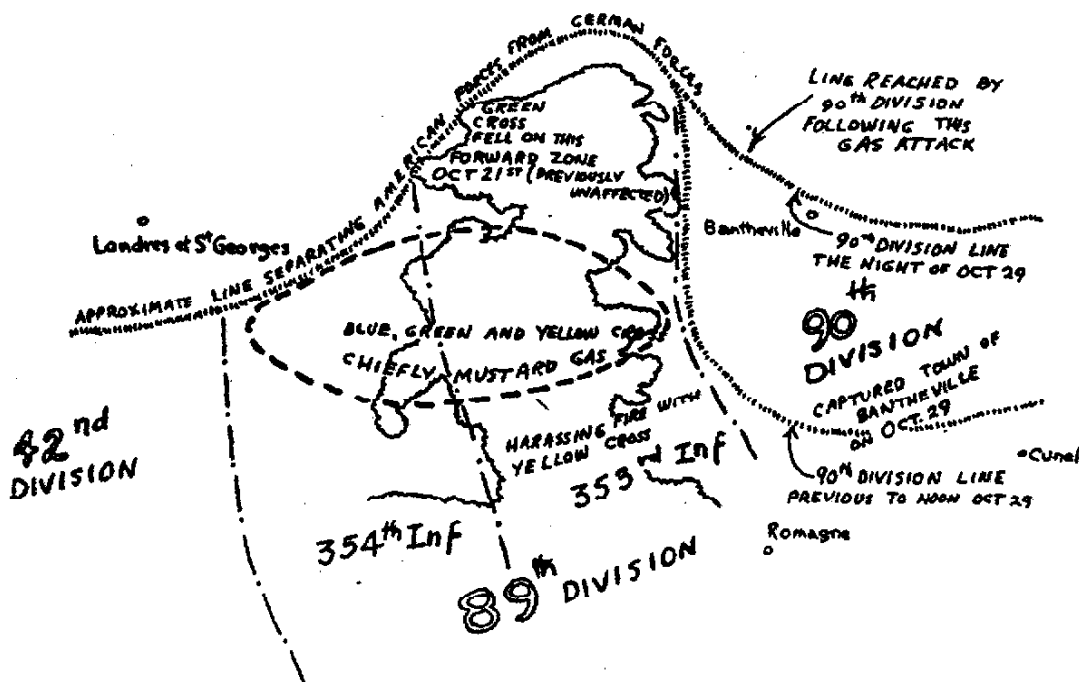


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GAS WARFARE IN WORLD WAR I

THE 89th DIVISION IN THE BOIS de BANTHEVILLE
October 1918

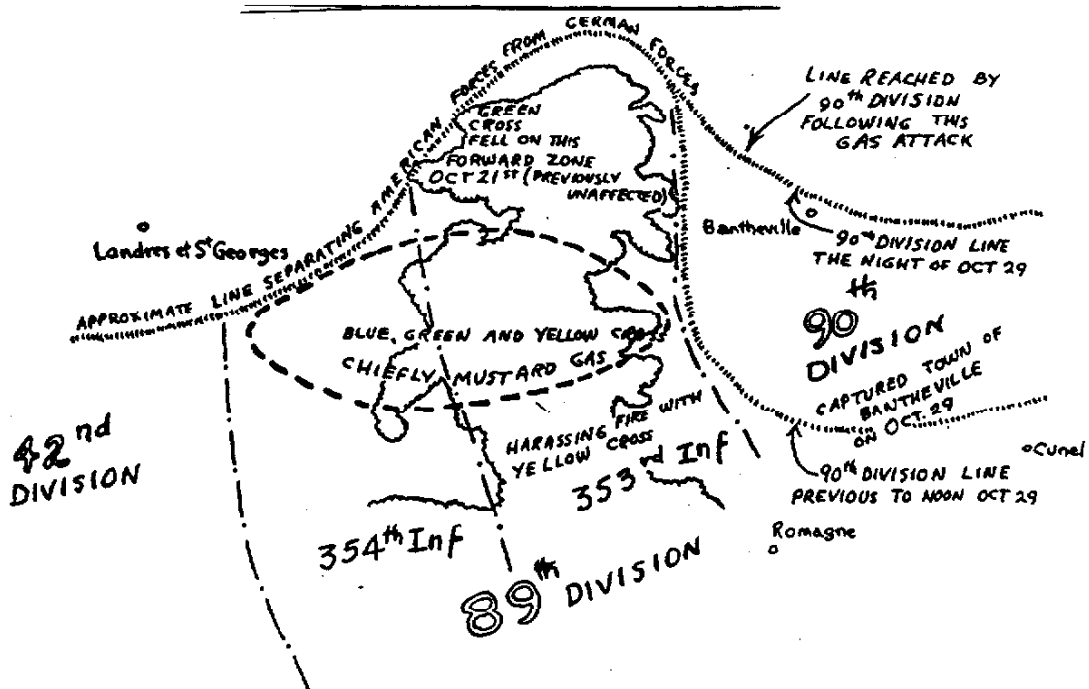


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October 1918



U. S. Army Chemical Corps Historical Office
Office of the Chief Chemical Officer
Washington, D.C.

The 89th Division in the Bois de Bantheville
October 1918

by

Rexmond C. Cochrane

GAS WARFARE IN WORLD WAR I

Study Number 18

U.S. ARMY CHEMICAL CORPS
HISTORICAL STUDIES

U.S. Army Chemical Corps Historical Office
Office of the Chief Chemical Officer
Army Chemical Center, Maryland

1960

Foreword

This is a tentative study of the gas experience of the 89th Division in the Bois de Bantheville 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 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 89th Division in the Bois de Bantheville

Prepared by

Rexmond C. Cochrane, Ph.D.

