most of them in the artillery. After one shelling, it was found that none of four artillery casualties resulting had had any gas training whatever, and the Division Surgeon warned that "This if not corrected will eventually lead to disastrous results."<sup>8</sup>

The predicted disaster occurred on the evening of 20 March when an estimated 400 mustard gas shells and 7,000 HE and shrapnel shells deluged a sector occupied by Company K, 165th Infantry, and its supporting machine gun unit. The attack was thought to be in retaliation for a gas and shrapnel preparation prior to a joint Franco-American raid carried out earlier that evening, but it is also possible that it was part of the German camouflage for the first of its great offensives that spring, up on the British front.<sup>9</sup>

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8

SOI 4, 14, 42nd Div, 24-25 Feb, 6 - 7 Mar (42nd Div Box 4, 20.1); Ltr, RGO 151st FA to CO 151st FA, 14 Mar, sub: Gas Casualties (GAF - 42nd Div); Ltr, 1st Lt Coghlan MC to Div Surg, 9 Mar, sub: Gas Casualties, and 1st Ind, 10 Mar, to CG 42nd Div (42nd Div Box 97, fol 470).

9

SOI 28, 42nd Div, 20 - 21 Mar; USA in the WW, III, 700.

Father Duffy of the 165th said the bombardment began in the late afternoon, about 1730, and lasted for three hours.

The men were prompt in putting on their masks as soon as the presence of gas was recognized, but it was found impossible to keep them on indefinitely and at the same time keep up the defense of the sector. It had been raining heavily the night before, and there was no breeze whatever. Immediately after the bombardment, the entire company area reeked with the odor of mustard gas and this condition lasted for several days.

[Since evacuation was not considered,] by about midnight some of the men were sick as a result of the gas, and as the night wore on, one after another they began to feel its effects on their eyes, to cry, and gradually go blind, so that by dawn a considerable number from the front line had been led all the way back and were sitting by the Lunéville road...waiting their turn at an ambulance....

Not a man lost his head...and not a man left for the hospital until he was stone blind, or ordered to go by an officer....Others stuck it out for so long that it was finally necessary to carry them on stretchers to the dressing station; and this although all had been instructed that mustard gas was one of the most deadly gases and that it caused blindness which lasted for months and was in many cases permanent.

By ten o'clock in the morning fully two-thirds of the company had been blinded.

The "consoling feature" of the gas attack, as Father Duffy said, was the stoicism of the remains of the gassed company as it left the trenches that afternoon, to be replaced by Company M.<sup>10</sup>

Gorrill, the Division Gas Officer, reported two separate attacks, on the afternoons of 20 and 21 March. In the first, approximately 250 mustard gas shells mixed with an equal number of HE shells made direct hits on the Company K trenches and dugouts. One man died and 270 became casualties -- more than a casualty per shell -- when the men delayed in masking or removed their masks

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<sup>10</sup>

History, pp. 162 - 63, quoted from Father Duffy's Story (New York, 1919), pp. 75 - 76.

almost at once on the advice of the French sergeants with them who thought the agent was tear gas. Neither officers nor men, said Gorrill, realized the dangerous persistency of mustard gas, particularly under conditions of high humidity, and no effort was made to evacuate the area.

The next day a repeat bombardment with an estimated 1,500 to 4,000 shells, four-fifths of them mustard gas, fell in the same trenches, but as the troops were then on their way out of the sector, their tour of trench training over, only 20 men were said to have been gassed. How many of the incoming French became casualties, Gorrill did not say.<sup>11</sup>

The total of 291 gas casualties reported by Gorrill is contradicted by Lt. Col. H. L. Gilchrist, Medical Director of the Gas Service, who reported observing 542 casualties (417 from the 165th Infantry alone) at base hospitals later that week, most of them with burns of the face and neck and severe damage to the respiratory tract as a result of premature removal of their masks.<sup>12</sup> Gilchrist's total is more likely since it is known that at least 180 of those

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11

Ltr, DGO to C CWS, 24 Jan 1919, sub: Rpt on cases of abnormally high gas casualties, per Circ Ltr 84 (GAF - 42nd Div); Spencer, "History of Gas Attacks upon the A.E.F. in the World War," III, 404 - 8. No German records of these attacks have been found.

Ltr, DGO 42nd Div to C Gas Serv, 23 Mar, sub: Gas atk; Ltr, DGO to CGO I Corps, 24 Mar, sub: Rpt of Gas Atk; Ltr, DGO to CGO I Corps, 24 Mar, sub: Suppl info (GAF - 42nd Div), said that details of the second atk were incomplete because of the relief.

12

Spencer, III, 409 - 15, quoted Gilchrist ltr of 1 Apr. Div Surg, Casualty Rpt, 22 Mar (42nd Div Box 2, 12.3), showed 442 gas cases up to noon, 22 Mar.

gassed were evacuated by the French, probably unknown to the Division Gas Officer at the time.<sup>13</sup>

During that four-week training period in Lorraine, G - 2 recorded enemy fire in the division sector totaling 77,252 HE shells and fewer than 2,000 gas shells, the latter figure in approximate agreement with Division Gas Officer estimates.<sup>14</sup> The division history said that the raids made with their French instructors, enemy retaliatory raids, reprisal fire, and gassing in the period cost the division 95 killed and 798 wounded.<sup>15</sup> But at least 6 deaths and 610 of the wounded were casualties of enemy gas.

After this disastrous experience with gas the division issued elaborate Standing Orders on Defense Against Gas, with special attention to mustard gas, and considerable retraining in gas protection was begun, including, in May, ten hours per week for two weeks of carrying out field maneuvers while masked.<sup>16</sup> A medical officer of the division, who prepared several excellent reports on the medical handling of gas cases and the operation of the gas hospital, not long after the March gas experience proposed the appointment of a Division

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13

Ltr, CO FH 167 to Div Surg 42nd Div, 23 Mar, sub: Americans treated at French hospitals (Med Dept Box 3795).

14

Compiled from SOI 1 - 28, 42nd Div, 21 Feb - 21 Mar.

15

History, pp. 123 - 165, 174.

16

Standing Orders, 42nd Div, 18 Apr (42nd Div Box 9, 32.13); Ltr, DGO 42nd Div to Gas Officers, 6 May, sub: Gas Tng (Med Dept Box 3792, fol 8).



Medical Gas Officer in the 42nd, to train medical personnel in the medical aspects of gas warfare and to supervise the treatment of gas casualties. On 23 April, the officer himself, 1st Lt. Jasper W. Coghlan, became the first DMGO in the AEF.<sup>17</sup>

Over two months later the Chief Surgeon, AEF, was to recommend that Division Medical Gas Officers, with the same duties, be appointed in all divisions. His proposal was not acted on until September, by which time the increasingly large numbers of men going to the rear as alleged gas cases required establishing a DMGO and a staff of medical gas NCOs in each unit, almost solely to assist in recognizing gas cases and to separate real from alleged gas casualties.<sup>18</sup>

#### Idyll in Baccarat

On 22 March the 42nd Division withdrew from the Lunéville - Baccarat sector to return to the AEF training area. It was to carry out a series of special tactical problems there, based on new German breakthrough techniques demonstrated

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17

Ltr, Coghlan to CofS 42nd Div, 18 Apr, sub: Gas Personnel, and Inds; Ltr, Coghlan to Div Surg 42nd Div, 10 Mar, sub: Gas Defense; Rpt on Gas Hospital, 17 Jun (all in Med Dept Box 3796, 470.6). Aptmt in Memo 148, 42nd Div, 23 Apr (42nd Div Box 10, 32.15). See also Div Surg Memos 118 (24 Apr), 129 (22 May), 134 (3 Jun), in Med Dept Box 3795.

18

Ltr, Gilchrist, Ch Surg AEF to Div Surg 42nd Div, 8 Jul, sub: Aptmt of DMGOs; Ltr, Capt Geo. W. Bancroft DMGO 42nd Div to DGO 42nd Div, 3 Oct, sub: Orgn of Gas Medical Dept (Med Dept Box 3796, 470.6).

at Caporetto the previous November.<sup>19</sup> But the day before it left, the Germans smashed through at the Somme, using those same breakthrough tactics, and within days were threatening to split the British and French armies on the Western Front. Experienced and rested French divisions then in quiet sectors had to be sent to stop the German tide. The 42nd went back into the trenches at Baccarat.

In the following months, as more and more French divisions went north, a total of 13 American divisions were to get most of their training in France on the Lorraine front, spending less and less time in the great AEF training areas that had been constructed for them. As for the 42nd Division, on 29 - 31 March it was back in the line, taking over a 16-kilometer sector at Baccarat, to remain there for 82 days, until 21 June.<sup>20</sup>

The period was spent in constructing defenses in depth, to counter the new German tactics, carrying out training problems in depth defense, and conducting raids preceded by great concentrations of fire on the enemy trenches opposite. Reprisal fire with 1,500 HE and 600 gas shells following the first

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19

GO 9, 42nd Div, 19 Mar, and atchd I Corps problem (42nd Div Box 7, 32.1); History, p. 177.

20

GO 11, 42nd Div, 23 Mar; GO 13, 28 Mar; History, pp. 192, 224.

such raid, on 3 May, cost the artillery 11 wounded and 52 gassed.<sup>21</sup> The artillery was again the target on 26 May when 1,538 green cross (phosgene), 2,617 yellow cross (mustard gas), and 41 blue cross (diphenylchloroarsine) shells drenched five batteries. The division reported just 39 casualties, all relatively slight, but the Germans claimed that the batteries did not fire for five days thereafter.<sup>22</sup>

A projector attack against the 168th Infantry at Village Negre on 27 May (Map No. 2) coincided with another great German offensive launched from the Chemin des Dames, to the northwest, but may actually have been a periodic shoot by one of the German pioneer battalions that moved up and down the Alsace-Lorraine front. Although amply warned by tell-tale sounds during the preceding week and by an Alsatian deserter that came into the lines on the day of the attack, the troops were caught asleep in their ravine dugouts by a crash concentration of 983 phosgene bombs. The shoot, at 0100 hours, had been preceded by a one-hour mustard gas shelling of two battery positions and was followed by an hour's back barrage in the ravine, to keep the troops in the gas..

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21

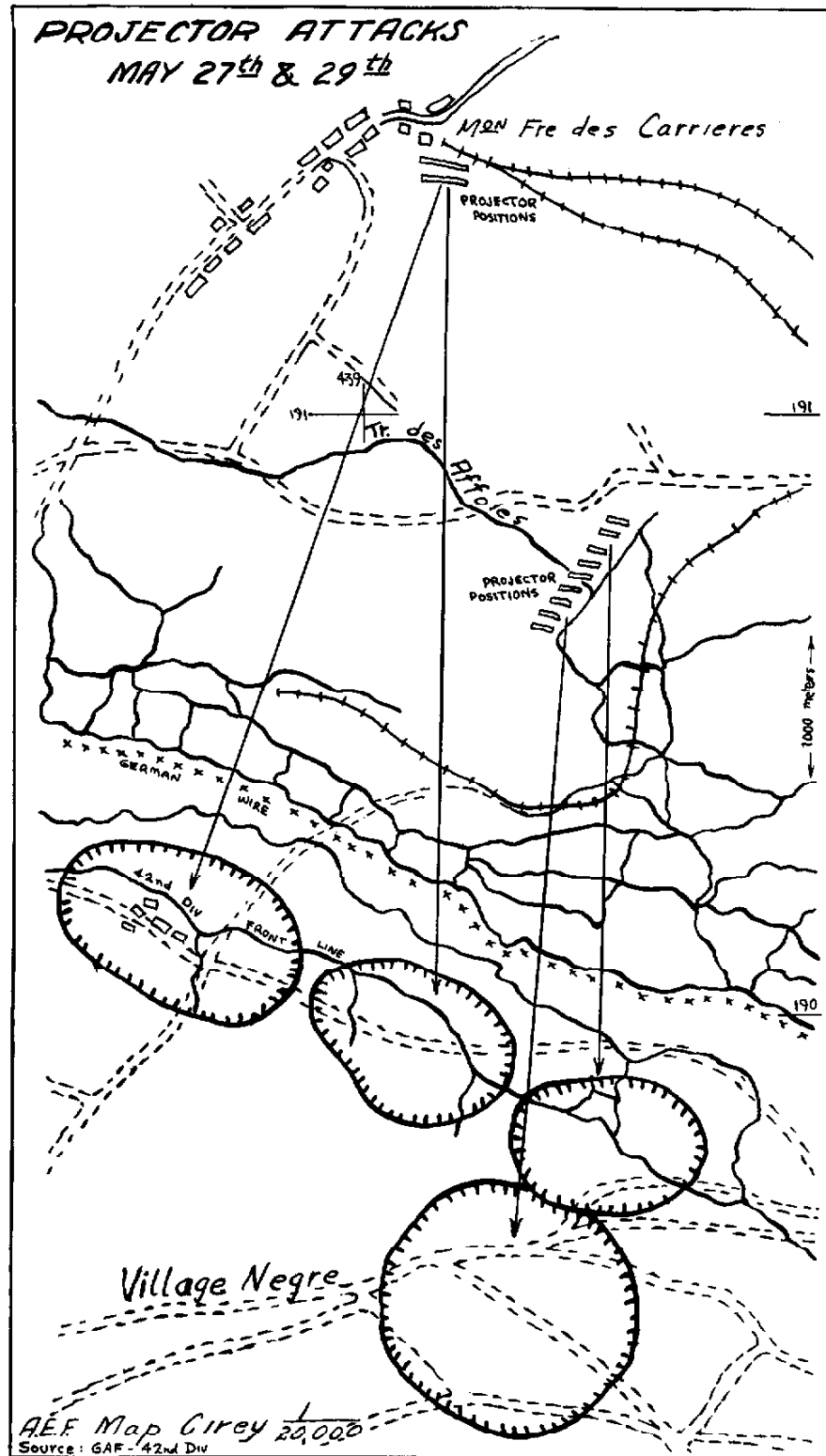
SOI 60 - 61, 1 - 4 May. Spencer, III, 417, rpts five mustard gas attacks 1 - 3 May with 34 casualties. History, pp. 193, 197 ff.

Eight gas attacks between 18 Apr and 12 May, all against the arty, with approx. 1,400 gas shells, causing 82 casualties, are rptd in Ltr, CG 42nd Div to CG VI Fr Corps, 25 May, sub: Record of Gas Atks (42nd Div Box 1, 10.2).

22

Spencer, III, 419 - 20; Hanslian, "Gasangriffe an der Amerikanischen Front," pp. 120 - 21. SOI 85, 26 - 27 May, estimated 4,375 gas shells in the atk.

The completeness of gas protection provided artillery at this time appears in rpts in 42nd Div Box 36, 37.0, Box 38, 63.6.



MAP NO. 2

By the next afternoon 188 men from three companies of 168th Infantry and 17 from the 150th FA had been evacuated, most of them severely gassed. That night the count was 270 gassed and 35 deaths.<sup>23</sup> G - 3 reported 1 killed and 6 wounded by shrapnel, 236 gassed and 37 gas deaths as a result of the projector attack.<sup>24</sup>

Warned by G - 2 to expect a repeat attack on the night of the 29th, the 42nd Division planned to break it up with gas fire the night before, but "owing to the weather," very little of the gas shell was fired. It did not keep the enemy from answering, however, and 19 additional gas casualties resulted.<sup>25</sup> Fully alerted on the 29th, the regiment at Village Negre was hit by the repeat projector bombardment as 643 phosgene drums and 125 HE drums were launched in successive firings, the HE bracketing the gas concentration.<sup>26</sup>

The Division Gas Officer said that as the men were standing-to in expectation of an enemy raid at the time, casualties were held to 50 gassed and 4 gas

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23

Hanslian, pp. 27 - 28; Spencer, III, 421 - 27. Capt Gorrill, the 42nd DGO, estimated 600 phosgene and chlorine bombs, according to Spencer.

24

DOR, 42nd Div, 26 - 28 May (42nd Div Box 13, 33.1). History, p. 207, reported 37 killed and nearly "160 who had to be sent to hospitals."

25

Opns O 6, 67th FA Brig, 27 May (42nd Div Box 35, 36.12); Ltr, CG 67th FA Brig to CG 42nd Div, 4 Jun, sub: Opns of May 27 - 28 (42nd Div Box 36, 33.6).

26

Hanslian, pp. 38 - 47. The DGO estimated 300 gas projectiles.

deaths. G - 3 counted 323 gas casualties, 9 gas deaths, and 16 wounded in the bombardment and subsequent raid, in addition to the gas and shell casualties two days earlier. Colonel Gilchrist of the Gas Service reported visiting between 300 to 340 gas cases after the two attacks, most of them, he said, severe casualties and 13 so bad "as to warrant a very gloomy prognosis." Among the latter were a number at first believed slightly gassed who had walked to the aid station and then suddenly collapsed.<sup>27</sup> But the G - 3 figures may be right, for a regimental historian said that two battalions were so badly hurt by the attacks that on 30 May the reserve battalion had to take over the line.<sup>28</sup>

On the early morning of 6 June, an estimated 3,000 to 4,000 shells including a large amount of phosgene hit a section of the 166th Infantry line. One death and 43 gas casualties resulted when some of the men became panicky while masked. An enemy raid was expected at the time, the men could not see with their masks on, and many ripped them off, preferring to be gassed rather than captured, said their gas officer.<sup>29</sup>

The last gas attack on the 42nd while at Baccarat covered the whole front

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<sup>27</sup>

Ltr, Med Dir Gas Serv to C Gas Serv, 5 Jun, sub: Proj atk on 42nd Div (GAF - 42nd Div); Spencer, III, 429 - 33. History, pp. 206 - 7, rptd 76 "wounded" in the bombardment and raid.

<sup>28</sup>

John H. Taber, The Story of the 168th Infantry (Iowa City, 1925), 2 vols., I, 229 - 36.