Under Contract DA-18-108-CML-6214

with

U.S. Army Chemical Corps

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



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THE 89TH DIVISION IN THE BOIS DE BANTHEVILLE

October 1918

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THE 89th DIVISION IN THE BOIS DE BANTHEVILLE

October 1918

In his final report General Pershing was to say that from 16 October to 1 November the entire First Army awaited the results of four local operations which were essential to adjust First Army positions preparatory to a renewed general assault. These operations were the capture of Grand Pré by I Corps, the clearing of the Bois de Bantheville by V Corps, the occupation of Cunel heights by III Corps, and the capture of the main ridge south of La Grande Montagne by XVII French Corps.¹

The 89th Division finally cleared the Bois de Bantheville on the morning of 23 October. "From that day until the jump-off, morning of November 1, were written some of the bloodiest and most tragic pages in the history of the 89th Division."² This dramatic sentence referred to the week-long occupation of the Bois de Bantheville under almost continuous gas and HE fire.

Since neutralizing the entire wood was out of the question, the enemy massed his mustard gas shells in a belt across the narrow center of the wood. This made it possible for the 89th to keep troops in the relatively gas free area around the top of the wood but made their supply enormously hazardous. Under tight discipline and division and corps orders to evacuate at once any area that became contaminated, gas casualties were probably held to an

1

U S Army in the World War, XII, Reports (Washington, 1948), p. 43; Rpt, Col George H. English (Adj and Opns O, 177th Brig), Mopping up the Bois de Bantheville, n.d. (89th Div Box 2, 11.4).

2

Capt C. J. Masseck, 353rd Inf, MS Brief History, 89th Div, June 1919 (89th Div Box 1, 11.4).

absolute minimum.

It was later pointed out that it might have been better for the 89th Division itself to have neutralized the wooded salient with yperite than to have held it in the face of gross enemy contamination. Under the circumstances, few divisions in the AEF were better trained for such an operation than the 89th. It had learned through earlier disastrous gas attacks how to survive in gas.

The emphasis in this study of survival will be on the events of that week at the end of October when the 353rd and 354th Infantry of the 89th "suffered a relentless bombardment of gas and high explosives that extended well back into the support positions," resulting in a loss of "between 500 and 600 men" in the brigade.³ The loss was actually nearer 1,200, of which more than 400 were gas casualties.

"Much gas and poor shelter"

The 89th Division, commanded by Brig. Gen. Frank L. Winn, landed in France late in June 1918 and after a month's retraining was put in the front line on the south face of the St. Mihiel salient for training in trench warfare. On the night of 7 - 8 August, just hours after the last of its regiments had taken its place in the trenches near Flirey, the enemy drenched a crowded sector of the front with mustard gas, causing over 600 gas casualties.⁴ On 6 September General Winn was relieved of command by Maj. Gen. William M. Wright and did not resume it until after the Armistice.

3

Masseck, Brief History, above.

4

See Study No. 6, "The 89th Division Comes into the Line."

Of the four regiments of the division, the 353rd and 354th, in Col. James H. Reeves' 177th Brigade, and the 355th and 356th, in Brig. Gen. Thomas G. Hanson's 178th Brigade, elements of the two center regiments, the 354th and 355th, took over 90 percent of the casualties in that gas attack. Later, in the St. Mihiel sector and then in the Argonne, the other two regiments came under similar major gas attacks.

"As is usually the case," said Capt. Hugh W. Rowan, the Division Gas Officer, after the gas experience of the 356th Infantry in early October, "this attack....will probably serve as a severe lesson."⁵ It was a lesson that each of the regiments had to learn for itself.

Although enemy gas fire resulted in gas casualties every day of the month that followed the attack on 7 - 8 August, nothing like that first attack occurred again in the sector, and the division held its positions until 12 September when it took part in the two-day operation that eliminated the St. Mihiel salient on the Western Front.

When in the weeks that followed a number of divisions that had been brought in for the St. Mihiel operation were withdrawn, to cross the front for the Meuse-Argonne battle, the 89th stayed on, extending to the right and left as the neighboring divisions moved out, until it spanned a front of more than ten kilometers. The enemy, surprised and overwhelmed in the attack of 12 September, had little opportunity to use his artillery during the operation, but quickly reorganizing in his previously prepared positions

5

Ltr, DGO 89th Div to G - 3 89th Div, 9 Oct, sub: Gas Discipline, Training and Control in the 177th and 178th Inf Brigs (89th Div Box 27, 63.5).

above the line where the American divisions had halted, he began a steady harassing of the new front line with gas and HE.

The constant movement of troops in and out of the American line increased enemy fears that another attack was imminent, and he stepped up his gas and HE fire and night after night, in his nervousness, filled the sky with "flares, rockets, and lights of all kinds."

The artillery of the 89th found itself unable to return the enemy's gas fire. Furnished with quantities of gas shells for the operation of 12 September which had not been used, the 164th FA Brigade had "no information as to the contents of these shells or their tactical use," and the Division Gas Officer, called into an artillery conference, "told them practically everything I knew on the subject, which wasn't very much." As a result, the brigade fired little gas and at no time more than 200 gas shells on any one day.⁶ Later, in the Meuse-Argonne operation, "attempts were made to instruct the [attached] divisional artillery in matters relating to the offensive use of gas, in which they showed great interest, but there was practically never a sufficient quantity of gas shells on hand to accomplish much in this line."⁷ The enemy was to have the advantage to the end of the war.

6

Ltr, DGO 89th Div to C CWS Att Off Div, 2 Oct, sub: Instructions as to use of gas shells by arty; Ltr, DGO to C CWS Att Def Div, 7 Oct, sub: Offensive Use of Gas (89th Div Box 148); Info Buls, 164th FA Brig, 1 - 6 Oct (89th Div Box 14, 20.4).

7

Ltr, DGO to C CWS Att Def Div, 20 Nov, sub: Monthly Rpt for Oct (89th Div Box 148).

In the period 14 - 30 September, G - 2 reported 11,116 HE shells falling in the division sector. To account for at least nine barrages or bombardments for which no estimates were made and three days when no reports were received from the 356th Infantry sector, the HE count should be at least doubled. In the same period just 59 gas shells were observed, apart from five gas barrages in the last week of September, when again no count of shells were made.⁸ It is probable that gas shells totaled at least 1,000.

G - 3 records for those two weeks show 48 killed, 310 wounded, 76 gassed, and 18 men missing, with casualties omitted on three days. Medical Department records suggest that the killed and wounded figures may be approximately correct, but gas casualties were more nearly 224 than 76.⁹

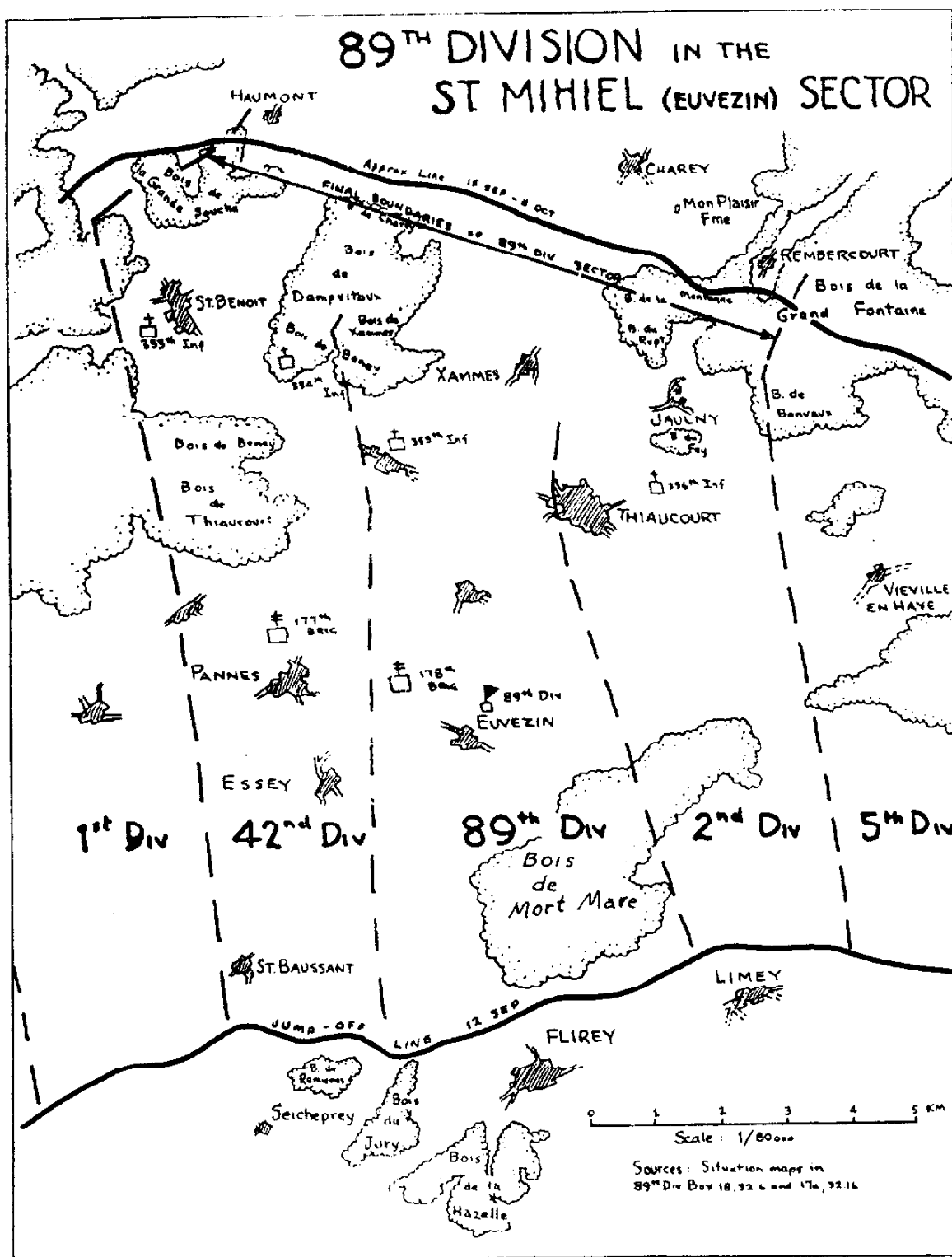
In the first week of October, G - 2 observers counted 10,585 HE shells and 985 gas shells falling in the sector, exclusive of a heavy HE bombardment of Pannes and repeated bursts of gas shells across the sector on the night of 3 - 4 October, barrages on the front lines and a concentration of HE in the Bois des Xammes the next night, and a bombardment on the early morning of 6 October when the woods north of Jaulny were "heavily and effectively gassed with arsene and mustard gas" (Map No. 1).¹⁰ G - 2 attempted no estimates of the number of shells fired in these bombardments,

9

DOR 36 - 50, 89th Div, 14 - 30 Sep (89th Div Box 16, 32.11); Med Dept data in Analysis, p. 78.

10

SOI 53 - 58, 89th Div, 1 - 7 Oct. G - 3 rptd a total of 18 killed, 30 wounded, and 116 gassed in the period, almost all deaths and wounds the result of shell fire (DOR 52 - 56, 1 - 6 Oct, 89th Div Box 16, 32.11).



MAP NO. 1

but the HE was probably double the actual count. Probable too was the IV Corps Gas Officer's report of a total of 4,250 gas shells fired into the 89th Division sector in 16 attacks during the period 1 - 7 October.¹¹

The attack of 6 October was far more serious than first reported. G - 3 thought there had been about 34 gas casualties, G - 2 reported 66, but the dramatic nature of the attack was better indicated in General Wright's note in his diary that night that "one 155 [sic] fell on a dugout and killed ten men of the 356th Infantry and badly gassed 49 of them....[There, in] the Jaulny sector...conditions...very bad, much gas and poor shelter for the men. They must make more effort to dig in."¹²

One account of the bombardment said that "Company I [356th Infantry] in the front lines was practically wiped out." The unit itself claimed that "the Company's strength was reduced to some 20 men, including cooks, supply and mess sergeants and company clerk." Battalion said "The fault was no one's, for [the Germans] used their best gas tactics. Starting with just a little arsene so you couldn't keep a mask on for sneezing, they shot over a very high concentration of mustard."

11

Rpt, IV CGO, 7 Nov, sub: Enemy Gas Opns from Oct 1st to Oct 31st (GAF - IV Corps), said the 16 gas atks resulted in 401 casualties out of 4150 men exposed. Available DGO rpts for the period (in Spencer, "History of Gas Attacks upon the AEF during the World War," III, 541 - 548) account for 5 atks with 252 casualties.