<sup>29</sup>

Rpt on Gas Atk, 7 Jun (GAF - 42nd Div); Spencer, III, 438 - 40. Telg, DGO to C Def Div Gas Serv, 8 Jun (GAF - 42nd Div), said the atk occurred in the 117th Eng, not the 166th Inf.

and rear of the sector as the Germans fired 16,200 blue, green, and yellow cross shells (diphenylchloroarsine, phosgene, and mustard gas), all calibers. This occurred on the night of 18 - 19 June while the 77th Division was coming in to relieve the Rainbow. Captain Gorrill estimated no more than 3,200 gas shells (mustard gas, diphosgene, and chlorpicrin), mixed with 1,000 HE shells, resulting, he said, in 219 gas cases in the 42nd and just 4 in the 77th Division.<sup>30</sup> But in the confusion of the relief, records and reports were admittedly uncertain and incomplete. Medical Department records show 461 gas casualties in June in the 42nd Division infantry regiments alone, 517 throughout the division.<sup>31</sup>

In the period 1 April - 20 June at Baccarat, observed enemy fire according to G - 2 daily reports totaled approximately 43,000 HE shells and 6,800 gas shells. This artillery fire, together with the casualties of raids and small arms fire, said the division history, resulted in 105 killed and 971 wounded, refusing as usual to distinguish the gassed from the wounded. The G - 3 record of casualties between 11 May and 20 June totaled 29 killed, 128 wounded, and 889 gassed.<sup>32</sup> Medical records show 63 killed, 277 wounded, and

30

Telg, DGO to C Def Div Gas Serv, 19 Jun (GAF - 42nd Div); Spencer, III, 441 - 44; Hanslian, pp. 122 - 23. No G - 2, G - 3, or medical rpts for the 77th Div have been found for this date, and Memo, DGO 77th Div to CG 77th Div, 23 Jun, sub: Rpt on Recent Gas Atk (GAF - 77th Div), repeats DGO 42nd Div data.

31

Med Dept of the U.S. Army in World War I, XV, Statistics, pp. 1052 - 53. Hereafter cited as Med Dept Statistics.

32

SOI 30 - 109, 1 Apr - 20 Jun; History, p. 225; DOR, 11 May - 20 Jun. DGO data in Spencer, III, pp. 416 - 44, show eight gas atks in the 82 - day period with 13,410 gas shells causing 646 gas casualties.

924 gassed in the division in the three months.<sup>33</sup>

Despite the raids, the hostile artillery fire averaging 500 shells daily, and the punishing gas attacks, the 42nd was to remember the months in the Baccarat sector as an "idyllic period" when the war often seemed wonderfully remote for days at a time. The long stay ended in the last week of June as the French called on the division for a special assault task.<sup>34</sup>

#### The German Offensive of 15 July

The French planned to use the 42nd Division in a Cantigny-like attack against a slight German salient north of Chalons, but learning that the enemy intended another of his offensives in that very area, the 42nd Division on 4 July was ordered instead to Naulin's XXI Corps, Fourth French Army, to strengthen the line. That day the division moved into support positions behind the 170th and 13th French Divisions (Map No. 3).<sup>35</sup>

The 42nd was amply warned that the German preparation for the attack would consist largely of gas shells. There was little that could be done

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33

Med Dept Statistics, pp. 1042 - 43, 1046 - 47, 1052 - 53. Stat Off, 42nd Div, Accum Casualty Rpts, 17 Feb - 26 Jun (42nd Div Box 2, 12.3), have totals of 136 killed, 1,456 wounded, 1,157 gassed, 17 missing. For still other figures, see 42nd Div Casualty Record to 15 June (42nd Div Box 97, 704).

34

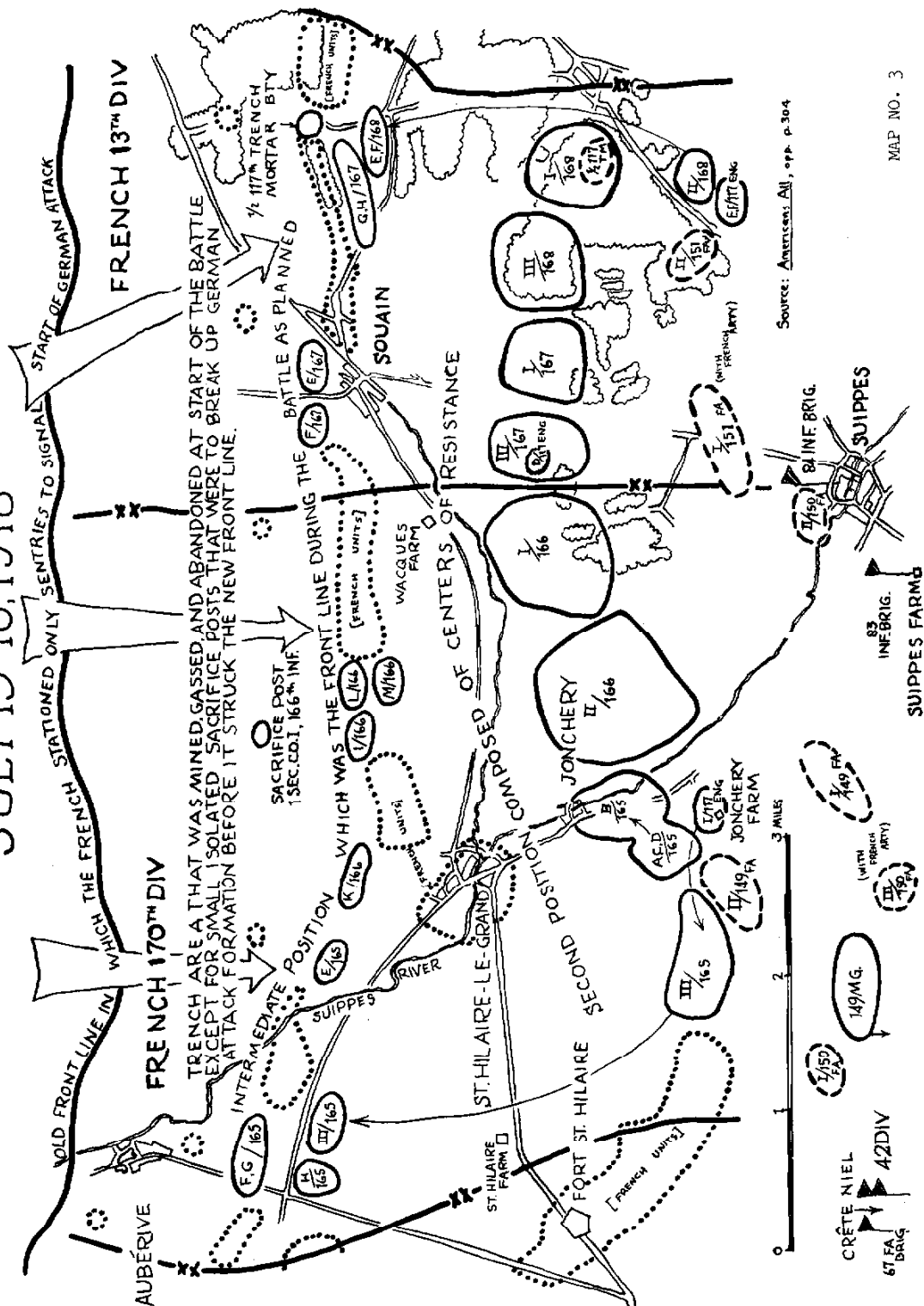
History, p. 214; GO 40, 42nd Div, 16 Jun (42nd Div Box 7, 32.1).

35

GO 45, 42nd Div, 30 Jun; GO 47, 4 Jul; History, p. 245. French documents in 42nd Div Box 13, 32.7, cover the period 3 - 19 Jul.



# 42<sup>ND</sup> DIVISION IN THE BATTLE OF CHAMPAGNE JULY 15-16, 1918



against non-persistent gas, but in anticipation of mustard gas shelling like that on the British lines in March (when some 150,000 yellow cross shells deluged three corps fronts), the division set up special five - man disinfecting squads in each company and battery and began their intensive training.<sup>36</sup>

The hour of the German bombardment was learned on the night of 14 July when a five - man patrol from Gouraud's Fourth Army slipped through the enemy lines, surprised a group of storm troops moving into position, and fought their way back with two prisoners. Based on their information, a bare half hour before the German preparation was to begin, Fourth Army ordered all its long-range guns and half its field guns to lay down a counter - offensive bombardment.<sup>37</sup>

The opening crash was heard in Paris, and the thunder of fire increased as Fifth French Army artillery joined at midnight. On schedule at exactly ten minutes after midnight, the roaring German guns "completely dwarfed the stupendous French fire." But surprise had been lost, and the German preparation was much less than had been planned owing to the difficulties of supplying the guns after the destruction caused by the French fire.

On the front where the 42nd Division waited in support, the German fire smashed trenches, blasted paths and roads, churned up the ruins of villages and farmhouses, and tore up small groves and woods as far back as Chalons,

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<sup>36</sup>

G - 1 Memo 230, 42nd Div, 11 Jul (42nd Div Box 1, 10.2).

<sup>37</sup>

History, pp. 253 - 54.

20 miles to the rear. Caught out in the bombardment, despite all claims of readiness made by the division, was a detail of 80 men from Company H, 165th Infantry, sent out that night with picks and shovels to fill in a line of trenches back of the front. The casualties in the entire company that day, 20 killed and 64 wounded, included most of the detachment.<sup>38</sup>

In the official history of the 42nd Division, the only reference to gas in its 60 - page account of that night are Colonel McCoy's remark that the enemy's heavy artillery fire went over his 165th Infantry reserve position "like freight trains, and the gas shelling took place mostly in the lower ground along the Suippe"; and a 168th Infantry historian's report that in the 1st Battalion position "the first shower [of shells] drenched certain sections with gas, so that men, impeded by their masks and the darkness, had great difficulty in getting quickly under cover, and a number were struck by shells."<sup>39</sup>

It was the Division Gas Officer's impression that "hundreds of thousands" of shells fell in the bombardment, "a third of them...gas shells, chiefly green and blue cross. A few yellow cross shells also fell, probably upon points not intended for occupation by the German troops."<sup>40</sup>

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38

History, p. 277.

39

History, pp. 266, 273; John H. Taber, The Story of the 168th Infantry, I, 282, 292.

40

Rpt on Gas Atk, 19 Jul; Ltr, Gorrill DGO to C CWS, 27 Jan 1919, sub: Details of gas atk (GAF - 42nd Div); Spencer, III, 445 - 46.

The bombardment was at its height when at 0417 red rockets sent up from the outposts signaled the start of the German assault. None of the 20 or more men in the outpost detachment of Company I, 166th Infantry, was heard of until after the armistice, when several who had been captured returned.<sup>41</sup> The attacking Germans, overrunning the outposts, advanced over a mile and a half of empty trenches before reaching the first French and American line of defense, where massed machine guns broke up the advancing lines.

A captured map revealed that the enemy expected to reach Suippes at noon that day and Chalons by 0400 the next morning. But by 1100 on 15 July the initial impetus was spent in front of the French intermediate position. In the lull, reserve battalions of the 165th and 168th Infantry were brought up to these forward positions, replacing the French units that had stopped the attack.

After regrouping his forces and bringing up his light guns, the enemy launched another attack late that day, tried again after a four - hour preparation at dawn the next day, and made one last attempt on the afternoon of 16 July, some of the enemy in this attack meeting elements of the 3rd Battalion, 166th Infantry. The enemy had penetrated between  $2\frac{1}{2}$  and 4 kilometers on the Chalons front, most of it over previously evacuated ground, when the grand offensive came to a halt.<sup>42</sup>

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<sup>41</sup> History, p. 281.

<sup>42</sup> G - 2 Bul of Info No. 3, 42nd Div, 17 Jul (42nd Div Box 4, 20.1); History, pp. 257 - 58.

Some of the maneuvering of the enemy observed during this advance, and his apparent retreat in some cases back to his original positions on 16 July were attributed to the fact that the French had filled their trenches and dugouts on the original front with mustard gas before evacuating them, and had contaminated large strips of ground back of the first trenches.<sup>43</sup>

Almost all of the 327 killed and 1,240 wounded in the division while with the Fourth French Army, said the official history, occurred on 15 July, principally as a result of the bombardment.<sup>44</sup> This is quite possible, since the only fighting reported by G - 2 at the time was on the night of the 15th when a platoon of the 165th Infantry warded off a small force infiltrating its position. The division made no great claims of German killed and wounded, and prisoners came to 27.<sup>45</sup>

Captain Gorrill, the Division Gas Officer, at first estimated 800 gas casualties, presumably included in the 1,240 "wounded," as a result of the bombardment, and said there would have been many more but for the exceptional

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43

Msg, RIO 168th Inf to Hq 42nd Div, 0915, 16 Jul (42nd Div Box 33, 32.16);  
Msg, RIO 167th Inf to Hq 42nd Div, 1045, 16 Jul (42nd Div Box 32, 32.16).

44

History, pp. 265, 302. Msg, Div Surg, 16 Jul (42nd Div Box 10, 32.16),  
rptd about 1200 casualties as of 0700, 16 Jul, "about 60 percent gas, slight."  
Cf. Msg, CG 42nd Div to C-in-C, 15 Jul (ibid.).

45

G - 2 Sum of Events, 15 - 16 Jul (42nd Div Box 4, 20.1); Msg, Hq 168th  
Inf to Div Hq, 1057, 15 Jul (42nd Div Box 10, 32.16). No G - 3 report for the  
period has been found.

cooperation of line and staff officers during the daily drills and inspections the previous week. Seventy-five percent of the gas casualties, he said, were unavoidable owing to the accompanying shell fire, the necessity of holding all positions, and removing masks because of fatigue. Most of the other casualties he suspected were either malingerers or light casualties that need not have been evacuated.

In a postwar report, Gorrill revised his total of 800, saying that he had been confused by duplicate hospital records, and actual gas casualties of the bombardment, based on personnel records, approximated 350.<sup>46</sup> Official Medical Department data for 15 - 16 July show that 242 were killed, 545 gassed, and 739 wounded in the division.<sup>47</sup> Other casualties of the bombardment were the large number of headquarters company men, wagoners, saddlers, cooks, and bandsmen stopped in flight at various places in the rear that morning, and almost 400 additional men admitted to the division hospitals suffering from hysteria and shell shock.<sup>48</sup>

With the threat of the offensive past, the 42nd Division on 19 July was reportedly making reconnaissances and preparations for a counterattack ordered

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46

DGO Rpt on Gas Atk, 19 Jul; Ltr, DGO to C CWS, 27 Jan 1919 (GAF - 42nd Div).

47

Med Dept Statistics, pp. 1058 - 59, 1104 - 5, 1134 - 35. Ltr, CG 42nd Div to C-in-C AEF, 10 Feb 1919, sub: Casualties, 5 - 17 Jul (42nd Div Box 2, 12.3), rptd 239 killed, 893 wounded, 350 gassed, 31 missing.

48

Msg, Div Msg Center rpt, 15 Jul (42nd Div Box 10, 32.16); Ltr, Div Psychiatrist to Ch Consultant, Neuro-psychiatry, AEF, 26 Dec, sub: Incidence of War Neurosis (Med Dept Box 3798, fol 730).

by General Gouraud when it received instructions to assemble in the rear.<sup>49</sup> Relieved by the French, the division entrained for the Chateau Thierry sector, to join I Corps in the great counteroffensive that had been launched against the unsuccessful German armies by the Ninth and Sixth French Armies on the morning of 18 July.

#### The Battle at the Ourcq

In five days the 42nd crossed the front, acquired 4,151 replacements, and came up behind the 26th Division in the Forêt de Fère.<sup>50</sup> The Germans had retired unmolested on the night of 23 - 24 July from their positions near Epieds to an intermediate line between Beuvarde-Croix Rouge Farm-le Charnel (Map No. 4).

Without definite knowledge either of the positions of the 26th Division or of the enemy, Col. Douglas MacArthur, Chief of Staff, arbitrarily drew a line on the map below Croix Rouge Farm. After debussing in the Epieds-Trugny area, the 84th Brigade approached this line on the afternoon of 26 July, relieving intermingled 26th Division, 28th Division, and French troops as it advanced. The 83rd Brigade, put in reserve back of a French division on the

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<sup>49</sup>

GO 48, 42nd Div, 20 Jul; History, p. 258 - 59.

<sup>50</sup>

With 507 replacements received in June, the division was now close to full strength (History, p. 532).

[illegible]

Source: Based on map in  
Americans All, opp. p. 494

MAP NO. 4



left, relieved that and the adjacent French division the next day.<sup>51</sup> The Rainbow was to make its first attack.

Under orders from Degoutte of Sixth French Army to pursue the retreating Germans relentlessly, the brigades advanced in echelon, the 167th Infantry capturing Croix Rouge Farm in a bayonet charge that evening. The 168th, on the right, made a short advance before it fell back before enemy machine gun fire. It came abreast, with the 165th and 166th Infantry, the next morning as the enemy retired above the Ourcq.<sup>52</sup>

The advance through the Forêt de Fere the previous night under heavy shell and gas fire, and the bayonet attack, without artillery preparation or support, were costly. The 167th said it lost half its men in each of the two battalions making the bayonet charge, and the 168th reported that 30 to 50 percent of its attacking companies had fallen, mowed down by the rows of machine guns along the edge of the field and at the farm. But in the charge the number of machine guns reported captured was 27, and the next day a burial party is said to have counted 283 bayoneted dead of the German 4th Guard Division.<sup>53</sup>

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51

SOI 110, 42nd Div, 25 Jul; History, pp. 317 - 18, 321. Note: A Historical Section GS rpt, n.d. (42nd Div Box 3, 18.2), confirms the finding at the National Archives that 42nd Div records for the Ourcq operation are "almost totally lacking."