12

Extracts from Diary of Gen W. M. Wright, 26 Jun - 11 Nov, 6 Oct (89th Div Box 20, 33.3). Hereafter cited as Wright's Diary.

"E Company, which was in regimental reserve [that night] was caught in the Bois du Fey...and lost nearly half the company. Twelve men (General Wright said ten) were killed outright [by a shell that] dropped in the center of the area occupied by the 1st Platoon and many were wounded severely and gassed. Three officers were badly gassed while helping to remove their wounded...[one] so badly...that he died." A total of 22 were reported wounded and 58 gassed in the company.¹³

In his first detailed account of the attack, based on regimental reports, the Division Gas Officer said the bombardment consisted of several thousand gas and HE shells. about 800 to 1,000 of them diphenylchloroarsine and mustard gas shells. All of Company I had been evacuated when he was belatedly notified of the attack and arrived at the front.¹⁴

Later, Captain Rowan said that of the three companies under attack, Company L had maintained excellent discipline and suffered only a few casualties, as a result of prolonged exposure in the gassed area. In Company I, adjacent to Company L in the trenches on the hill, "practically all of its men [were] gassed owing to the company commander ordering off the masks" less than two hours after the shelling ceased. In Company E,

13

MS Hist of Co K, 356th Inf; Hist of Co I, 356th Inf; Hist of 3rd Bn 356th Inf; Hist of Co E, 356th Inf; Hist of 2nd Bn 356th Inf (all in 89th Div Box 32, 11.4).

14

Ltr, DGO 89th Div to G - 3 89th Div, 14 Oct. sub: Gas Atk on the 356th Inf (GAF - 89th Div); Spencer, III, 545 - 48.

in reserve, "needless casualties occurred owing to the men becoming panic stricken."¹⁵

"The 356th Infantry," said Rowan, "fell down very badly, the fault being apparently a matter of organization and control rather than individual discipline of the men." Even when each of these factors are at peak performance, he concluded, "It is probably impossible to reduce gas casualties down to absolute zero, and we should be well satisfied if they keep below ten or a dozen to each attack"¹⁶ It was sometimes possible to achieve this low figure under HE bombardments but seldom under gas, and never when a gas attack reached the magnitude of an HE bombardment.

Regimental records a week after the attack indicated 202 gas casualties among 700 men exposed, of which 11 were in Company L, 168 in Company I, and 23 in Company E. This seemed to be all, but since the division, less its artillery, was relieved in the sector and moved out the day after the attack, said Rowan, "information as to the [number,] severity and results of casualties was not obtainable with accuracy beyond the fact that there were quite a number of severe cases. Except for the H.E. bombardment the attack was no more severe than several others we had in that sector, and spoiled an unusually good record by

15

Ltr. DGO to C CWS, 13 Feb 1919, sub: Rpt in compliance with Circ Ltr 89 (89th Div Box 26, 63.3).

16

Ltr, DGO 89th Div to G - 3 89th Div, 9 Oct, sub: Gas Discipline, Training and Control in the 177th and 178th Inf Brigs (89th Div Box 27, 63.5).

this Division in regard to defense against gas."¹⁷

In a postwar report, Captain Rowan, citing Division Surgeon records, said that 119 gas casualties had occurred in the period 1 - 4 October and 552 on 5 - 7 October, suggesting many more gas casualties in Company L and in Company E, the one that panicked, than realized at the time. Rowan, however, was "quite sure" that the latter total was in error and that gas casualties did not exceed 275. But field hospital admissions show 580 gas casualties between 1 and 7 October, most of them the result of the gas attack on the 6th.¹⁸

On the night of 6 - 7 October advance elements of the 37th Division arrived from the Argonne and began the relief of the 89th. The organic artillery of the division was left behind, not to join again until after the Armistice.

Special Situation Report

The 37th Division, "coming in badly and with very little system and order....a 4th class division" after its battering near Montfaucon,¹⁹ completed the relief of the 89th on the night of 8 - 9 October. The latter division entrucked the next day for the Meuse-Argonne front, its

¹⁷

Ltr, DGO 89th Div, 14 Oct, above; Memo, DGO 89th Div to C CWS Att Def Div, 16 Oct, n.s. (89th Div Box 148).

¹⁸

Ltr, DGO 89th Div, 13 Feb 1919, above; Analysis, p. 78.

¹⁹

Wright Diary, 7 Oct.

destination Récicourt, below the center of the First Army line where on 1 October the 37th Division had been replaced by the 32nd Division. The 89th would eventually relieve the 32nd.

For ten days, from 10 to 20 October, the 89th rested, cleaning up, refitting, and training the 2,000 replacements it received at Récicourt. On the 12th the division was transferred to Summerall's V Corps reserve and ordered to move up between Eclisfontaine and Epinonville, in support of Haan's 32nd Division. The 32nd had taken Cierges and Gesnes and was then getting set to strike at the enemy's Kriemhilde position at Romagne (Map No. 2).²⁰

Going up to the front on a private reconnaissance the next day, General Wright described the scene he witnessed from a slight eminence. "The entire country for about ten kilometers...[was nothing but] a mass of trenches, wire...and the roads seas of mud...Everything was impossible." It was a dismal prospect, and he presumed he would "relieve the 32nd Division as soon after tomorrow's fight [i.e., on the 14th] as is practicable and probably carry the action on until the division is worn out."²¹

Unexpectedly, in the attack on 14 October, the 32nd outflanked both Côte Dame Marie and Romagne, key points in the Kriemhilde Stellung,²² and