52

Ltr, CO 168th Inf to CG 42nd Div, 21 Aug; sub: Rpt of Opns, Jul 24 to Aug 5 (42nd Div Box 33, 33.6).

53

SOI 112, 42nd Div, 26 - 27 Jul; History, pp. 346 - 38, 362. The 168th Inf later rptd its actual losses that night as 231 killed and 580 wounded (History, p. 493).

"The orders for the attack on the Croix Rouge farm were prepared too hastily," said Lt. Col. Walter E. Bare, 167th Infantry commander, "and apparently without definite knowledge of the location and strength of the enemy." The division was certain that either Sixth French Army or I Corps erred grievously in believing the Germans beaten and in rapid retreat.<sup>54</sup>

About midnight on 26 July, Col. Blanton Winship of I Corps headquarters arrived with orders for a general attack across the Ourcq. Cheered by the successful bayonet attack on the farm, Degoutte now ordered all four regiments to make the assault that night without using their rifles, "but...to confine themselves to the bayonet." Colonel Winship insisted, reported the 165th Infantry commander, Col. Frank R. McCoy, "that...Degoutte was determined to keep the Germans moving and that, if necessary, I must sacrifice my command in the effort."<sup>55</sup> The bayonet order was rescinded only when it was discovered that the enemy had disappeared from the front. Fifteen hours later, on the night of the 27th, the division began the advance to the Ourcq, with orders to attack across the river the next morning.

During the evening of 27 July enemy artillery put down mustard gas in front of the Ourcq, "getting heavy concentrations along all the low approaches to the river." The next morning, the division artillery still far in the rear,

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54

History, pp. 312, 351, 496. No division field orders for the Ourcq opn have been found; they are said to have been verbal.

55

History, pp. 326 - 27. FO 26, I Corps, 0110, 27 Jul (I Corps Box 15, 32.1), said the atk, just before dawn, would be made with the bayonet.

the assault battalions of the 42nd advanced through the gas barrier. Against intense rifle and machine gun fire, they crossed the Ourcq. As they began the assault on the German positions along Hill 184-Seringes-Bois Colas-Bois Brulé-Meurcy Farm-Hill 252-Sergy-Hill 212, enemy planes swept back and forth over the front, directing artillery fire and machine-gunning the advancing lines.<sup>56</sup>

At nightfall the remains of all four battalions had been driven back to the sunken road along the north bank of the river, their dead and wounded strewn over the slopes to the front. Contributing heavily to the failure of the attack that day, said the 167th Infantry commander, Col. William P. Screws, had been the curtain of gas "covering the entire valley along the Ourcq river and its tributaries....Although I wore my gas mask almost constantly, I suffered considerable burns and nausea from the effect of the gas." He fought on another day and then had to be evacuated.<sup>57</sup>

On 29 July, with the help of two regiments of the 4th Division, Seringes, Bois Colas, Meurcy Farm, Sergy, and Hill 212 were taken, at least temporarily. Characteristic of the method of attack was that of the assault forces of the 166th Infantry who, "in spite of terrific fire...as they ascended the slopes, marched on in perfect order, silenced enemy machine guns, took Hill 184 and

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56

SOI 113, 27 - 28 Jul; DOR, 28 - 29 Jul; Ltr, CO 166th Inf to CG 42nd Div, 26 Aug, sub: Rpt of Opns (42nd Div Box 30, 33.6).

57

History, pp. 332 - 34, 372 - 73.

stormed the town [of Seringes]."<sup>58</sup> Neither the 166th nor any other regiment of the 42nd was to do any more serious fighting at the Ourcq after that day.

German counterattacks on 30 July succeeded in penetrating Seringes and making a no-man's-land of Meurcy Farm and Hill 212, but the 42nd held on elsewhere above the Ourcq. Sometime that afternoon the body of Joyce Kilmer was found, a bullet through his brain, in the field to the west of Seringes.

During the night of the 30th, a battery of 75's reportedly fired gas on the southern part of the Forêt de Nesles where the enemy was thought to have reserves, and the next afternoon a detachment of the 1st Gas Regiment with the 165th Infantry put 140 rounds of thermite and white phosphorus into Bois Brulé and on machine gun nests at Meurcy Farm. But it was meager retaliation for the mustard gas fire that fell at regular intervals those two days on Sergy, Hill 212, Villers sur Fère, the Ourcq valley, the valleys running down to the river and elsewhere as far to the rear as La Cense Farm.<sup>59</sup>

Too late, on 31 July G - 2 received a captured German map with all the Ourcq valleys marked in green. "Whenever we've attacked during the last few days," said G - 2, "the Boche has systematically shelled the five small draws

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58

SOI 114, 42nd Div, 28 - 29 Jul; History, pp. 337, 433. The claims of the 42nd and other divisions to the capture of Seringes, Meurcy Farm, and Sergy are discussed in History, pp. 397 - 98.

59

SOI 115 - 17, 42nd Div, 29 Jul - 1 Aug; Ltr, CO 1st Bn 30th Gas Regt to CG I Corps, 1 Aug, sub: Stokes Mortar Opns (42nd Div Box 23, 33.6).

leading to the Ourcq on our front...using gas and H.E." The shelled areas corresponded exactly with the green areas on the map, and all units were to be notified of the map at once.<sup>60</sup>

But it didn't matter any longer, for on the night of 1 August, as the division on the right (the 32nd) finally got above Hill 212 and Les Jomblets, the enemy artillery fire slackened and then ceased. The German withdrawal to the Vesle had begun.

The next morning, with the 117th Engineers — the only fresh troops left — in the line, the 42nd Division began the march towards the Vesle. Sometime later Colonel Douglas MacArthur, abandoning his role as Chief of Staff, reported that he had "personally assumed command of the line [and was] going great guns.... If the enemy hasn't prepared positions in the Foret de Nesle, I intend to throw him into the Vesle."<sup>61</sup> Within the hour the line collided with strong rearguard enemy positions sited just above the forest, and there on 3 August the division was relieved by the 4th Division, which continued on the next day to the Vesle.<sup>62</sup>

The official history of the Rainbow said that total casualties in the battle with the 10th Landwehr, 201st, 6th Bavarian, and 4th Guard Divisions at

<sup>60</sup>

Memo, G - 2 for Col. R. H. Williams [I Corps], 31 Jul (42nd Div Box 7, 27.7). Neither the map nor any notification of it has been found.

<sup>61</sup>

Msg to CG 42nd Div, 2 Aug (42nd Div Box 10, 32.16).

<sup>62</sup>

FO 35, I Corps, 1800, 2 Aug.

the Ourcq were 1,214 killed and 4,315 wounded, or 5,529.<sup>63</sup> Gas casualties were not distinguished, and the Division Gas Officer himself had little idea of the extent of gas casualties in the division. His single report covered only 27 July, the day the troops advanced to the Ourcq, over ground "slightly saturated with mustard gas." An indeterminate amount of mustard gas, as well as diphosgene, had been put down by the enemy, and the troops had worn their masks from one to six hours that night and during the attack the next morning. He thought there had been about 200 gas casualties, but a large percentage of these were unquestionably malingerers and a number of others had not been gassed at all but worn out from over-exertion and lack of food.<sup>64</sup>

Medical records reveal that in the period 25 July - 5 August, 763 men in the division were killed, 2,713 were wounded, and 896 gassed, for a total of 4,472. Whether these figures include the 397 wounded and 160 gassed that were

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63

History, p. 493. Memo, Div Surg to CofS 42nd Div, 1 Aug (42nd Div Box 2, 12.3), rptd 4353 gassed and wounded between 24 Jul - 3 Aug. Rpt, Stat Sec, 42nd Div, n.d. (*ibid.*), rptd 623 killed, 4541 wounded, 926 missing. A postwar Opns Rpt, CG 42nd Div, n.d., (42nd Div Box 14, 33.6), shows 696 killed, 4240 wounded, 578 missing.

Note: Records indicate that the actual German units were the 201st, 4th Guard, and 6th Bavarian Reserve. Since the 4th Gd relieved the 10th Ldw on 26 - 27 July, it is doubtful that the 42nd saw more than rear guards of the 10th Ldw.

64

DGO Rpt on Gas Atk, 5 Aug (GAF - 42nd Div); Spencer, III, 447.

received by 28th Division hospitals cannot be determined.<sup>65</sup>

These high losses were said to have occurred largely because the division had been sent in with little or no reconnaissance or knowledge of enemy positions, had failed to disperse its troops adequately across the sector or in depth, and had left its supports and reserves bunched up, subject to sudden concentrations of enemy artillery fire. The battalions advanced in a standard attack formation, "bullheadedly assaulting machine-gun strong-points," instead of advancing on them by short rushes, crawling, and infiltration. The troops had not yet learned that their rifles were more effective than hand grenades or accompanying machine guns, and the machine gun battalions were convinced that instead of being dispersed among the troops, they ought to have been on the heights south of the Ourcq, where they could have concentrated their fire on selected enemy strongpoints above the river. The artillery also believed that concentrated fire on assault targets would probably have been much more effective than the normal barrage patterns actually fired after the guns came into position.<sup>66</sup> Although gas losses represented over a quarter of the "wounded," nothing was said to indicate that the gas experience was instructive. Nor was Gorrill, the Division Gas Officer, helpful. Left to him, most of the gas casualties

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Med Dept Statistics, pp. 1058 - 59, 1066, 1104 - 5, 1134 - 35, 1166 - 67, which also show division totals for the month of July, including the 15 July bombardment, of 1059 killed, 1592 gassed, and 3397 wounded -- 6,048 altogether. See also Memos, Div Surg 28th Div to Div Surg 42nd Div, 4 and 5 Aug (Med Dept Box 3795).

66

History, pp. 486 - 89, 517 - 19. These were the lessons said to have been applied in the St. Mihiel opn (History, pp. 551, 568, 570 - 71). Their application in the Meuse-Argonne was not mentioned.

would probably have been candidates for court martial.

As the 42nd Division entered its bivouac area near La Ferte sous Jouarre on 4 August, Col. Douglas MacArthur, promoted to Brigadier General, relieved General Brown of command of the 84th Brigade. That same day General Menoher wrote corps asking for at least a month or six weeks "to recuperate, reconstitute, re-equip and [to] amalgamate replacements." Otherwise, he warned, the division would suffer marked deterioration.

But the new batch of green replacements, 5,614 of them — making a total of 10,272 in two months — did not arrive until late in the month and there was little time left to train them. Colonel Donovan later said that for the St. Mihiel operation, 65 percent of his men and 75 percent of the officers in the 1st Battalion, 165th Infantry, were new and almost wholly untrained.<sup>67</sup> Then and later in the Argonne replacements arrived that had been civilians thirty days before and had been in France just nine days.

On 30 August, the 42nd Division was assigned to Dickman's IV Corps in the Toul area for the first American Army offensive, and on 12 September, with the 1st and 89th Divisions on either side, it advanced up the center of the St. Mihiel salient.<sup>68</sup> The two days of the attack reportedly cost the

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<sup>67</sup>

Ltr, CG 42nd Div to CG I Corps, 4 Aug, sub: Condition of the 42nd Div, and 1st Ind, I Corps to Adj First Army, 4 Aug (42nd Div Box 1, 10.2); History pp. 435, 532, 570.

<sup>68</sup>

FO 17, 42nd Div, 9 Sep, 42nd Div Box 7, 32.1); History, p. 571; Study No. 5, "The Use of Gas at St. Mihiel."



division 234 killed and 667 wounded.<sup>69</sup> As surprised as the enemy by the results of the lightning-like strike, the 42nd Division was subsequently certain that its quick success had been largely the result of its application of the lessons learned at the Ourcq.<sup>70</sup> Actually, beginning with the opening bombardment, the two operations had very little in common.

During the two weeks that followed the closing of the salient, the repeated raids back and forth on the new front, and the incessant heavy fire as the enemy nervously awaited a renewal of the attack that never came, resulted in 55 killed and 259 wounded.<sup>71</sup>

On 30 September the division withdrew from the sector and in five nights of marching in "cold penetrating liquid mud," crossed from the St. Mihiel to the Meuse-Argonne front, going into V Corps reserve in the Bois de Montfaucon.<sup>72</sup>

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69

History, p. 575. G - 3 at the time estimated 50 killed, 423 wounded, 2 gassed (DOR, 11 - 14 Sep). Other rpts in 42nd Div Box 14, 33.6, describe total casualties, including missing and captured, ranging between 407 and 702.

70

See rpts on lessons applied in 42nd Div Box 18, 50.1, and Box 28, 50.1.

71

History, p. 596. In the period 10 - 30 Sep, G - 2 recorded a total of 15,726 shells in the sector, 880 of them gas shells. For the same period, which included the attack and subsequent raids, G - 3 showed a total of 66 killed, 679 wounded, and 41 gassed (SOI 119 - 138, 10 - 30 Sep; DOR 10 - 30 Sep). Spencer, III, 448 - 451, rptd three gas attacks with 1950 mustard gas shells between 26 - 30 Sep, resulting in 54 gas cases.

72

FO 27, 42nd Div, 30 Sep; FO 32, 6 Oct; History, p. 595.

"Such expressions are forbidden"

In the opening days of the Meuse-Argonne offensive, the 35th and 91st Divisions, on the left center of First Army front, advanced almost five miles to a line along the slopes of the Exermont - Gesnes ravine. They had crossed the ravine only to be hurled back by counterattacking forces to Baulny ridge and Serieux Farm, where their reserves succeeded in stopping the German attack.

At that point, between 30 September and 3 October, the 1st and 32nd Divisions relieved the 35th and 91st, and in ten days of furious fighting advanced above the Exermont-Gesnes ravine to a line below Sommerance and through the Bois de Romagne (Map No. 5). There on the night of 11 - 12 October the 42nd Division took over the thin forward positions of 1st Division to continue the battle to break the Kriemhilde Stellung.<sup>73</sup>

As the lead battalions of the 166th, 165th, and 167th Infantry moved into the sector occupied by 1st Division, they found "remnants of gas...in the dark, damp woods" and "the ground everywhere in front of the captured German positions... strewn...with the bodies of men of the 35th, 1st, and 91st Divisions." With the dead were also numbers of German and 1st Division wounded. They were brought out that night.<sup>74</sup>

The 167th Infantry, coming up by way of Exermont, reported enemy artillery

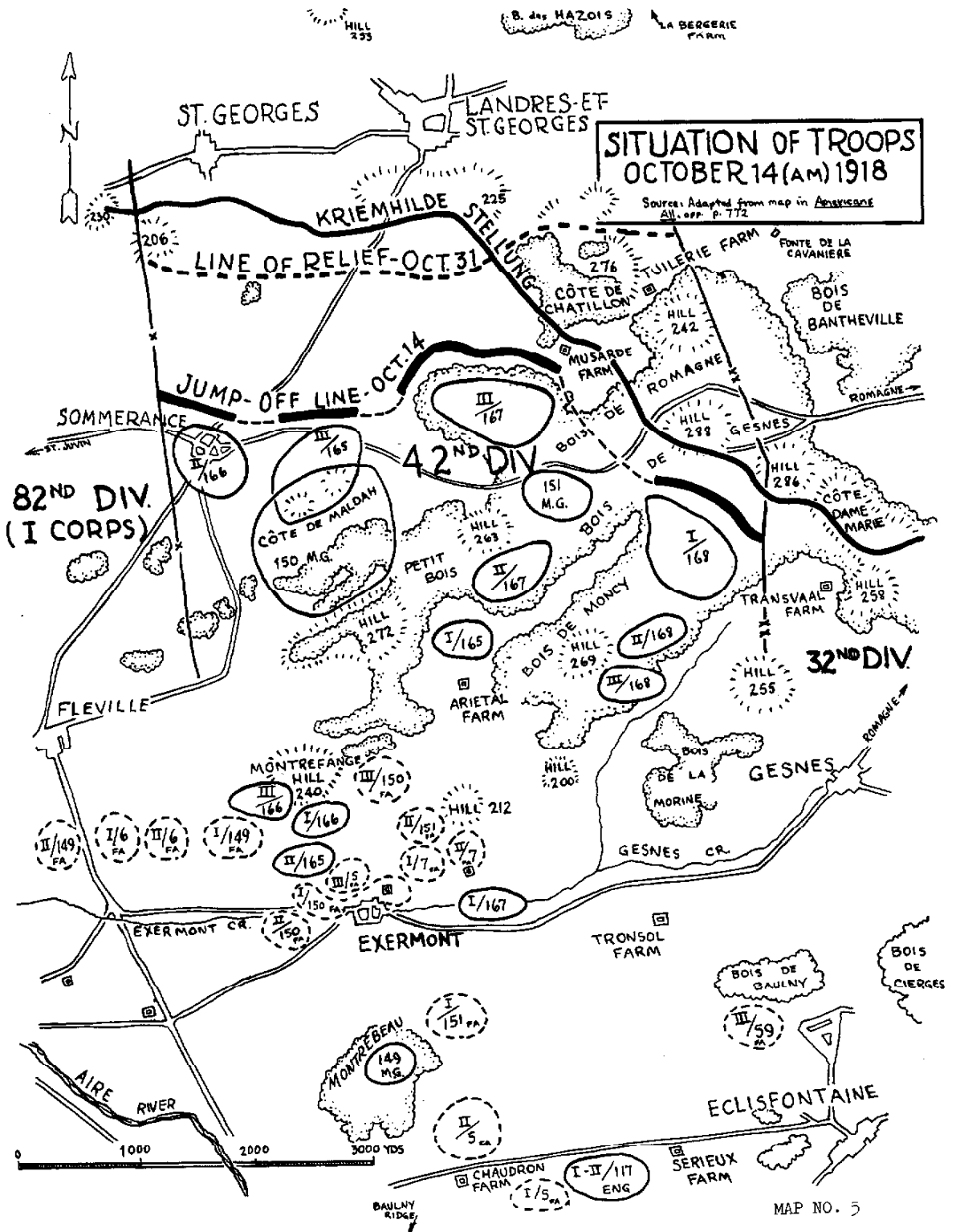
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<sup>73</sup>

FO 34, 42nd Div, 1530, 10 Oct; History, pp. 624 - 25.

<sup>74</sup>

History, pp. 602, 630 - 32, 688, 706, 716.



"constantly shelling the valley with gas shells, mostly mustard and tear gas. I well remember," said Colonel Bare, the regimental commander, "that both... General [MacArthur] and I consumed so much of the gas that neither of us could hardly see or talk on account of the effect of the fumes."<sup>75</sup> The 168th Infantry, moving into the gap that had developed between the 1st and 32nd Divisions, found less evidence of battle but enough gas to cause a number of casualties. There, with the loss of Hills 272, 269, and 255, the Germans had withdrawn to the next line of hills, and only patrols, friendly and hostile, covered the gap even after the 42nd came in.<sup>76</sup>

The 42nd Division arrived on the front at a low point in the fortunes of First Army. Pershing had hoped to clear the Meuse-Argonne sector in a matter of days, but the almost insuperable obstacles of terrain and the dogged resistance of the enemy had knocked out those hopes. Foch and Petain grumbled that Pershing had allowed himself to get snarled by using too many of his big divisions in the narrow sector. Pershing's reaction was to press the attack of 4 October with reckless regard for lives. On 10 October, after repeated prodding of slow divisions, Army stood before the Keienhilde Stellung, the enemy's last heavily fortified line, along Grand Pré-Champigneulle-Landres et St. Georges-Romagne-Brieulles. The attacks on the next two days were listless and futile.

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<sup>75</sup>

History, p. 677. Spencer, III, 452, rpts only a phosgene and HE atk on the 151st FA on 11 Oct, as 205 105-mm. gas shells resulted in 4 casualties.

<sup>76</sup>

SOI 140, 42nd Div, 12 - 13 Oct; History, pp. 625 - 30; Taber, The Story of the 168th Infantry, II, 159.

On 12 October, Pershing, exercising personal supervision of the front, began relieving a number of corps, division, and brigade commanders all along the line. Included was Cameron of V Corps, replaced by Maj. Gen. Charles P. Summerall, who had just driven the 1st Division up to the Kriemhilde position.<sup>77</sup>

That same day, the 12th, Pershing assumed command of his Group of Armies (First and Second American Armies), as Liggett came from I Corps to take over First Army. Liggett found a tired, dispirited army badly in need of rest.<sup>78</sup> Even the 42nd Division coming in that day "worn down...[by] fatigue, hunger, wet, and cold," appears to have been considerably less than fired up for victory.<sup>79</sup>

The troop commanders certainly thought so, as is clear from Major Donovan's account that on 13 October when word reached his headquarters that President Wilson had arranged to discuss a peace with the enemy based on his fourteen points, battalion and company commanders were told to "squench [this report] right away. Do not give it to the men." But the report quickly spread, and the men were heard saying, "why the hell should we do any more fighting now?" Too late, on 14 October a division memo "ordered that all discussion

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77

Shipley Thomas, The History of the A.E.F. (New York, 1920), pp. 320, 327; Pershing, My Experiences in the World War, (New York, 1931), II, 336.

78

See Study No. 10, "The Use of Gas in the Meuse-Argonne Campaign," pp. 11, 35, 39, 46.

79

History, p. 633. Cheseldine, in Ohio in the Rainbow, p. 248, discusses the low spirits of the men at that time.

of peace be suppressed." To counter the peace talk and arouse the fighting spirit of the troops again, they were told that the harder they hit the enemy in the coming fight the sooner he would yield.<sup>80</sup>

The general failure of the Army-wide attack on the Kriemhilde Stellung on 14 October, in which the 42nd participated, apparently further depressed the morale of the troops, for on 16 October all divisions reproduced exactly a memorandum, obviously from Army, stating that any talk about relief was henceforth forbidden. Also forbidden was exaggeration of losses and casualties in such expressions as "All shot to pieces," "Held up by machine guns and machine gun fire," "Suffered enormous losses," and "Men all exhausted." These expressions were not to be used in official messages or reports, and forbidden in conversations and discussions, since they were generally misleading and always harmful.<sup>81</sup>

It is not difficult to show that an important cause of the low morale was the mounting fear of the enemy's use of gas, and that it was largely responsible for creating so great a straggler problem that, as Bullard said, a solid line of MPs back of the fighting front had become necessary to keep

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80

History, pp. 690 - 91; Memo 306, 42nd Div, 14 Oct (AEF GHQ G - 3 Rpts Box 3327, fol 4). Group Argonne WD, 14 Oct (GFB 25, fol I), also rptd the profound effect on the troops of the exchange of notes, their attitude that of the proverb, "Der Friede steht vor der Tür, ein Esel, der sich 5 Minuten vor 12 noch totschiessen lässt" ["Peace stands before the door, and he is a jackass who lets himself be killed at five minutes to twelve"].

81

Memo 307, 42nd Div, 16 Oct (42nd Div Box 2, 12.2).

the men in the line.<sup>82</sup> The basis of that fear was the gas atmosphere that the enemy maintained over much of the front by his regulated gas fire each day. When it did not cause real casualties, it supported apprehension and panic, and hastened the onset of battle fatigue and exhaustion from prolonged wearing of the gas mask. Something had to be done to cut down on the increasingly large numbers of alleged gas casualties making their way through the MPs to the rear.

As early as 7 September, Division Medical Gas Officers had been appointed throughout the Army to assist at the division triages in separating true gas cases from those faking gas symptoms or who were merely exhausted. There had been little need for them in the St. Mihiel operation, and not until early in October did the AEF become aware of the alarming numbers of gas evacuations. A reminder of their duties was sent to all Division Medical Gas Officer, followed by a letter on 12 October from the Chief Surgeon, AEF, to all divisions urging more vigilant efforts. Far too many men on their own say so were still being evacuated as gas cases to the base hospitals in the rear, only to be found on arrival wholly free of gas symptoms. Large numbers of new men particularly, said the Chief Surgeon, improperly trained or wholly without gas training, on experiencing gas for the first time did not understand its effects and imagined all sorts of ailments. As a consequence, "during or immediately following gas

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82

R. L. Bullard, Personalities and Reminiscences of the War (New York, 1925), p. 267.

bombardments they become panic stricken and rush to the hospitals for relief."<sup>83</sup>

It was said that around mid-October gas evacuations, real, suspected, or feigned, reached "something like 42 percent" of the troops engaged in battle, as "a general average in the AEF."<sup>84</sup> Clearly, it was the enemy's continuous use of gas that produced the "enormous losses" and "exhausted" condition of the men that Army found so harmful, both as fact and verbal expression.

#### Through the Kriemhilde Stellung

When Liggett took over First Army, plans for the assault on the Kriemhilde Stellung had already been completed. He had only to set the hour, 0800 on 14 October. The order issued by the 42nd for the attack was reassuring: "The enemy is withdrawing on the entire western front." Army and corps said so, and it was true enough on the British and French fronts to the northwest.

The three German corps facing First Army, though almost exhausted and their reserves long since committed and weakened, were far from ready to withdraw. They held the hinge of the German line on the Western front that made it possible for the northern armies to give way before the French and British without imperiling their communications or strategic lines of retreat.<sup>85</sup>

<sup>83</sup>

Ltr, DMGO 42nd Div to DGO 42nd Div, 3 Oct, sub: Orgn of Gas Med Dept (Med Dept Box 3796, 470.6); Ltr, Chief Surg AEF to Div Surg 42nd Div, 12 Oct, sub: Rules governing DMGOs (Med Dept Box 3793, fol 13).

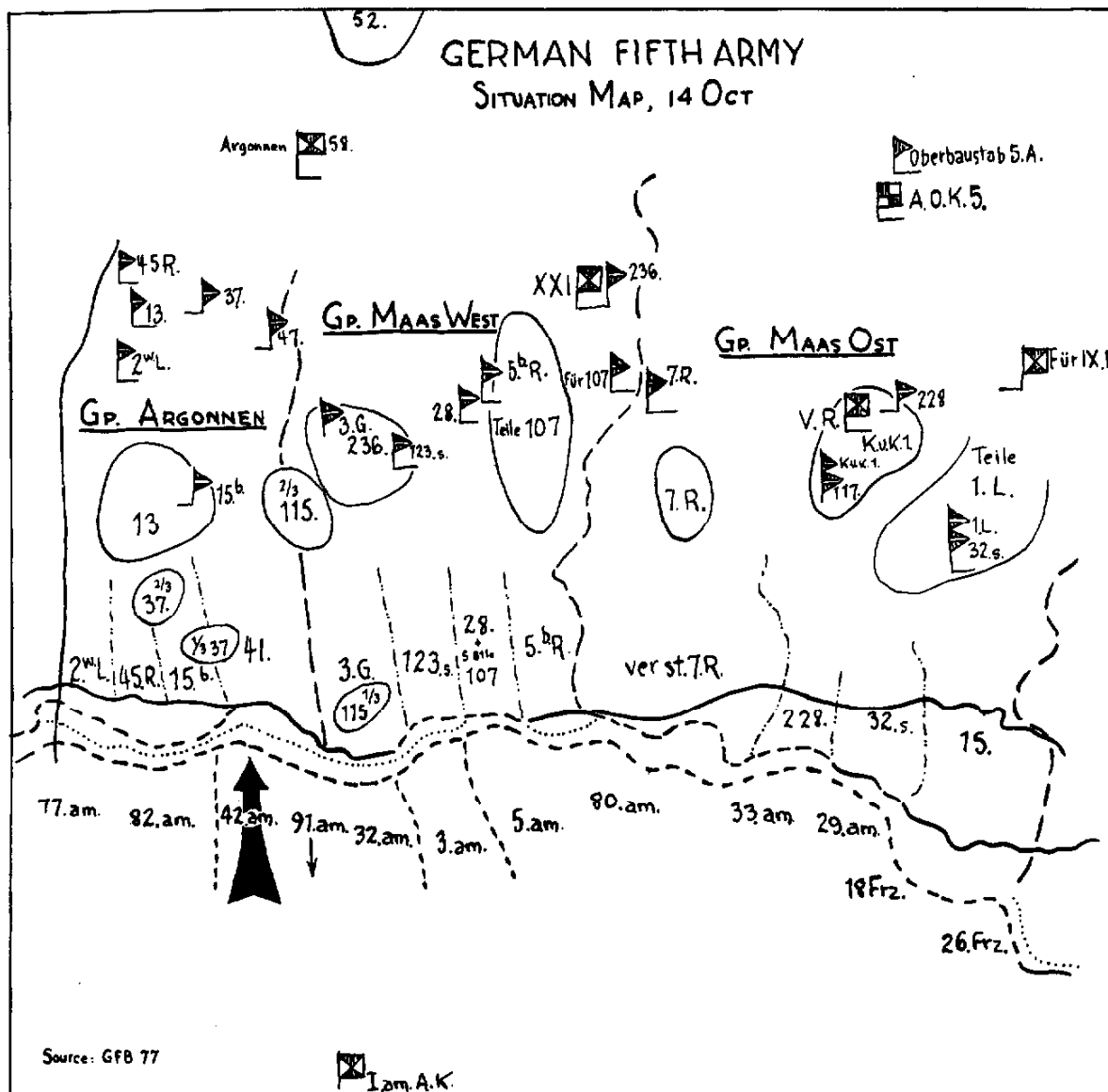
<sup>84</sup>

Ltr, DGO 32nd Div to CG 32nd Div, 9 Nov, sub: Monthly Rpt (1st Army Box 340).

<sup>85</sup>

Telg, Gallwitz to Supreme Hq, 1930, 9 Oct (USA in the WW, IX, 546).





In front of the 42nd Division as it came in were the 15th Bavarian and 41st Divisions of Group Argonne, and to the right the 3rd Guard Division of Maas Group West (Map No. 6). The 15th Bavarian had been brought in as a counterattack division on 12 October, but the condition of the unit it was to support made it necessary to relieve that unit on the morning of the 14th. Except at St. Georges, which was held by the 15th Bavarian, the 42nd Division faced only the 41st Division. This was a recently reconstituted and rested unit, brought from the Metz front the week before. But as a result of its battering by 1st Division on Hill 272, if prisoner interrogations are to be trusted, the strength of its line companies was down to approximately 25 men each.<sup>86</sup>

Corps objectives in the attack on 14 October were the ridge above St. Georges-Hill 253-Bois L'Epasse-La Bergerie Farm-the ridge of the Bois d'Andevanne. The 42nd and 32nd Divisions (V Corps) were to reach them in four stages, the first by the 84th Brigade and 32nd Division, to straighten the line by advancing through the Bois de Romagne to Musarde and Tuilerie Farms. In the second stage three hours later, all regiments were to advance, reaching the line Hill 206-Fonte de la Cavière. The third advance, two hours after, would carry them above St. Georges and Landres et St. Georges, and finally to a line through Hill 253-La Bergerie Farm, thus flanking the

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86

74th Brig (41st Div) WD, 10 Oct (GFB 239, fol I); 15th Bav Div WD, 13 Oct (GFB 167, fol III); Rpts of interro of 91 prisoners capt'd 16 Oct (42nd Div Box 6, 22.3). Note: The normal strength of a German company was between 120 and 125 men.

Bois des Hazois.<sup>87</sup>

Corps and division orders called for a two-hour preparation by the combined 42nd and 1st Division artillery on enemy strongpoints on the Cote de Chatillon, Hill 262, north edge of the Bois de Romagne, and Hill 288, with smoke shells in the last three minutes to blind observation. The infantry brigades were to advance alternately, using all available artillery for each attacking brigade. Although in the preparation and in the attack "gas shells [were to] be used freely," none were fired on the 42nd Division front and gas was not mentioned in subsequent attack orders. Last minute changes in the orders made it clear that the 42nd Division attack was to be the principal effort on the Army front that day, with the units on either side supporting it.<sup>88</sup>

In the attack the troops of the 42nd got barrage fire and not the promised concentrations, because of shortage of ammunition. Even the 25,000 rounds of HE fired in the preparation seem to have been largely wasted. So random was the fire that the enemy thought it had been delivered with trench mortars. An artillery battalion commander explained: "Owing to enemy control of the air [the artillery had] been unable to secure adequate regulation." As a result, the inadequate cover and flanking enemy fire "contributed materially

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87

FO 59, 1st Army, 1100, 12 Oct (1st Army Box 32, 32.1); FO 73, V Corps, 2300, 12 Oct (V Corps Box 7, 32.1); FO 36, 42nd Div, 0500, 13 Oct; History, pp. 644 - 45.

88

Suppl to FO 73, V Corps, 2130, 13 Oct. FO 59, 1st Army, par 3 (x), above, said that "Corps and division commanders will utilize to the fullest extent possible the advantages of lethal gas in preparing for and assisting the infantry attack, and in causing casualties in the rear areas and along lines of communications."

to prevent success" of the attack.<sup>89</sup>

It was 1225 hours on 14 October before the 168th Infantry got into the enemy trenches on Hill 288. "The battalion which took the hill," said MacArthur, "[was] very badly shattered....The position...was superbly defended and heroically won."<sup>90</sup> Five hours later, as the division on the right took Romagne and flanked Côte Dame Marie by driving through to the Sommerance-Romagne road, the 168th joined it there and found the enemy firing down on them from the hill to their front.<sup>91</sup>

Against steady fire from Hill 242 and the Côte de Chatillon, the 167th Infantry got some of its troops forward as much as half a kilometer before they were forced to dig in. MacArthur estimated there were all of 200 machine guns in the Côte de Chatillon, pinning down all four of the battalions of his brigade that he had put into the line. Without a careful artillery preparation, he said, it was impossible to take the wood.<sup>92</sup>

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89

Memo, 67th FA Brig, 13 Oct (42nd Div Box 35, 32.15); History, pp. 646 - 47, 731; G - 3 Memo 43, 42nd Div, 17 Oct, and Memo, Hq 42nd Div for CG 67th FA Brig, 17 Oct (both in 42nd Div Box 9, 32.15).

90

Msg, MacArthur to Hq 42nd Div, 1225, 14 Oct (42nd Div Box 11, 32.16).

91

Ltr, G - 2 V Corps to CG V Corps, 28 Dec, sub: Suggestions for revised rpt of the C-in-C (V Corps Box 59, fol 3).

92

Msg, MacArthur to Hq 42nd Div, 1435, 14 Oct. Sketch, Position of 2nd Bn, 18th Regt (41st Div), 12 Oct (GFB 239, 74th Brig, fol I, p. 45), shows 6 heavy and 7 light machine gun nests in the Côte de Chatillon.

The 165th Infantry on the left was also stopped by the machine gun fire from the Cote de Chatillon, as well as frontal fire from the enemy positions below Landres et St. Georges and long-range gas and shrapnel fire from the Bois des Hazois. The 166th Infantry, attacking from below Sommerance with the 82nd Division was stopped at Hill 230 until that position was flanked by the 82nd, and then advanced slightly towards its second objective, Hill 206, before machine gun fire brought it to a halt.<sup>93</sup>

The assault battalion of the 166th was said to have lost almost 300 killed and wounded that day, 240 of them replacements received the week before. Many of the new men, said the battalion commander, had not even been instructed in the loading of their rifles. It is doubtful whether any of them had had any gas training, let alone gas experience, and the gas fire, which had been almost continuous ever since the troops arrived in the sector, started to rain heavily over the attack front a half hour after the troops began their advance that morning. A total of 662 gas shells, probably diphenylchloroarsine, was reported fired by 41st Division artillery that day. Though it acted largely to keep troops masked rather than produce casualties, G - 3 reported over 290 gassed

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93

History, pp. 649 - 52, 669 - 71, 705. The 82nd broke through the 15th Bav Div and got into St. Georges from the west that day but lost it the next. 41st Div WD, 14 Oct (GFB 191, fol II); Gp Argonne WD, 14 Oct (GFB 25, fol I).

on the 14th, as well as over 100 killed and 696 wounded.<sup>94</sup>

The line had been somewhat straightened but the 84th Brigade was still well below the Côte de Chatillon and its supporting outposts at Musarde Farm, Hill 242, and Tuilerie Farm. The corps order on the night of the 14th continued to insist that the enemy's resistance was breaking on the First Army front.