²⁰

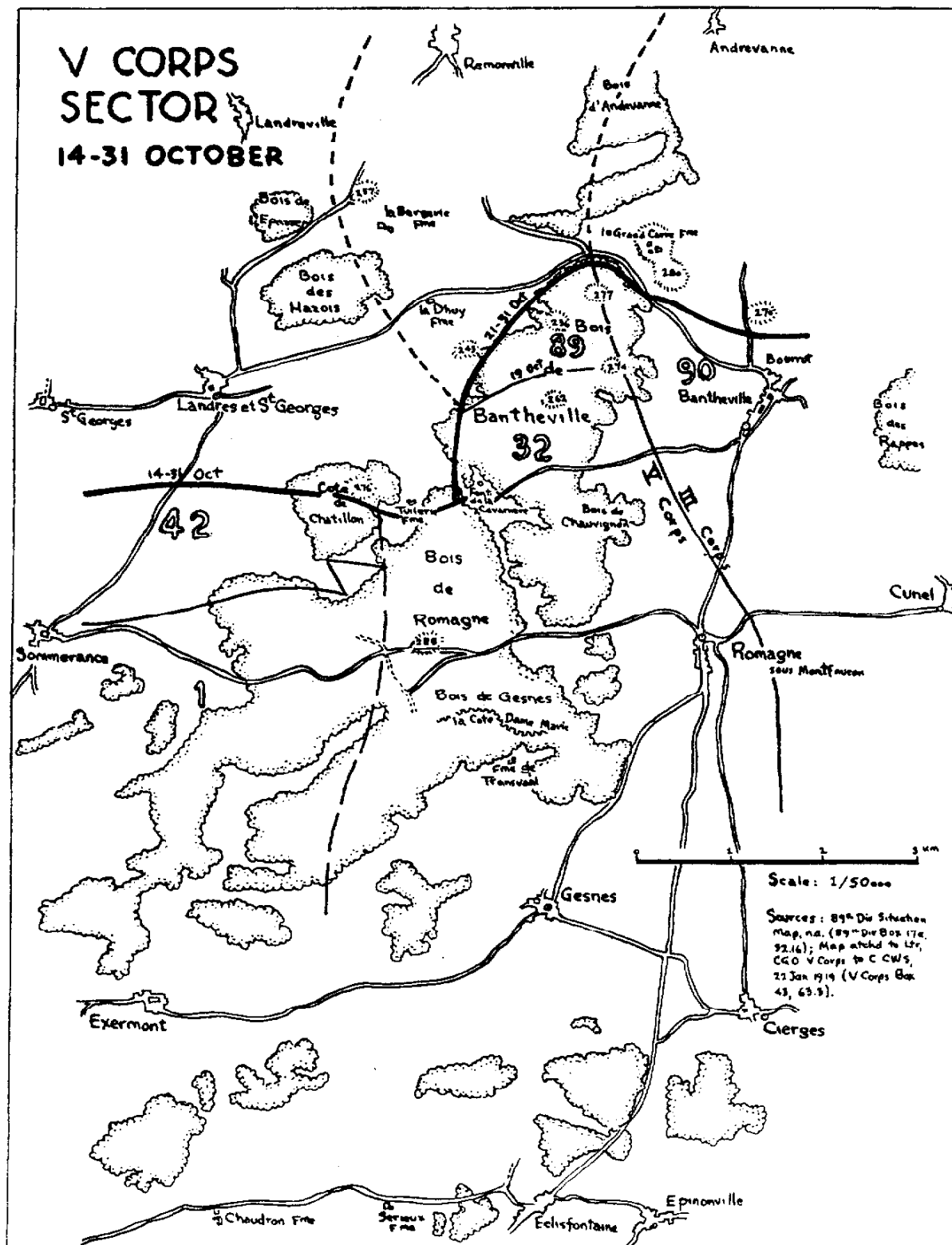
Wright Diary, 8 Oct; FO 72, V Corps, 1930, 12 Oct (V Corps Box 14, 32.1); FO 32, 89th Div, 14 Oct (89th Div Box 15, 32.1).

²¹

Wright Diary, 13 Oct.

²²

See Pershing, My Experiences in the World War (New York, 1931), II, 340.



MAP NO. 2

in keeping with Summerall's policy never to take out a winning division, the 32nd stayed in the line until its patrols reached the top of the Bois de Bantheville, five days later.

The success on the 14th could not be exploited and none of the three corps of First Army made much progress in the next several days. It was the belief of corps that the strain of two weeks of fighting in the rain and cold had exhausted the line. The enemy, on the other hand, had conserved his dwindling forces, leaving small detached groups to hold tenaciously to strongpoints at farms, crossroads, and patches of woods across the front, while the main body was believed to be stationed with the long-range guns some distance in the rear. Daily, said Wright, corps awaited counterattacks from these reserve forces, but they failed to develop.²³

In a special situation report prepared on 14 October, 89th Division G - 2 minimized the hazards of the coming operation. So far, gas had not been used with any frequency on the attacking troops on that front. "Only two cases are mentioned where it was used upon them to any considerably extent. Some gas shells were mixed with others. Except in the two above cases it was not used in large amounts. When used it was used in high explosive shells." Enemy small arms fire was also reported

23

Wright Diary, 15 Oct.

as "inconsequential," but his machine guns and his artillery, particularly a battery of Austrian 88's, had been damaging.²⁴

Meanwhile, corps continued to push the 32nd Division above the Bois de Chauvignon and into the Bois de Bantheville. From the enemy point of view, Bantheville woods was in danger of being lost, for the 3rd Guard Division there was in no condition to withstand many more attacks. Artillery alone was holding back the Americans. 13th Division units, coming in fast to relieve the 3rd Guard, arrived at the southeast corner of the Bois des Hazois, top of Bantheville woods, and the south edge of Bantheville village on the night of 16 - 17 October.²⁵

By that time, high casualties, gas fatigue, and prolonged combat had worn out the 32nd. On the 17th, General Haan called for relief. "I have received a number of reports from the front today which convince me that my division is exhausted, and that to push it any further might result in disaster." In one regiment, battalion effectives were down to 125 to 150 men each. The other regiments, he thought, were probably little better off.²⁶

Though Haan denied it vigorously in this letter to Summerall at corps, as exhaustion mounted, straggling had become wholesale. As a

24

G - 2 Rpt, 2100, 14 Oct (89th Div Box 6, 20.1).

25

FO 78, V Corps, 1800, 16 Oct; Gp Maas West Order Ia 835, 16 Oct (in Gp Argonne records, German Files Box 26, fol V, p. 77). Note: German Files Box will hereafter be abbreviated GFB.