This was more true than V Corps knew. Though the divisions had been reluctant to use gas that morning, corps had not, and the fortified town of Romagne had been taken following a bombardment that included over 2,000 white phosphorus shells, 5,000 No. 5 phosgene shells (more than 1,000 of them 155-mm. caliber), and 3,000 No. 6 lachrymatory shells. As a result, a regiment of the 3rd Guard Division of Maas Group West had retreated before the 32nd Division as far as Cavanière that day, exposing the flank of Group Argonne's 41st Division and endangering the line of the Kriemhilde Stellung all the way up to the Côte de Chatillon. The connection made by a reserve regiment thrown into the break between the 41st and 3rd Guard Division late in the day was described as very

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94

83rd Brig Msg Center Log, 14 Oct (42nd Div Box 13, 33); 79th FA Regt (41st Div) WD, 14 Oct (GFB 191, fol III, pp. 131 - 32); DOR 4, 42nd Div, 14 - 15 Oct; History, pp. 705 - 6.

Losses in the German regt opposite the 83rd Brig were rptd as 95 killed and wounded and 5 gassed, from phosphorus and gas; in the regt at Hill 288 losses were rptd only as "heavy" (74th Brig WD, 14 Oct, GFB 239, fol I; 41st Div WD, 14 Oct, GFB 191, fol II).

thin (Map No. 7).<sup>95</sup>

In resuming the attack on 15 October, the brigades were again to advance alternately with maximum artillery support, the 83rd mopping up St. Georges and Landres et St. Georges, while the 84th Brigade exploited the Cote de Chatillon and the woods near Tuilerie Farm. Preparations through the night were badly hampered when the enemy kept the troops on the St. Georges front and the reserves and artillery positions in Exermont ravine under continuous gas fire.<sup>96</sup>

Little progress was made in the rain and storm on 15 October. "During the [previous] night the enemy made liberal use of gas shells upon Exermont and the adjacent ravine and during the battle...rained gas upon the slopes over which our troops were obliged to pass....During the afternoon...a heavy concentration of gas shell accompanied by high explosive was fired on our lines along the western edge of the Côte de Chatillon." Yet 41st Division artillery records show only 192 gas shells fired on 15 October.<sup>97</sup>

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95

Ltr, CGO V Corps to CGO 1st Army, 19 Nov, sub: Rpt on Recent Opns (GAF - V Corps); GP Argonne WD, 14 Oct, and 41st Div WD, 14 Oct, above; Gp Maas West Order Ia 799, 14 Oct (GFB 26, fol V, p. 54).

Note: No other confirmation for the gassing of Romagne has been found in German or American records. 32nd Div rpts say only that both Romagne and Cote Dame Marie were outflanked that day and later cleared.

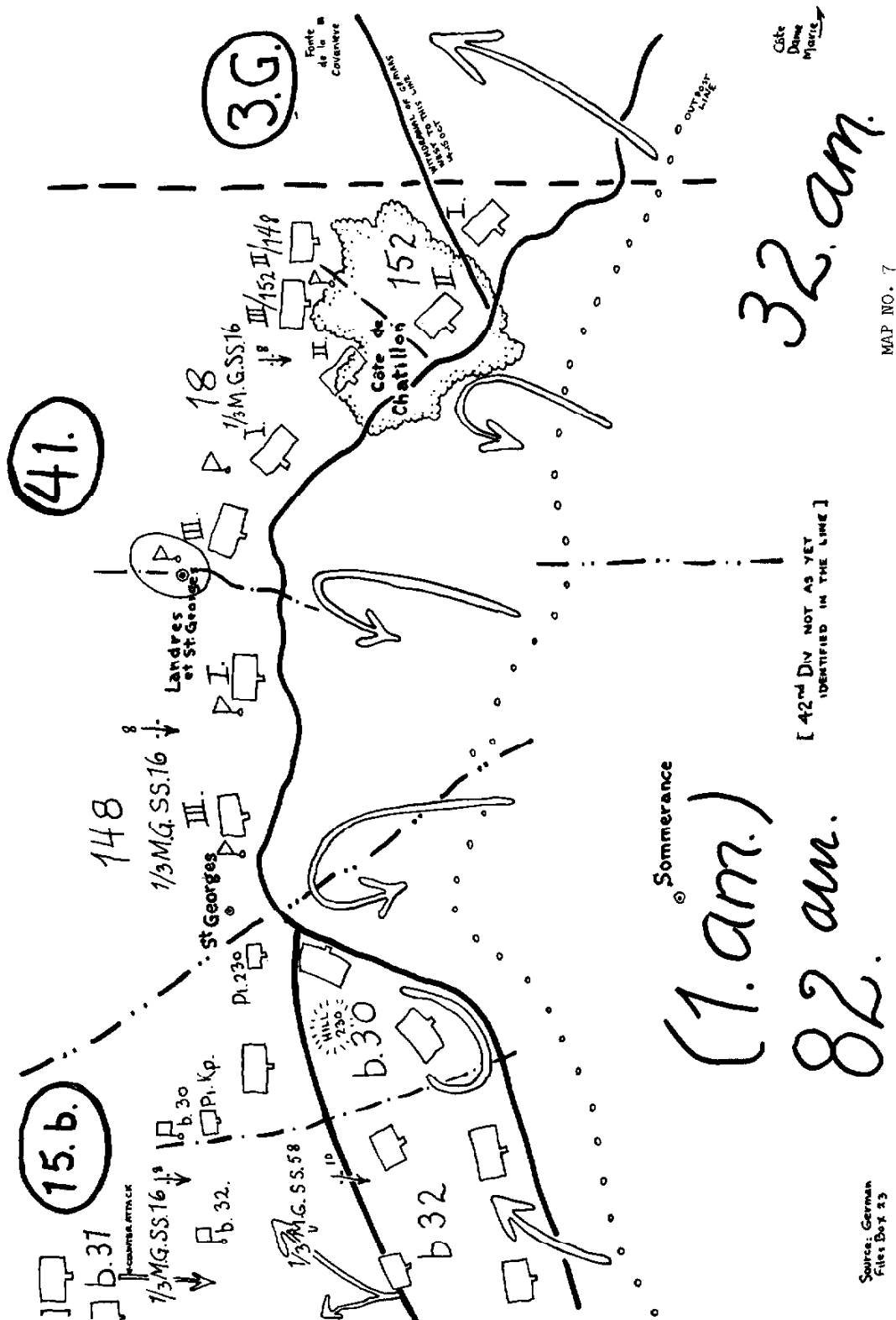
96

FO 75, V Corps, 1945, 14 Oct; FO 37, 42nd Div, 2330, 14 Oct; DOR 4, 42nd Div, 14 - 15 Oct.

97

SOI 142 and 143, 42nd Div, 14 - 16 Oct; Rpt of Activities, 149th FA, 15 - 16 Oct (42nd Div Box 36, 20.8); 79th FAR (41st Div) WD, 15 Oct (GFB 191, fol III, p. 134).

SECTION OF GROUP ARGONNE SITUATION MAP  
SHOWING MAIN LINE OF RESISTANCE AS OF 0500, 14 OCT  
AND ACTION ON 14-15 OCT - BEFORE 42ND DIV WAS IDENTIFIED





(There is reason to believe that even as little gas as this was sending large numbers of men to the rear. The Division Gas Officer later reported that less than a third of those who arrived at the gas hospital at Baulny in that period had gas symptoms, over half the remaining were ordered back to the front, and the remaining men admitted as sick or exhausted.<sup>98</sup>)

After repeated attacks, mixed elements of six companies of the 168th Infantry finally dug in within half a kilometer of Musarde and Tuilerie Farms, with the enemy still holding most of Hill 242 between the farms. The 167th Infantry, now for the most part in the open facing the machine guns of the Côte de Chatillon, dared not advance at all after patrols found the wire on the western slopes of the hill wholly undamaged by the preparatory fire that morning.

Fearfully, the German 41st Division reported that if the division coming in to relieve the 3rd Guard could not restore the line on the left flank, the Côte de Chatillon could not be held much longer.<sup>99</sup>

On the left, mechanical troubles and heavy casualties stopped the tanks assigned to the 83rd Brigade somewhere south of Sommerance, and the attack of the 166th and 165th Infantry, running into infiltrating enemy troops,

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98

Memo, DGO 42nd Div for CG 42nd Div, 22 Oct, n.s. (42nd Div Box 97, fol 470).

99

41st Div WD, 15 Oct; and Gp Argonne WD, 15 Oct, above. Part of that relief division, the 13th, was diverted to reenforce the Côte de Chatillon.

counterattacks from Landres et St. Georges, "withering and well-timed machine gun fire...[and] very active H.E. and gas shell fire," got nowhere. By late afternoon the attack battalions of both regiments were reported "badly shot up and pretty well disorganized," the battalion of the 165th Infantry reduced to six officers and fewer than 400 men. Its commander, Major Donovan, was himself evacuated in the first hour of the attack with a machine gun bullet through the knee.<sup>100</sup>

Numbers of the dead of both regiments of the 83rd Brigade were left on the enemy wire before St. Georges and Landres et St. Georges on the 15th. They were still there on 1 November. Again, the green toops probably suffered most, as G - 3 reported casualties of 54 killed, 398 wounded, and 144 gassed. The German 148th Regiment opposite them reported 12 killed and wounded that day.<sup>101</sup>

Although the 42nd Division was to use considerable gas later, it does not seem to have occurred to anyone that the immediate situation demanded gas -- on the wired trenches before St. Georges and Landres et St. Georges, on the machine gun nests in the Cote de Chatillon, and on the hostile artillery in the

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<sup>100</sup>

83rd Brig Msg Center Log, 15 Oct; History, pp. 657, 695 - 96, 708 - 9.

<sup>101</sup>

SOI, 165th Inf, 15 Oct (42nd Div Box 27, 32.6); History, pp. 657, 694; DOR, 42nd Div, 15 - 16 Oct; 74th Brig (41st Div) WD, 15 Oct (GFB 239, fol 1).

The 83rd Brig Msg Center Log, 15 Oct, claimed that "entire companies, dead or wounded, were left in front of the wire." Div Surg, Rpt on Med Dept in the 42nd Div, n.d. (Med Dept Box 3792, fol 1), said that by 2100, 15 Oct, the field had been cleared of wounded, with 1,211 cases evacuated to the rear since the start of the attack.

Bois des Mazois and Bois l'Epassse. Division was reluctant to use gas during an attack, and the most the 42nd would do was to plan a great smoke screen along the east and west boundaries of the 83rd Brigade between its 2nd and 4th objectives, to block the flanking fire from superior enemy positions on the right and left.<sup>102</sup> Even that wasn't carried out, owing to a change in Army plans.

The key to the German resistance on that front was clearly the Côte de Chatillon, and unaware that the Germans had already conceded its loss, on the night of 15 October at a conference of General Menoher, General MacArthur, and Colonel Hughes (Chief of Staff), MacArthur asked to make a do-or-die brigade attack on the height, using the whole of the 151st Field Artillery for supporting fire. Although Summerall, the corps commander, and Drum, Army Chief of Staff, reportedly wanted a general attack, they were persuaded that the plan might work.<sup>103</sup>

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102

FO 38, 42nd Div, 15 Oct. For another screening plan, see G - 3 Memo 45, 42nd Div, 17 Oct (42nd Div Box 9, 32.15).

103

History, pp. 658 - 63. Hughes credited MacArthur with the plan (p. 658); Lt Col Bare, CO 167th Inf, said it was his (p. 679); and Maj Norris, CO 2nd Bn 167th Inf, said it was his (p. 684).

Lt Col Bare is quoted as saying that Summerall ordered Chatillon taken on 16 Oct and MacArthur replied: "We will take [it] by tomorrow afternoon by 6 o'clock or report a casualty list of 6,000 dead...[including] me." MacArthur's own reported words are: "If this Brigade does not capture Chatillon you can publish a casualty list of the entire Brigade with the Brigade Commander's name at the top" (History, pp. 660, 678).

This planning, which figures so largely in the official history, is not supported by the records. Army orders that afternoon said the principal effort on 16 October would be made by I Corps, with the adjacent 42nd Division protecting its flank. Even this plan of attack was jeopardized when a German prisoner taken during the day declared that a great counterattack was to be made on the left flank of Army. Rear elements in I and V Corps were at once alerted, and the 42nd and 32nd Divisions began preparing a line of resistance along Côte de Maldah --north edge of the Bois de Romagne--heights of the Bois de Gesnes -- Côte Dame Marie.<sup>104</sup>

When the enemy counterattack failed to materialize by morning, MacArthur attacked as planned. A half-hour artillery preparation was put on the slopes of Chatillon, but according to the 167th Infantry, it was the 151st Machine Gun Battalion, not the 151st Field Artillery, that supported the attack. Sixty machine guns on Hill 263 were said to have fired the impossible total of a million rounds in a 45-minute barrage on Chatillon as the troops advanced.<sup>105</sup>

At 1030 hours, provisional battalions of the 167th and 168th Infantry, made up of the most effective companies left in the brigade, assaulted Tuilerie Farm, the crests of Hill 242, and Chatillon itself. Thrown back repeatedly, MacArthur reenforced the battalions and sent them up again. Outflanked the previous day and its forces at Cavanère pushed back by the advance of the

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<sup>104</sup>

FO 66, 1st Army, 1000, 15 Oct; FO 67, 1st Army, 1500, 15 Oct; FO 76, V Corps, 2345, 15 Oct; FO 38, 42nd Div, 15 Oct; History, p. 664.

<sup>105</sup>

History, pp. 679 - 80, 713.

32nd Division into the Bois de Bantheville, the enemy on the Côte de Chatillon withdrew to the Bois des Hazois in the late afternoon.<sup>106</sup> Elements of the two regiments linked up on the heights. Neither the 83rd Brigade nor I Corps made any significant advance that day. It was enough to have taken the Côte de Chatillon, a critical element, said Group Argonne, in the Kriemhilde Stellung.<sup>107</sup>

Again that day the enemy, "now habitually [mixing] explosive gas shells with his fire of high explosive," made "large use of gas shells" on the front lines and forward areas, and gas casualties were high.<sup>108</sup> But MacArthur's do-or-die promise to leave if necessary 6,000 dead on the Côte de Chatillon was not kept. Division casualties on 16 October were held to 36 killed, 254 wounded and 101 gassed — the smallest numbers in the three days of fighting.<sup>109</sup>

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<sup>106</sup>

41st Div WD, 16 Oct.

<sup>107</sup>

Gp Argonne, WD, 15 and 16 Oct, above; History, pp. 664 - 65, 667.

Lt Col J. D. Hall of Hist Sec GS, in Field Notes made 15 - 23 May 1919 (42nd Div Box 3, 18.2), found Musarde and Tuilerie Farms completely destroyed and the extensively prepared south edge of Chatillon showing evidence of hard fighting. But the Kriemhilde position to the northwest was still largely intact in 1919. Col Hall complained of the difficulty of following the action because of the incomplete records of the division.

<sup>108</sup>

SOI 144, 16 - 17 Oct; DOR, 16 - 17 Oct; 79th FAR (41st Div) WD, 16 Oct (GFB 191, fol III, p. 135).

<sup>109</sup>

DOR, 16 - 17 Oct. Disconcerting is the statement attributed to Col Noble B. Judah, G - 2, in History, pp. 732 - 33, that by 18 Oct the div had taken prisoners from 23 enemy divisions and 19 independent units. No confirmation has been found in the records.

Gas casualties up to 16 October, reported by G - 3 as 580 and by the Division Surgeon as 700,<sup>110</sup> represented only those evacuated by the Division Medical Gas Officer to base hospitals, although it is doubtful whether anyone in the division had escaped the effects of gas inhalation or near exhaustion as a result of prolonged wearing of the gas mask. The division had lasted just three days before it was ordered to dig in and hold. The lessons learned at high cost along the Ourcq and apparently applied so well at St. Mihiel just didn't seem to apply in the Meuse-Argonne. The exhaustion of troops was now Army-wide.

"No further information of the enemy"

With the break in the Kriemhilde position at the Côte de Chatillon, Côte Dame Marie, and Romagne on 14 - 16 October, Liggett ordered what amounted to a cease fire across the First Army front.<sup>111</sup> Two weeks of continuous combat, high casualties, and "plentiful use of gas" with little or no gains, had taken all the fight out of the troops. They had to be rested.<sup>112</sup>

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110

Analysis, p. 80. Capt. Gorrill, DGO, rptd 4 gas cases on 12 Oct and 400 for the period 13 - 20 Oct (Rpt on Gas Atk, 12 Oct; Telg, DGO to C CWS, 22 Oct, in GAF - 42nd Div).

111

Opns Rpt, 1st Army, 16 Oct, quoted in USA in the WW, IX, 280. FO 70, 1st Army, 1200, 17 Oct, ordered organization of the front for general defense.

112

Rpt of 1st Army, and Memo, 1st Army for C-in-C, 17 Oct (USA in the WW, IX, 286, 292 - 95), described their plight as "loss of cohesion and... uncoordinated action." Cf. Ltr, CofS V Corps to GCs 42nd, 32nd Divs, etc., 22 Oct, sub: Care of sick and exhausted soldiers (42nd Div Box 97, fol 704), on the "depressed mentally and physically."