26

Pers Ltr, Haan to CG V Corps, 17 Oct, n.s. (32nd Div Box 4, 32.15).

battalion commander in the 32nd later described it,

While the fighting troops held their front with a line of combat groups, the M.P.'s strung another line of smaller groups behind the combat area. At every important road corner, watering place and kitchen, close behind the lines, there was an M.P. post and woe to the man who came back from the front without a wound, a message or other easily vouched for business. Other groups of M.P.'s roved around searching dugouts, ration dumps, kitchens and other likely places. Pretty regularly they escorted little groups back to the front.²⁷

An after-action report said that by 20 October the division had three lines of straggler posts operating, which collected 444 men, the odd 44 belonging to other divisions.²⁸ Such reports on straggling usually tended to minimize the phenomenon.

When on 18 October patrols from the combat groups finally reached the northern edge of the Bois de Bantheville and reported encountering no enemy troops, corps was certain that the enemy had begun another of his planned retreats. He must be followed up with fresh troops.²⁹ The 32nd, with casualties estimated between 4,500 and 6,000, was at last

²⁷

Glenn W. Garlock, Tales of the Thirty-Second (West Salem, Wisc., 1927), p. 260.

²⁸

Rpt on Opns of the 32nd Div, Sept 29 - Oct 20, 15 Nov, p. 51 (32nd Div Box 11, 33.6).

²⁹

Msgs between CG 32nd Div and CG V Corps, 18 Oct (V Corps Box 18, 32.15); DOR 50, V Corps, 17 - 18 Oct (V Corps Box 26, 33.1).

ordered to make way for the 89th Division.³⁰

The 89th Division, which "for a week...had been a few miles behind [the] front line with bands playing and other evidences of high morale and a cheerful contempt for long range shells,"³¹ was to find the enemy far from ready to retreat.

Faced with the loss of Côte Dame Marie and Romagne on the 14th, the Côte de Chatillon on the 16th, and with the Bois de Bantheville now threatened by 32nd Division patrols, the German command on 18 October determined to hold the Americans in the positions they had taken and in particular prevent any further occupation of Bantheville woods.

The forest of Bantheville requires special attention. An advance here by the enemy must be stopped at the first line....As soon as the weather permits, the engagement of the enemy artillery with all means (balloon and plane observation) will be carried out. Since the enemy manages his munitioning with trucks, harassing of enemy supply roads is particularly important....Defensive fire must mainly be used in concentrated annihilation fire on the Bois de Bantheville and the ravines where the ready positions of the enemy are to be expected.³²

30

Garlock, above, p. 256, rptd, 1,178 killed, 4,657 wounded, 82 missing in the opn, a total of 5,917. Rpt on Opns, 15 Nov, above. p. 37, rptd a total of 5,019. Ibid., p. 55, the 32nd Div San Train rptd 4,928 (approx 500 killed, 2,801 wounded, 532 gassed, 30 PN, 61 injured, 1,004 sick).

The Medical Dept of the U S Army in the World War, XV, Statistics, Part II, Medical and Casualty Statistics (GPO, 1925), pp. 1030, ff., shows 853 killed, 3,557 wounded, and 727 gassed in the 32nd Div in October, or a total of 5,137. Note: This volume will hereafter be cited as Med Dept Statistics.

31

Garlock, p. 256.

32

13th Div Order Ia 114, 18 Oct (GFB 164, fol II, p. 49).

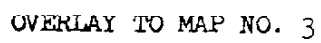
The next day Group Maas West ordered the 13th and 123rd Divisions to concentrate their artillery fire on the Bois de Bantheville. The 13th Division artillery command (Arko 13) was to prepare a firing plan for systematic coverage of the woods and adjoining strongpoints.³³ The sector was divided by a fire protection line in front of the forward positions of the 13th Division (Feuerschutz weit) and another in front of its main line of resistance (Feuerschutz kurz), with right, left, and center zones. (With the subsequent loss of the Bois de Bantheville, these fire lines remained drawn through the wood, as shown in Map No. 3 and Overlay.).

All light and heavy batteries of the division had precise registration data for each of the six zones, and fire missions to the artillery could call for massed fire, moving at 15 - minute intervals from zone to zone. In addition, 37 specific targets, representing American forward areas, troop assembly points, and artillery positions were later designated, 20 of them Eierzeil or pinpoint targets and 17 Rotpunkt or area targets.

Furthermore, upon sending the code message "Feuerschutz Wald von Bantheville," the 13th Division obtained fire support on its grid by the

33

13th Div WD, 19 Oct (GFB 164, fol II, p. 1). The plan as fully formulated appears in sketch atchd to Arko 13 Order, 24 Oct (GFB 164, fol III, pp. 107 - 09).





MAP NO. 3

batteries of its neighboring division. Similarly, the artillery of the 13th Division was registered for supporting fire to the left of its sector on the double heights above Cunel and on the Bois des Rappes, and to the right on the Côte de Chatillon and Landres-et-St. Georges.³⁴

The plan was a standard German defense fire pattern but rarely has it been found in such detail in the records as for the Bois de Bantheville.

It was put into operation the night of 18 - 19 October, as the 32nd Division waited out its relief. A thousand rounds of HE pounded the western edge of Bantheville wood, la Cavanière spring, and Romagne. Howitzer fire fell on Robinette Farm (also known as Transvaal Farm), Tuilerie Farm, and along the Sommerance-Romagne road, and at least 100 rounds of 10 - cm. blue cross (diphenylchloroarsine) and green cross (phosgene) gas burst on troop positions on the same road. Surprise bombardments with small quantities of yellow cross (mustard) gas were also put on Cavanière, Tuilerie Farm, points in the Bois de Bantheville, and on the Sommerance-Romagne road.