For his failure to take St. Georges and Landres, Summerall directed the relief of Lanihan of the 83rd Brigade, replaced on 17 October by Colonel Henry J. Reilly. Colonel Mitchell, the 165th Infantry commander, was also relieved and Colonel Hough of the 166th was warned. Bad weather and general fatigue were unacceptable excuses for the poor morale and inactivity of the brigade.<sup>113</sup>

The 42nd Division history said a general attack was planned for 16 October but called off pending the arrival of reenforcing artillery. Another Army attack on 20 October was also cancelled when a general staff officer, said to be carrying plans of the attack, was captured the night before.<sup>114</sup> But orders in the period called only for continued exploitation of the front and organization of the line of defense. The exploitation consisted in sending out patrols that quickly recoiled before "an unbroken chain of machine guns along the enemy line," the results translated daily in corps field orders as "No further information of the enemy."<sup>115</sup>

The cease fire was nominal. As much to hearten the troops as to harass and soften up the enemy, then at work on two new positions, the Senta and Freya Stellungen, above the Kriemhilde, on 17 October Army ordered the divisions

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<sup>113</sup>

History, p. 741; Cheseldine, Ohio in the Rainbow, p. 256.

<sup>114</sup>

History, p. 710.

<sup>115</sup>

FO 40, 42nd Div, 1915, 16 Oct; SOI 149, 42nd Div, 21 - 22 Oct; Ltr, MacArthur CG 42nd Div to CG 1st Army, 12 Nov, sub: Rpt on Opns in the Argonne (42nd Div Box 14, 33.6).

of V and III Corps to begin a daily systematic bombardment of enemy machine gun and battery positions, lines of resistance, and reserve areas. It was to be observed, not map, fire, and as supply was limited, the artillery was warned to make every shot count.<sup>116</sup> In the next two weeks almost half of each day's fire by the 42nd Division was made with gas shell. For once, division had no choice about firing gas shells; it was an Army order.

The 42nd began its part of the bombardment, under the direction of the Corps Chief of Artillery, by putting 2,000 No. 4 cyanogen chloride shells into the Bois l'Epassé on 18 October. The next day the artillery was ordered to fire 4,900 No. 5 phosgene and No. 6 cipalite (lachrymatory) shells into the Bois l'Epassé, Bois des Hazois and the woods north of St. Georges and Landres (Map No. 8).<sup>117</sup>

On 20 October, 408 gas shells (unidentified) were fired into Landres et St. Georges, and between 22 and 29 October an additional 9,589 gas shells, all non-persistent agents, were put on the previous targets and on the enemy front lines, enemy roads, and Hill 253. This volume of gas fire is confirmed in a Corps Gas Officer report showing over 11,000 gas and smoke shells fired

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<sup>116</sup>

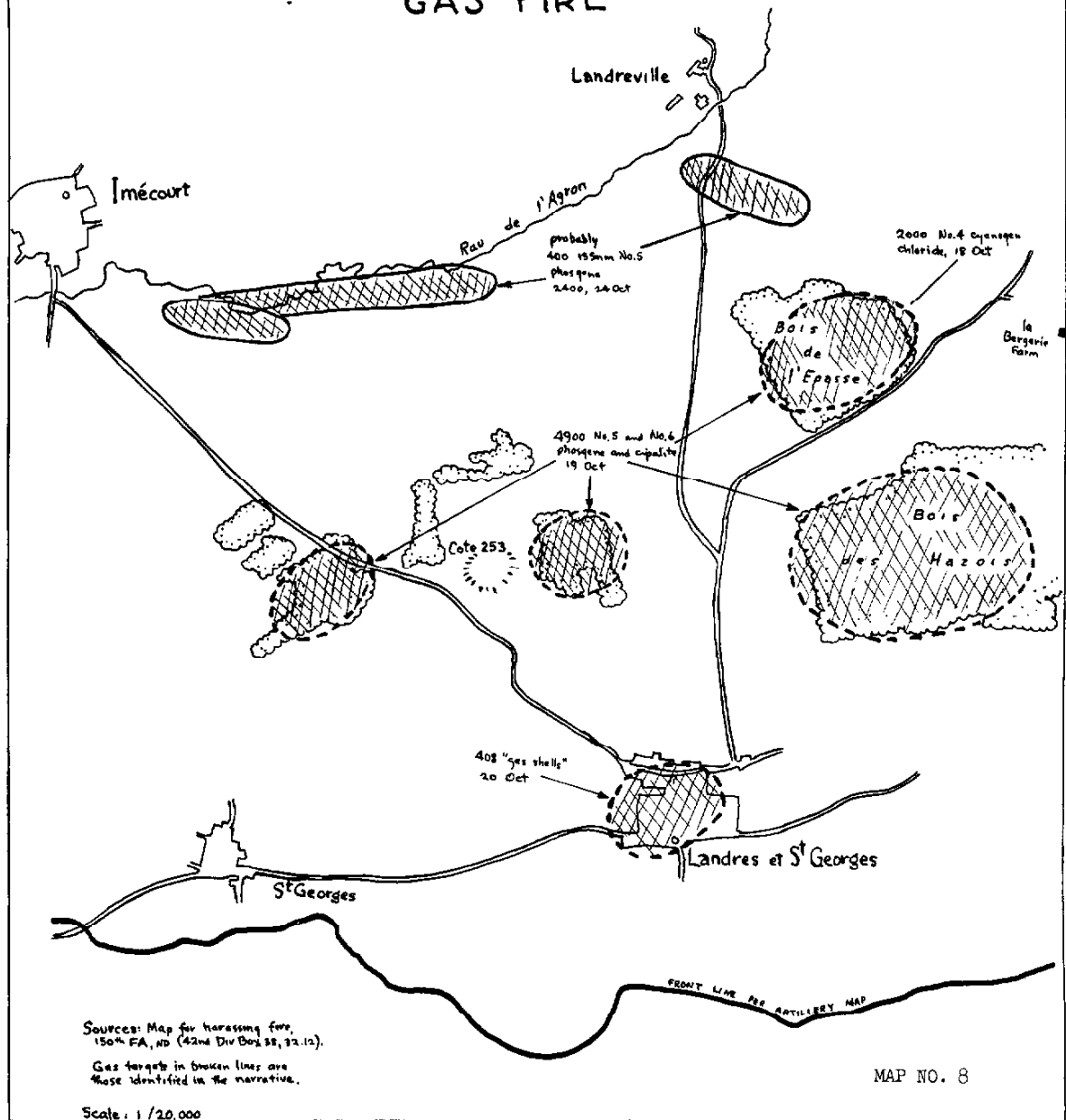
SOI 145 and 146, 42nd Div, 17 - 19 Oct; FO 72, 1st Army, 1245, 17 Oct; FO 79, V Corps, 2030, 17 Oct, et seq.

<sup>117</sup>

DOR, 151st FA, 17 - 18 Oct (42nd Div Box 39, 33.1); Memo, 67th FA Brig, 18 Oct, and atchd V Corps arty order, 18 Oct (42nd Div Box 35, 32.15); G - 3 Memo 48, 42nd Div, 1515, 18 Oct (42nd Div Box 9, 32.15).



# 42<sup>ND</sup> DIVISION GAS FIRE



on 14 - 15 October and almost 30,000 more between 16 - 31 October.<sup>118</sup>

War Diaries of the German 41st Division almost completely ignore this weight of gas fire. In the period 18 - 29 October the gas and shell fire of the Americans was said to have resulted in 97 killed, 226 wounded, and just 11 gassed, the latter on 23 and 27 October. No casualties resulted apparently from the shelling of batteries below Landreville on 24 October with "about 400 rounds of gas," although this was, like most of the earlier fire, phosgene, and in this case was in 155-mm. shells.<sup>119</sup>

The enemy casualty reports may be correct. Cyanogen chloride, a poor agent in the field, and cipalite, an obsolete lachymator, were not likely to produce many casualties, but most of the gas was phosgene, a deadly agent except when fired, as the 42nd Division artillery seems to have done, over a period of hours. The accompanying HE fire undoubtedly acted to dissipate any slight concentration of phosgene.

Enemy gas fire, reported on seven of the last twelve days of October,

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118

DOR, 149th FA, 19 - 20 Oct (42nd Div Box 36, 22.7); DOR 7 - 18, 42nd Div, 17 - 29 Oct (42nd Div Box 14, 33.1); SOI 145 - 54, 42nd Div, 17 - 27 Oct (42nd Div Box 4, 20.1); Ltr, CGO V Corps to CGO 1st Army, 19 Nov, sub: Rpt on Recent Opns (GAF - V Corps).

G - 3 rptd 16,897 gas shells fired by the 42nd Div arty, G - 2 rptd 14,179 gas shells in the period 17 - 27 Oct, as well as 44,060 75-mm. HE and 7,524 155-mm. HE.

119

41st Div WD, 18 - 29 Oct; 3rd Bn 148th Regt (41st Div) WD, 24 Oct (GFB 191, fols II and III).

was described as "scattered," "gas shells being used," "large proportion of gas shells," and "gas shells in appreciable quantities," with "about 2,000 gas shells, lethal and sneezing, no mustard gas" reported on 27 - 28 October. Altogether, G - 2 recorded 18,540 HE and 4,595 gas shells coming into the sector in the period 21 - 31 October, the principal gas targets the front lines, Hill 263, Côte de Maldah and the valley to the south, Hill 247, Bois de Romagne, and Tuilerie Farm. Casualties were variously estimated as 20 killed, 258 wounded, and 198 gassed, and as high as 40 killed, 341 wounded, and 226 gassed.<sup>120</sup>

Records of the 79th Field Artillery Regiment, the artillery command of the 41st Division, reveal that between 14 and 30 October, when it was relieved, it fired no more than 7,366 HE shells and 1,801 gas shells, of which 316 were yellow cross (mustard gas), the rest blue cross (diphenylchloroarsine). Gas was fired on all but four of those seventeen days -- as many as 662 rounds on 14 October, as few as 26 rounds on 17 October -- with all the yellow cross fired on 19, 20 and 22 October. Identified gas targets appear on Map No. 9.<sup>121</sup>

To this fire should be added that of the 15th Bavarian Division, which reported gassing assembly areas, billets, and roads in the Sommerance area on 16 October, and Georgen-Aue (south of St. Georges), Sommerance, and the woods

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<sup>120</sup>

SOI 149 - 59, 42nd Div, 21 - 31 Oct, and DOR, 21 - 31 Oct; Analysis, p. 80.

<sup>121</sup>

79th FAR WD, 9 - 20 Oct; 3rd Bn, 148th Regt (41st Div) WD, 24 - 29 Oct (GFB 191, fol III, pp. 98, 127 - 44).

No confirmation is available for the DGO rpt (in GAF - 42nd Div) of 350 mustard gas shells on 27 Oct, resulting in 47 casualties among the 99 men in two batteries of the 151st FA.



to the north on the mornings of 18 and 19 October, all presumably with blue cross gas. Number of rounds is not given, but it was probably less than 1,000. Finally, on the night of 30 - 31 October, Sommerance was bombarded with 848 rounds of yellow cross gas.<sup>122</sup>

The 42nd Division initially reported its total casualties in the Argonne from 10 October to 1 November as 380 killed, 1,715 wounded, 699 gassed, and 78 missing -- a total of 2,872.<sup>123</sup> The official history said the Argonne battle cost the division 695 killed and 3,175 wounded, or 3,870 officers and men. Other sources report total wound casualties between 2,049 and 2,146, and gas casualties between 862 and 1,062, with over half the gas casualties occurring on 14 - 16 October. There were gas casualties every day the division was in the sector.<sup>124</sup>

#### The Last Preparation

In the last two weeks of October, Group Argonne reported American artillery fire searching and ranging deep in its rear areas, tanks crossing the Aire and gathering along the front, and, as a result of its patrol encounters

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122

Morning rpts, 15th Bav Div, 16 - 18 Oct (Annexes to WD, GFB 167, fol III, pp. 28, 34, 38); Combat Rpts, 15th Bav Div, 30 and 31 Oct (GFB 167, fol IV, pp. 224 - 25, 234).

123

Ltr, CG 42nd Div to CG 1st Army, 12 Nov, sub: Rpt on Opns in the Argonne (42nd Div Box 14, 33.6).

124

History, p. 846; Analysis, pp. 75, 80.

and probes, evidence that the main strength of the Americans was "disposed far from our lines....preparing new attempts for a breakthrough....This impression is reminiscent of the enemy situation just before 26 September."<sup>125</sup>

Concerning the expected attack a German artillery commander said: "The principal mission of the artillery [will be] to hammer with speed and accuracy at the large vulnerable mass targets of awkward, incautious troops which the enemy offers us before they reach our positions. Only thus can our sorely beset line troops be protected and the mass attack be shattered." Although most of the Kriemhilde Stellung remained intact and work was going forward on the Senta and Freya positions behind it, there were simply insufficient reserves available to contain another attack like that of 26 September. The Senta and Freya would not be enough. On 24 October Group Argonne admitted as much: "Preparations for withdrawal behind the Meuse will be expedited from this time forward." <sup>126</sup>

On 28 October the relief of the 41st by the 52nd Division was begun, with the 31st Division coming in as its counterattack division. The 52nd had fought the 1st Division from Exermont to Landres et St. Georges. It knew the ground well. Beyond observation of desultory shell fire, Group Argonne had "nothing

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<sup>125</sup>

Group Argonne WD, 17 - 31 Oct (GFB 25, fol I).

<sup>126</sup>

Arko 15 Arty Order 300, 18 Oct (15th Bav Div, GFB 167, fol III, p. 32); Gp Argonne WD, 24 Oct, above.

special to report" on 30 and 31 October.<sup>127</sup> It waited.

Meanwhile, on 20 - 21 October the 83rd Brigade took over the 84th Brigade front, spanning the sector except for a portion on the right, turned over to the incoming 89th Division.<sup>128</sup> That same day corps issued preliminary orders for the next general assault. The 42nd Division on a brigade front would take St. Georges, Landres et St. Georges, and Hill 253 the first day. The 89th on the right, advancing from Tuillerie Farm-Bois de Bantheville, would invest the Bois des Hazois. A unit of the 1st Gas Regiment was to assist the 42nd in the attack with smoke and thermite, and "as free a use of non-persistent gas will be made [by all artillery] as considerations of destructive and barrage fire will permit."<sup>129</sup>

Four days later, when Liggett decided to shift the weight of the attack from I Corps on the left to V Corps in the center, new orders extended the initial objective to the heights in the Bois de Barricourt, some seven kilometers north of Landres et St. Georges. In the two-hour preparation, gas was to "be freely employed to neutralize enemy organizations," and the plan of artillery fire in the corps would be prepared by the Corps Artillery Commander. Another new note in the order, also born of experience, was that

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<sup>127</sup>

52nd Div WD, 26 Oct (GFB 197, fol III, p. 4); Gp Argonne WD, above.

<sup>128</sup>

FO 41, 42nd Div, 20 Oct.

<sup>129</sup>

FO 84, V Corps, 1300, 20 Oct (V Corps Box 7, 32.1); FO 42, 42nd Div, 1100, 21 Oct.

individual fire superiority rather than sheer man power [was to] be the driving force of the attack." This time there was to be no mopping up, and the artillery would not be displaced forward. The attack was going through.<sup>130</sup>

The 42nd Division was not to make the attack. Summerall, commanding V Corps, later explained that "Army wanted to put in fresh divisions with the artillery barrage which I had planned." The excuse was lame and left-handed. Although the 83rd Brigade made a special plea to be allowed to make the assault, it is more likely that Army wanted its regulars in the van for the big show.<sup>131</sup>

The 2nd Division, passing through the 42nd at the hour of attack, would advance on successive brigade fronts, with the 1st Division behind it. The 42nd was to go into I Corps reserve as soon as it was relieved.<sup>132</sup>

In the two-hour preparation on the morning of 1 November, the guns of V Corps fired 187,317 shells or almost three times the number fired by the corps on either side. Army records show that 15,009 of these shells were gas (I and III

130

FO 90, V Corps, 0800, 24 Oct. 1st Army Battle Instructions, 22 Oct, on which the corps order was based, finally appeared as FO 88, 1st Army, 1500, 27 Oct (corrected copy). See GHQ AEF G - 3 Rpts Box 3256 and USA in the WW, IX, 313.

131

History, pp. 748 - 49; Ltr, CO 83rd Brig to CG V Corps, 23 Oct, sub: Atk by the 83rd Inf Brig (42nd Div Box 22, 10.2). James G. Harbord in The American Army in France, 1917 - 1919 (Boston, 1936), p. 451, said: "In the battle order [on 1 November] the front lines were...all Regular or National Army Divisions. The National Guard Divisions were in reserve."

132

FO 82, 1st Army, 1900, 22 Oct, put 1st and 2nd Divs in V Corps reserve. The 42nd Div issued no FOs between 21 - 26 Oct, and FOs 47 and 48, 42nd Div, 31 Oct, were silent about going into I Corps reserve.



Corps fired, 8,891 and 5,237 gas shells, respectively), but the 42nd Division history, citing the Historical Section, General Staff, reports this same number of shells as shrapnel, not gas.<sup>133</sup> Corps records also deny this great weight of gas, showing that 1,564 155-mm. No. 5 phosgene shells were fired on the right of V Corps (i.e., in front of the 89th Division), and a total of 11,748 75-mm. white phosphorus shells across the corps front.<sup>134</sup> Although the 89th Division protested the use of any gas at all, the gas fire was carried out by corps and Army artillery, probably on the Bois l'Epassé as indicated in Map No. 10, although no confirmation other than the map has been found.<sup>135</sup>

The only gas fired on the 2nd Division front during the preparation were 80 phosgene bombs, mixed with HE and thermite, put on four targets in front of St. Georges by a company of the 1st Gas Regiment (Map No. 11). Two of the targets were said to be "thickly studded with machine gun emplacements," the other targets trenches with machine guns in position.

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133

Rpt of Munitions Br, GS, 1st Army, n.d., (AEF GHQ G - 3 Rpts Box 3090, fol 243); chart in History, p. 753.