During the early morning of the 19th, repeated annihilation fire waves of three - minutes' duration by all light and heavy batteries,

34

See captured Arko 13 Order 4561, 28 Oct, with directions for Arko 28, 107, 41, and 15 Bavarian (SOI file, 89th Div Box 6, 20.1). A copy of the original order is in GFB 164, fol III, p. 124, with accompanying tracings on pp. 122 - 23.

each wave including some blue cross gas, were put down in succession on the right, left, and center of the 32nd Division sector, with special fire on roads, road junctions, and ravines and hills where battery positions had been located.³⁵ Casualties in the 32nd Division on 19 and 20 October were reported in medical records as 54 killed, 50 wounded, and 26 gassed.³⁶

Mopping Up the Bois de Bantheville

On the afternoon of 19 October, with all four regiments of the 89th in a tight line, the 177th Brigade under General Winn moved up to Côte Dame Marie and the 178th under General Hanson came up west of Romagne. There, as orders arrived directing that the front be held by a single brigade, the 177th withdrew to reserve positions and the 178th extended to the left.³⁷

The relief in the Bois de Bantheville that night was carried out with difficulty. The regiments of the 32nd Division were found considerably disorganized and intermingled, their own and enemy dead had been left where they fell, and the exact location of the lines in the wood,

35

13th Div Order Ia 115, Arty Missions for the night of 18 - 19 Oct and 19 Oct, 18 Oct (GFB 164, fol II, p. 50); Msg, Arko 13 to 13th Div, 19 Oct (ibid., p. 55); Morning Rpt, 13th Div to Gp Maas West, 0520, 19 Oct (ibid., p. 10).

36

Med Dept Statistics.

37

FO 82, V Corps, 1100, 19 Oct (V Corps Box 14, 32.1); Wright Diary, 19 and 20 Oct.

which covered a large part of the front, was highly uncertain.³⁸

Bantheville wood was reported cleared, but on the previous day 89th Division patrols had found la Dhuy Farm and the whole northern half of the wood strongly occupied. Furthermore, the enemy order of battle map issued by V Corps to the 89th (Map No. 4) proved inaccurate both as to front lines and enemy dispositions. G - 2 later reported both the 13th and 15th Regiments of the German 13th Division in the wood, their battalions reduced to three companies with a rifle strength of between 25 and 50 each. Each company was believed to have at least six machine guns and two grenade throwers and each regiments was believed to be supported by one or more storm companies. Supposedly east of Bantheville but actually occupying that village was the 123rd Division, and on the opposite flank of the 13th Division, around Landres-et-St. Georges, was the 41st Division (see Map No. 5, below).³⁹

By morning of 20 October the lead battalions of the 355th and 356th Infantry occupied the road west of Bantheville in the forest, as

38

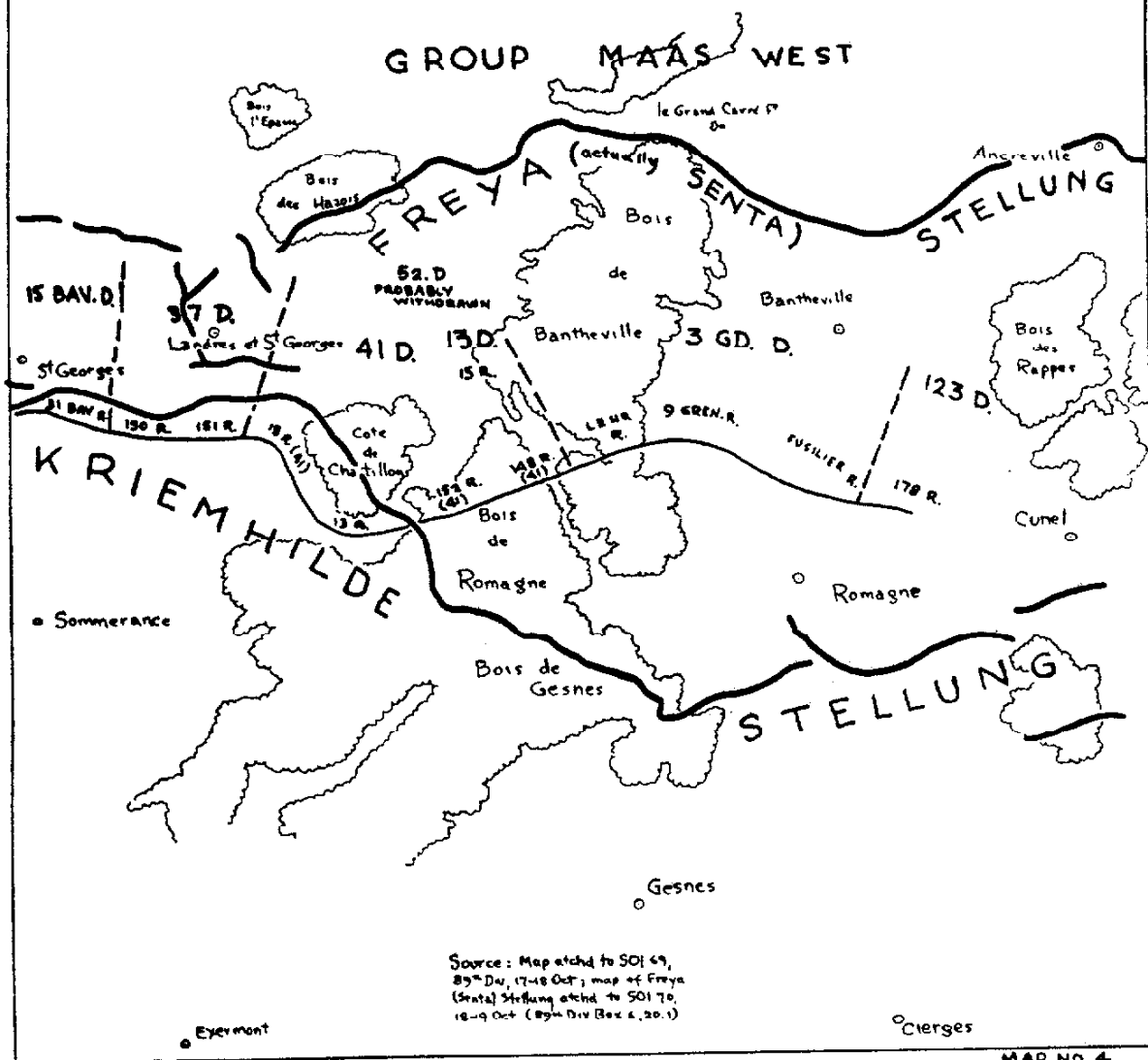
Col George H. English Jr. (Adj, 177th Brig), MS, History of the 89th Div, p. 167 (89th Div Box 2, 11.4). This 290 - page narrative is essentially that publ'd as The Complete History of the 89th Division (War Society of the 89th Div, Denver, Col., 1920) and will be cited hereafter as MS History.