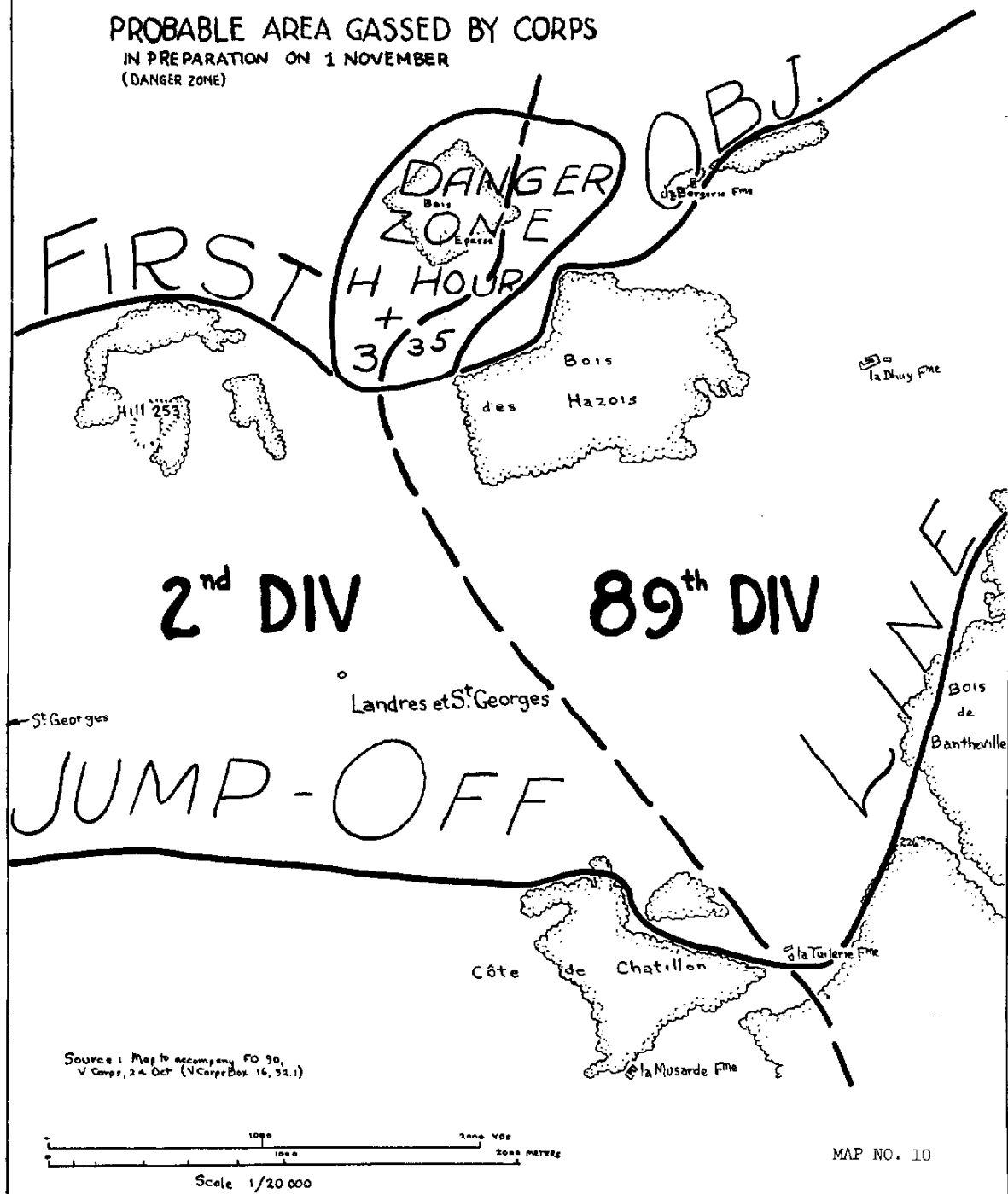
134

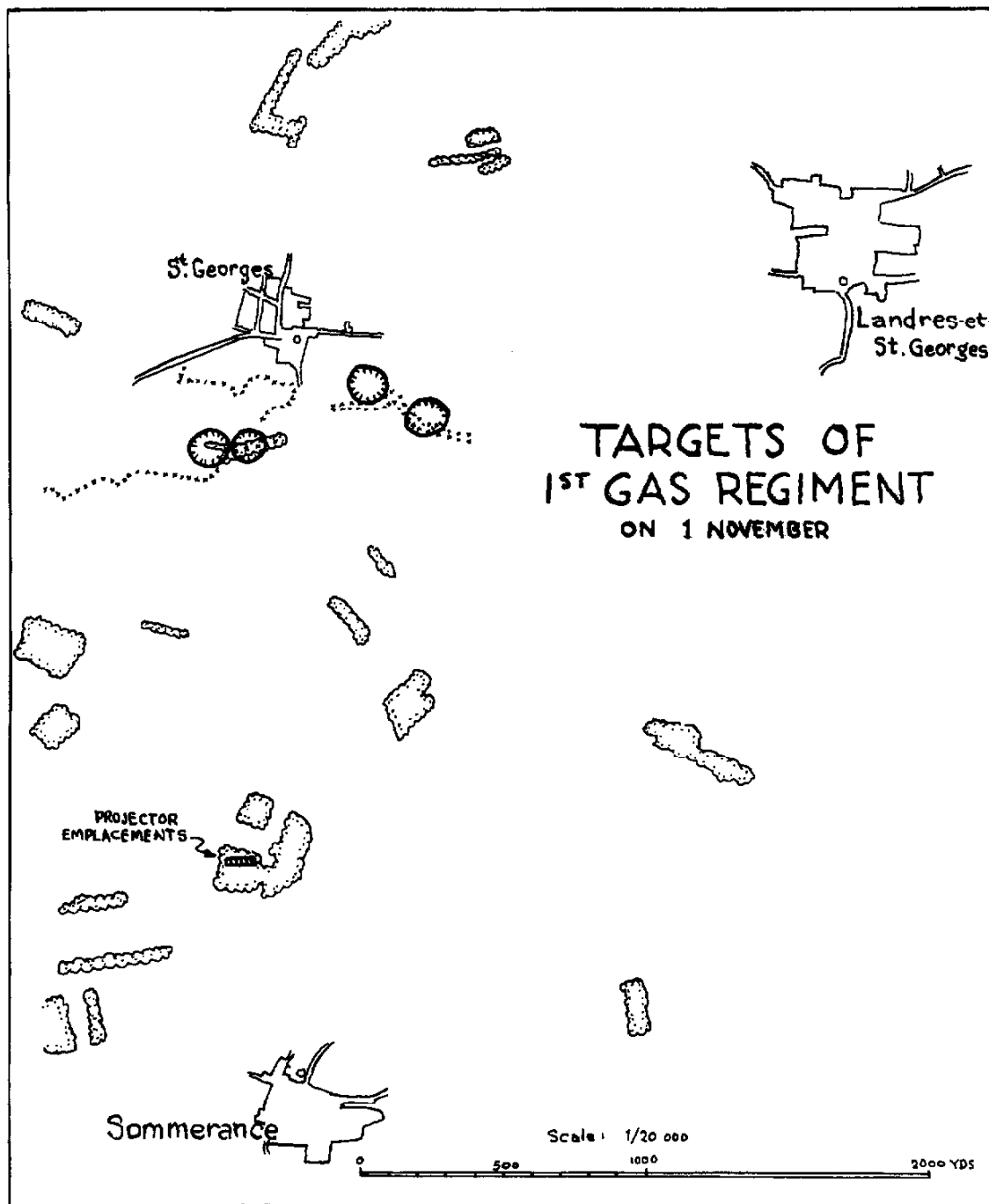
Ltr, CGO V Corps to C CWS, 3 Feb 1919, sub: Arty gas atks - American Army (GAF - V Corps).

135

A projected study, "The 89th Division in the Bois de Bantheville," may throw light on this gas mission. Memo to accompany FO 90, 25 Oct (V Corps Box 14, 32.1), referred to the "danger zone" but did not make clear whether gas or HE fire were to cover it during the advance.

PROBABLE AREA GASSED BY CORPS  
IN PREPARATION ON 1 NOVEMBER  
(DANGER ZONE)





MAP NO. 11

In the advance on 1 - 2 November, approximately 15 bodies, "possible gas casualties," said the 1st Gas Regiment, were found near these positions. A week later the 1st Gas Regiment also laid claim to 300 German gas casualties reported to have been evacuated from the St. Georges - Landres et St. Georges area on the morning of 1 November.<sup>136</sup> It is more likely that the 300 were casualties of the phosgene concentration in the Bois l'Epassé.

#### The Race for Sedan

At zero hour, 0530, on 1 November, 2nd Division advanced through the forward lines of the 42nd and swept almost eight kilometers, to the heights of Barricourt. As it cleared the front, the 42nd began its march northwest, into I Corps sector, along the axis St. Juvin-Verpel-Buzancy-Authe. On 5 November it relieved the 78th Division near Petites Armoises and continued the pursuit to within marching distance of the Meuse (Map No. 12).<sup>137</sup>

The 42nd, hard on the heels of the enemy rear guard and his equipment trains jammed at the Meuse, was ordered to capture them and then cross and

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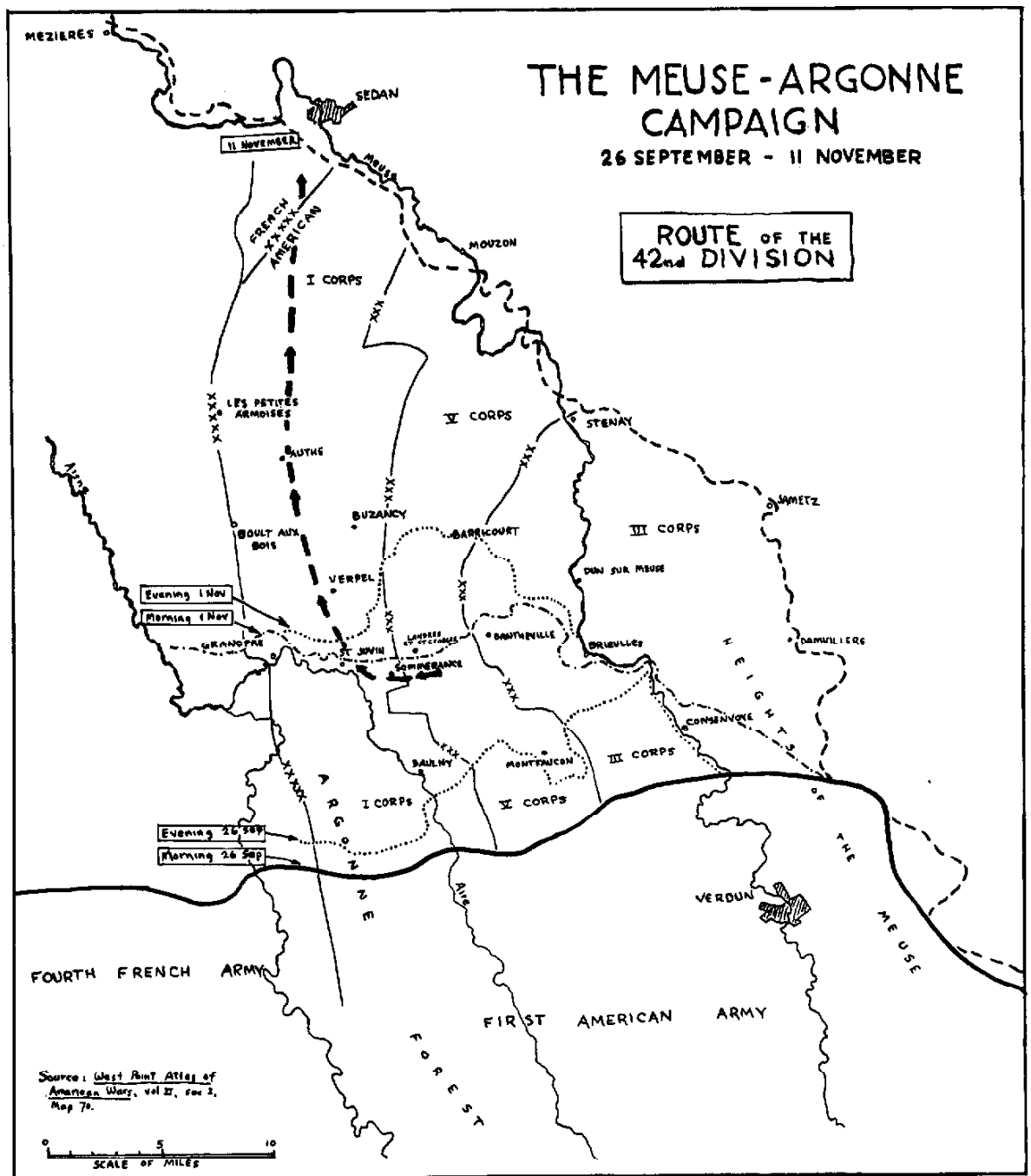
<sup>136</sup>

2nd Bn 1st Gas Regt WD, 1 Nov (WD Hist Box 307, 33.5); Daily Bulletins 2, 5, 7, 1st Gas Regt, 2, 6, 8 Nov (1st Army Box 342); James T. Addison, The Story of the First Gas Regiment (Boston and New York, 1919), pp. 174 - 75.

The 6 officers and 220 men of the 1st Bn 169th Regt, 52nd Div, who were gassed on 30 Oct in their support positions near Verpel were probably casualties of the gas fired on I Corps front (Combat Rpt...1 - 2 Nov, 52nd Div, GFB 197, fol I, p. 6).

<sup>137</sup>

USA in the WW, IX, 573; FO 49 - 52, 42nd Div, 1 - 4 Nov.



MAP NO. 12

seize a bridgehead at Sedan. The division order that night read: "The opportunity presented to the division is one of the most brilliant of the war."<sup>138</sup> But during the next two days "the substantial resistance of the enemy west of the Meuse" blocked all efforts to close with the rear guards.

On the morning of 7 November, as the enemy completed his crossing, 1st Division, coming up on the right of the 42nd in five great columns, suddenly cut over its corps boundary and through the lines of the 42nd Division in a private race for Sedan. Confusion was compounded hourly, its climax a message sent by General Menoher to I Corps shortly after noon: "General MacArthur... with his orderly were taken prisoner by a patrol of the 1st Division and brought into our lines...at the point of a pistol...the patrol mistaking him for a German."<sup>139</sup>

The lines of both divisions were thoroughly mixed as both struggled to get to the Meuse and enter Sedan first. Neither made it, as enemy artillery and machine guns brought them all to a halt just short of the river, said General Menoher, and 1st Division was ordered to withdraw, to permit the neighboring French the honor of crossing and entering Sedan. The town was never captured. The French entered Sedan only after it had been evacuated by the retreating Germans on 14 November.

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138

FO 53, 42nd Div, 2200, 5 Nov.

139

Msg, Menoher to Craig I Corps, 1345, 7 Nov (42nd Div Box 11, 32.16). MacArthur later said it probably was his cap that led to the mistake. He insisted the story became greatly exaggerated with retelling (History, p. 801; pp. 774 - 846 cover the race for Sedan).

Before that, on 10 November, the 42nd Division was relieved before Sedan by the 77th Division and brought back to Landres et St. Georges for regrouping and concentration. On 17 November it began the march to the Rhine as part of the Army of Occupation.<sup>140</sup>

Reluctantly, the 42nd admitted that in its five-day pursuit of the enemy it captured no enemy material. He had set his own pace and left nothing behind but sacrifice machine gun crews. Their fire, and that of the long-range artillery, cost the division 15 killed, 130 wounded, and 22 gassed, a total of 167, in the period 4 - 8 November.<sup>141</sup>

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<sup>140</sup>

FO 56, 42nd Div, 2100, 8 Nov; FO 61, 1800 15 Nov; History, p. 776.

<sup>141</sup>

Ltr, MacArthur CG 42nd Div to CG 1st Army, 12 Nov, sub: Rpt on Opns in the Argonne (42nd Div Box 14, 33.6); Ltr, Maj Gen C.A.F. Flagler, CG 42nd Div to CG I Corps, 25 Nov, sub: Rpt on Opns in the Argonne (ibid.). History, p. 846, says the last operation cost 63 killed, 376 wounded.

## ANALYSIS

### 42nd Division Casualties

Numerous undated scraps of paper with casualty figures found in 42nd Division records may stem from a division memorandum on 6 August that read: "At the end of each day's fighting, the First Sergeant [of each unit] is to make a note of casualties, classifying the wounded as slight or severe, and, if possible, the cause of death or wound." <sup>142</sup> The memo was in response to a directive from Pershing that casualty reporting to the Central Records Office was to be speeded up, and this was the method adopted by the 42nd Division to comply. How far this procedure was followed cannot be learned, but it should be noted that as in many other divisions no distinction was made between the wounded and gassed.

The casualties reported in the official history of the Rainbow (presumably from Statistical Section records) and recorded in this study (pp. 10, 17 - 18, 23, 31 - 32, 34 - 35, 63, 73), are presented here as Table No. 1 <sup>143</sup>

The first official data, in Ayres' statistical summary of 1919, The War with Germany (p. 117), show the 42nd Division to have taken the fifth greatest

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<sup>142</sup>

Memo 249, 42nd Div, 6 Aug (42nd Div Box 2, 12.3).

<sup>143</sup>

History, p. 880, reports total casualties of the war as 2,810 killed and 11,873 wounded, or 14,683. This higher figure probably includes casualties unspecified as to a particular operation or campaign.



TABLE NO. 1  
Casualties reported in the  
Official History of the Rainbow

Sector	Killed	Wounded	Total
Lorraine (17 Feb - 22 Mar)	95	798	
Lorraine (29 Mar - 21 Jun)	105	971	
Champagne (6 - 19 Jul)	327	1240	
Aisne-Marne (26 Jul - 3 Aug)	1214	4315	
St. Mihiel (12 - 30 Sep)	289	926	
Meuse-Argonne (11 - 31 Oct)	695	3175	
Meuse-Argonne ( 4 - 8 Nov)	63	376	
	<hr/> 2,788	<hr/> 11,801	= 14,589

number of casualties in the AEF, its 2,713 battle deaths and 13,292 wounded, totaling 16,005, fewer only than those suffered by the 1st, 2nd, 3rd, and 28th Divisions.

The most recent compilation of official casualty figures (though it omits data for the five months in the Lorraine sector) is that in the Battle Monuments Commission study of the Rainbow,<sup>144</sup> consolidated and presented here as Table No. 2:

<sup>144</sup>

42nd Division Summary of Operations (Washington, D.C., 1944), pp. 15 - 16, 32, 50, 91.

TABLE NO. 2

42nd Division CasualtiesBattle Monuments Commission

Sector	Date	Killed and Wounded
Esperance-Souain sector and Champagne Marne Defensive	3 - 14 Jul	36
	15 - 18 Jul	1590
	19 - 20 Jul	<u>12</u>
		1638
Aisne-Marne Offensive	21 - 24 Jul	22
	25 Jul-3 Aug	5476
	4 - 6 Aug	<u>20</u>
		5518*
St. Mihiel and Essey-Pannes	4 - 11 Sep	9
	12 - 16 Sep	893
	17 Sep-1 Oct	304
	2 - 4 Oct	<u>1</u>
		1207
Meuse-Argonne Offensive	5 - 11 Oct	138
	12 - 19 Oct	3175
	20 Oct-1 Nov	551
	2 - 4 Nov	29
	5 - 7 Nov	236
	8 - 11 Nov	<u>125</u>
		<u>4254</u>
		12,617

\* Exclusive of 983 casualties in two regiments of the 4th Division atchd to the 42nd Division during the battle at the Ourcq.

Gas Casualties

Table No. 3 below, compares on a monthly basis three sets of 42nd Division gas casualty figures for the period February - November 1918: those reported by the Division Gas Officer, said to be based on Division Surgeon and Division

Statistical Section data; those reported from various sources in the present study; and a tabulation from the Medical Department's official volume of battle statistics. Figures in parentheses are gas deaths.<sup>145</sup>

TABLE NO. 3  
Comparative Gas Casualty Statistics

Month 1918	DGO	Study No. 17	Med Dept
February	-	24 ( 6)	0
March	417	586	267
April	16	-	141
May	364 (34)	669 (46)	297
June	313	262	532
July	1065	1246	1617
August	48	-	320
September	74	54	145
October	782 ( 1)	926	1021
November	23	22	95
	<u>3,102 (35)</u>	<u>3,789 (52)</u>	<u>4,435</u>

In the Meuse-Argonne battle in October, the focus of the present study, the 82nd and 32nd Divisions, on either side of the 42nd, agreed that there were no large-scale or concentrated gas attacks that month. In the artillery fire both night and day on the front lines and in the back areas, the enemy habitually mixed explosive gas shells with ordinary high explosives, so that neither the characteristic incoming sound nor the burst distinguished the gas

<sup>145</sup>

Ltr, DGO 42nd Div to C, CWS, 30 Jan 1919, sub: Rpt as per Circ Ltr 89 (GAF - 42nd Div), which incorrectly shows these figures totaling 2,697, instead of 3,102 (35); present Study No. 17, pp. 7, 9, 13 - 18, 24, 32, 34 - 35, 55 - 56, 61 73; Med Dept Statistics, pp. 1030 - 1180.

shells. Vile weather conditions and the character of the terrain acted to increase the persistency of the gas (largely diphenylchloroarsine), so that "varying concentrations of gas were almost continually about." Since the resistance of the troops was much lowered by the hard fighting and continuous bad weather, the men were easily knocked out by the slightest concentrations of gas.

The 32nd Division on the right reported 503 gas cases in the period 5 - 19 October -- a suspiciously low figure, considering the honest cries of anguish of that division. The 82nd on the left reported 1,443 cases and 9 gas deaths, along with 872 gas cases from other organizations (including the 42nd Division), in the period 8 - 31 October, 95 percent of them inhalation cases. A postwar report, based on hospital records, revised the totals in the 82nd Division to 1,681, with 8 deaths.<sup>146</sup>

Captain Gorrill, the 42nd Division Gas Officer, thought there were about 400 gas casualties (and 1 gas death) in the period 13 - 20 October, about half the cases evacuated with mustard gas burns, the other half "due to failure to differentiate between a harmless concentration and a dangerous concentration of Green Cross products, the gas being present in varying concentrations for days at a time in certain localities." The constant presence

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146

Ltr, DGO 32nd Div to CG 32nd Div, 9 Nov, sub: Monthly Rpt (1st Army Box 340); Ltr, DGO 82nd Div to CG 82nd Div, 24 Oct, sub: Gas Casualties; and Ltr, DGO 82nd Div to C CWS, 24 Jan 1919, sub: Rpt on Gas Casualties and Gas Shellings (1st Army Box 341).

of gas tended to make the men careless. All too often they delayed in masking on entering areas of higher concentration than those they had left, and were frequently caught by wind changes bringing dangerous concentrations into an area relatively free of gas earlier.<sup>147</sup>

Captain Gorrill, explaining his single comprehensive report, said that he had considerable difficulty getting daily reports from his gas officers, owing "to the general trying conditions of a big drive." His Monthly Gas Casualty Report for October reflected the difficulty. He reported a total of 549 gas casualties, of which 299 were true cases, the other 250 "sent from Field Hospitals to the rear solely because there were no facilities for reequipping them in the division" (sic).<sup>148</sup>

As indicated in Table No. 4, below, all other sources reporting gas casualties in the 42nd Division showed considerably larger numbers than did the Division Gas Officer.<sup>149</sup>

It seems safe to assume that at least 1,000 of the 4,000 casualties suffered by the 42nd Division before Landres et St. Georges were gas cases.

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<sup>147</sup>

Ltr, DGO 42nd Div, 21 Oct, quoted in Spencer, III, 453 - 54.

<sup>148</sup>

Monthly Rpt in GAF - 42nd Div.

<sup>149</sup>

Sources of Table No. 4: DOR, 42nd Div, 11 Oct - 1 Nov; Rpt, Div Surg, 42nd Div, 26 Dec, sub: Casualties in the 42nd Div - corrected copy (Med Dept Box 3793, fol 16); FH 165 (Med Dept Box 3811), FH 167 (Med Dept Box 3815), FH 168 (Med Dept Box 3818); Med Dept Statistics, pp. 1030 - 1180.

TABLE NO. 4  
COMPARATIVE CASUALTY DATA - OCTOBER 1918

Date	DOR 42nd Div			Div Surg 42nd Div		Field Hospital Lists		Med Dept Statistics		
	K	W	G	W	G	W	G	K	W	G
1 - 7 Oct	-	-	-	-	-	-	-	3	67	19
8 - 9 Oct	-	-	-	3	29	-	-	3	18	-
9 - 10 Oct	-	-	-	13	15	-	-	1	17	2
10 - 11 Oct	-	-	-	17	15	0	1	5	41	10
11 - 12 Oct	5	13	5	19	9	10	6	6	62	10
12 - 13 Oct	0	38	24	190	45	0	11	6	68	23
13 - 14 Oct	20	182	16	55	19	11	29	9	69	39
14 - 15 Oct	100	696	290	719	298	71	275	85	599	207
15 - 16 Oct	54	398	144	375	151	85	331	175	424	220
16 - 17 Oct	36	254	101	270	119	37	108	84	264	86
17 - 18 Oct	15	92	44	83	44	15	42	16	110	62
18 - 19 Oct	7	40	21	113	34	18	28	13	106	45
19 - 20 Oct	10	78	19	45	12	10	29	4	64	39
20 - 21 Oct	0	16	15	17	28	6	18	7	24	26
21 - 22 Oct	5	35	12	32	15	9	8	6	42	23
22 - 23 Oct	0	20	13	24	13	4	10	4	30	18
23 - 24 Oct	0	30	7	29	7	7	19	4	37	17
24 - 25 Oct	0	12	2	17	2	1	2	0	27	6
25 - 26 Oct	0	14	6	24	6	0	4	6	20	6
26 - 27 Oct	0	13	4	12	4	8	3	0	34	25
27 - 28 Oct	8	40	48	31	50	5	47	3	26	23
28 - 29 Oct	0	16	56	10	51	8	54	7	24	46
29 - 30 Oct	2	35	13	23	3	7	6	1	34	4
30 - 31 Oct	5	20	3	25	3	4	5	2	19	13
31 - 1 Nov	0	7	19	-	-	12	26	0	23	21
Date not specified										
	267	2049	862	2146	972	328	1062	462	2324	1021
1 - 3 Nov								9	59	44
								471	2383	1065

In the official history, the Division Surgeon is said to have reported a total of 1,182 patients passing through the gas hospital at Baulny, the other hospitals there handling an additional 5,800 patients, from five American divisions.<sup>150</sup> This points to the most striking discrepancy in Table No. 4, the field hospital figure of 328 wounded. It is known that well over 3,000 of 42nd Division admissions were sick, not wounded, but the records of admission of the remaining wounded have not been found.

Of the 1,062 gas casualties recorded at FH 167 (see Table No. 4), 728 were cases of gas inhalation (principally diphenylchloroarsine), 291 had mustard gas burns, and 3 were phosgene cases. Not counted in this total were 30 cases received on 17 October and 88 on 20 - 23 October whose diagnoses were subsequently changed from "gas" to "exhaustion." Whether they were gas mask exhaustion cases or battle exhaustion cases cannot be said. The differentiation was never made in AEF records.

Comparison of the effectiveness of enemy gas and shell fire is difficult to determine since G - 2 made no estimates of daily enemy fire until 29 October, and then from 21 to 31 October reported 18,540 HE and 4,595 gas shells in the sector (narrative, p. 61 ). These figures are roundly contradicted by available German records. In the period 14 - 30 October, the 41st Division artillery, opposite the 42nd, reported firing just 7,366 HE and 1,801 gas shells,

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History, pp. 770 - 71. Corresp in Med Dept Box 3795 shows that the 32nd and 82nd Divs also handled a number of 42nd Div casualties.

while the neighboring artillery of the 15th Bavarian Division probably fired less than 2,000 additional gas shells into the 42nd Division sector, almost half of that amount on the last day of the month (narrative, p. 61). In the face of this contradiction, the figures of 18,000 HE and 4,000 gas shells will be arbitrarily accepted as the maximum weight of fire that fell in the 42nd Division sector that month.

Reports of 42nd Division casualties in October range between 2,095 killed and wounded and 699 gassed and 2,565 killed and wounded and 958 gassed, with the latter figures, based on Medical Department records, probably the most accurate. Over 70 percent or 1,896 of the killed and wounded occurred in the period 14 - 18 October, during the assault on the Kriemhilde position, when the incidence of machine gun and small arms casualties must have been overwhelmingly higher than artillery casualties. It is therefore assumed that casualties of enemy artillery fire that month, the remaining 30 percent, may have been at most 670 killed and wounded.

These 670 casualties, produced by 18,000 HE shells, indicate a casualty for every 27 shells -- extraordinary effectiveness for HE against protected troops. The 958 gas casualties in the division, resulting from no more than 4,000 gas shells fired by the enemy, represents a casualty for every 4 shells. This order of effectiveness of gas shell is supported by the Division Gas Officer's statement that ideal conditions of wind, temperature, and humidity were present throughout the month, heightening



enormously the persistency of the enemy's green cross gas.

As the present study indicates, the gas training and gas discipline of the 42nd does not appear at any time to have been of particularly high caliber. A report on the state of training in May seems representative. After almost six months of instruction, an inspector reported that the gas discipline as a whole was not what it should be. "Regimental commanders in several cases do not realize the importance of gas training, and think too much emphasis is placed on the gas end." But it was not the Division Gas Officer who could be charged with excessive zeal, for elsewhere the report said: "Gorrill...does not accomplish nearly as much as a Division Gas Officer should in the way of giving regimental training." <sup>151</sup>

That may have been true in May, but in October Gorrill was to say that "in open warfare individual protection is our chief defense against gas [and] this can only be obtained when an opportunity is given for individual instruction." <sup>152</sup> The implication was that the division had been given little opportunity to rest and train, and with close to 20,000 replacements since May, large numbers were bound to have had little or no individual gas training.

Considering the unsatisfactory gas records of the 42nd and Gorrill's own excuse for his gas officers, that division may well have been included

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<sup>151</sup>

Ltr, 2nd Lt R. L. Sebastian CSS to Maj G. N. Lewis CSS, 24 May, sub: Personal Rpt (GAF - 42nd Div).

<sup>152</sup>

Quoted in Spencer, III, 454.

in the V Corps Gas Officer's remark in November that in some divisions "the organization of gas personnel, down to and including company gas non-commissioned officers, was not what it should have been in the matter of liaison." 153

Because exhaustion and hysteria may relate to the enemy's use of gas, statistics made available by the Division Psychiatrist in a postwar report are of some interest. In July, the month of the great German gas bombardment, as well as the battle at the Ourcq, the division triage reported 24 cases of hysteria, 77 exhaustion cases, and 395 shell shock cases. In October, there were 10 hysteria and 20 exhaustion cases, and in November, 112 exhaustion cases. No comment of any kind was made on either the source or significance of these figures.<sup>154</sup>

The large number of shell shock and hysteria cases in July almost certainly occurred during the bombardment on the 15th. Most of the exhaustion cases may safely be attributed to the fight at the Ourcq at the end of the month. More interesting is that not a single case of shell shock occurred in the Argonne attack, and exhaustion and hysteria cases were minimal.

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153

Ltr, CGO V Corps to CGO 1st Army, 19 Nov, sub: Rpt on Recent Opns (GAF - V Corps).

154

Ltr, Div Psychiatrist 42nd Div to Ch Consultant, Neuro-psychiatry, AEF, 26 Dec, sub: Incidence of War Neurosis (Med Dept Box 3798, fol 730).

### Lessons Learned

The depressed morale of First Army in early and mid-October resulted in part from the continuous rainy weather, from lack of food owing to the failure of the lines of communication, but most of all from the widespread feeling of the troops that they were being uselessly sacrificed to gas and machine guns by a blind command.

The lessons learned at the Ourcq had been more or less successfully applied at St. Mihiel, largely because that operation had been almost without opposition and the enemy had not used gas. But in that long list of lessons, nothing was said about the effect of gas on the operation or the high toll gas had taken. It is not surprising then that no effort seems to have been made after the Ourcq battle to instill better gas discipline in the division, to teach greater respect for gas, or more important, to train the men to wear their masks for long periods of time. The Division Gas Officer's remark later that fully 50 percent of the gas casualties in the Argonne were the result of carelessness indicates poor discipline as well as poor or inadequate training.

At the Ourcq, as in the Argonne, a major repeated complaint was of inadequate artillery support. But there is no evidence that the troops wanted artillery gas fire, as well as greater HE fire, to support their attacks. That was a lesson Army and corps were to learn, but it was never accepted by the divisions.

One of the clearest expressions concerning artillery support, whether gas or HE, is that by Maj. Lloyd D. Ross, a battalion commander in the 168th Infantry (History, pp. 518 - 19):

There...existed all through the chain of command an ever present tendency to rush troops forward and keep pushing them against enemy machine guns without adequate support from machine guns, howitzers, and artillery. General officers and field officers....employed the same driving tactics they [had] used in smaller commands in the Philippine Islands and in similar campaigns. They would not take the word of the officer in the front line as to the opposing forces and weapons but kept driving troops forward inadequately supported by artillery.

The same mistake was made in the Argonne, except the infantry had become wise to the game. We officers in command had determined that when stubborn resistance was met we would not sacrifice men against material but take our time and gain our ends in other ways. We moved more slowly perhaps but more surely and had more men alive at the end of the action. We attained our objectives but without enough artillery in support.

These remarks sound perilously close to insubordination, but they support the contention in the narrative ( pp. 39 - 42 and passim) that the low morale of the 42nd Division in the Argonne battle, owing as much to its gas experience as to its general exhaustion, made it impossible for the division either to break through the Kriemhilde position by its own efforts or to exploit in any way the opportunity offered it.

They also explain Liggett's decision to halt general operations in mid-October, to rest the troops and get the artillery up behind them again. And they may explain a major reason for the relatively large quantities of gas fired by the 42nd Division artillery between 18 and 29 October, under corps direction.

Major Ross must have been as aware as Major Donovan of the 165th Infantry of "how [many artillery shells] must be expended before a casualty list begins to mount" (History, p. 394). Heavy artillery HE fire admittedly did not produce high casualties. Its effect was nerve-wracking. And its friendly use tended to provide psychological rather than real support. But even light gas shelling day after day almost inevitably produced large numbers of casualties, and its effects were debilitating on those not made casualties.

It was not an infantry commander but the commander of the 117th Sanitary Train who made this observation on the continual gas fire (History, pp. 726, 728). His ambulance company litter bearers in the Argonne, he said, worked night and day with little food or rest, in almost continual rain and cold, and over almost impassable terrain, while "the enemy kept up a harassing fire on all back areas and continually drenched the valley with gas....Gas saturated the air....It was no wonder that the men were soon exhausted...and frequent reliefs were necessary."

The gas that might have opened the way into St. Georges, Landres-et-St. Georges, and the Côte de Chatillon was not used until the division had been exhausted by enemy gas and decimated by enemy machine gun fire. Since most of the defenses of Chatillon were along its leading edges, thorough gassing of those edges, as well as Musarde and Tuilerie Farms on the first day of the attack (as corps recommended), would have made the

positions as untenable as those in Romagne were on 14 October and as those in the Bois Hazois, Bois l'Epasse and elsewhere were made in the gas preparation on 1 November.