I&O Rpt, 353rd Inf, 24 - 25 Oct (89th Div Box 12, 20.7), said 51 Americans and 20 Germans were buried west of Gesnes where they fell and 7 Americans and 2 Germans in the northwest corner of the Bois de Chauvignon. See also Wright Diary, 17 and 18 Oct.

39

SOI 70, 89th Div, 18 - 19 Oct; SOI 31, V Corps, 20 - 21 Oct (V Corps Box 5, 20.1); SOI 73, 89th Div, 21 - 22 Oct.

PRESUMED ENEMY ORDER OF BATTLE - 18 OCTOBER



the last of the 32nd Division filtered down through the woods. No enemy forces had been encountered.⁴⁰

During the night of the relief, Group Maas West ordered a coordinated yellow cross bombardment of the southern half of Bantheville woods by the 13th and 123rd Divisions. But neither division had sufficient yellow cross or even HE shells at the field gun positions for a mission, and after mortar fire that night, the heavy batteries took over the fire the next day, "mainly on the Bois de Bantheville, [with] single harassing fire rounds during the entire day on roads, especially crossroads, the heights and ravine on the west edge of the Bois de Bantheville, and the east edge of the Bois de Romagne."⁴¹ 89th Division G - 3 reported the "usual amount of gas, continued heavy harassing and counter-battery fire," with an estimated 20 men wounded up to noon on the 20th.⁴²

Verbal orders from corps said the 178th Brigade was to complete mopping up the Bois de Bantheville during the day of 20 October, and outlines of trenches to a depth of six inches were to be taped out and dug along the line of resistance on the north edge of the Bois de Romagne-

40

Rpt of Opns, CG 178th Brig to CG 89th Div, n.d. (89th Div Box 19, 33). The 32nd Division in the World War (Madison, Wisc., 1920), p. 110, said the 89th "elected" to hold the line through the center instead of taking over the northern edge of the wood.

41

Gp Maas West Order to 13th Div, 1205, 19 Oct; Msg, [Arko 13] to 13th Div, 19 Oct; 13th Div Order Ia 126, Arty Missions for night of 19 - 20 Oct and 20 Oct, 19 Oct (GFB 164, fol II, pp. 59 - 61).

42

DOR 70, 89th Div, 19 - 20 Oct (89th Div Box 19, 33.1).

heights of Bois de Gesnes - Côte Dame Marie, preparatory to continuing the advance on that front.⁴³

With the clearing of the Bois de Bantheville, enemy communications along the ridge running southwest from the Bois d'Andevanne to Landres - et - St. Georges would be cut, enabling the 42nd Division on the left to capture that seemingly impregnable position. Beyond were the heights of Barricourt, the V Corps objective originally set on 26 September, which could not be assaulted until Bantheville woods and Landres - et - St. Georges were cleared.

In preparation for the next advance, during which V Corps was to seize the line Bois des Hazois - Côte 253, two battalions of the 353rd Infantry (177th Brigade) were brought to the top of the Bois de Romagne on the evening of 20 October, relieving a regiment of the 42nd Division there and extending the sector of the 89th further to the left.⁴⁴ The mopping - up operation had still not begun.

The order to clear the woods reached the forward battalions of the 178th Brigade at 1000 hours that morning. The job was to be completed that day and would be done without artillery assistance, since the 57th

43

FO 83, V Corps, 1700, 19 Oct, said only that the 42nd and 89th Divs were to develop the enemy MLR by strong patrols; FO 34, 89th Div, 2130, 19 Oct, ordered the mop - up.

44

FO 84, V Corps, 1300, 20 Oct; FO 37, 89th Div, 21 Oct; I&O Rpt, 353rd Inf, 20 - 21 Oct.

FA Brigade (32nd Division), under Brig. Gen. LeRoy Irwin, now attached to the division, was to continue the systematic bombardment of enemy positions, under corps direction, which it had begun the previous day.⁴⁵

On the afternoon of 20 October a reconnoitering patrol found that more than platoons, as originally planned, would be needed to clean up the wood, and a company each of the 355th and 356th Infantry were made ready. The two companies set out after dark, about 2000 hours, and when they lost touch with one another almost at once, each proceeded independently up through the woods. Before the action was over two days later an entire battalion in each of the two regiments was engaged.

With heavy enemy fire falling to the rear, the companies advanced along either side of the forest. On the left, F Company of the 355th met little resistance until it reached Hill 236 (see Map No. 2) where a nest of machine guns opened up and reportedly reduced it in minutes to platoon strength. Reenforced the next morning by two more companies, by 1300 the 355th had taken the hill and four hours later a patrol reached the northwest edge of the wood.

On the right, the company of the 356th Infantry advanced as far

45

See FO 79, V Corps, 2030, 17 Oct. Ltr, DGO 32nd Div to C CWS, 9 Nov, sub: Monthly Rpt for Oct (1st Army Box 341), said that during the week of 19 Oct its arty fired 1600 #5 phosgene shells into the top of the Bois de Bantheville and 1200 #5 into the Bois des Hazois. The 1600 shells could only have been fired on 19 or 20 Oct, though no German record confirms it and the Germans themselves were bombarding and later gassing it. See 13th Div WD, 19 - 21 Oct (GFB 14, fol II, pp. 10 - 14).

as Hill 277 before running into heavy fire. After waiting for reenforcements, it fought its way over the hill and continued to the northeast edge of the wood. About 0500 on the 21st it reached the top and dug in. It was this relatively quick advance, and the hopeful accounts of the other regiment on the left, that apparently led General Wright to say the job was officially reported completed at 0900 on the 21st and the brigade would be relieved at once.⁴⁶

The cries for help and the dribbling in of reenforcements led a more or less impartial observer, the 5th Division Liaison Officer at the 178th Brigade command post, to comment that morning:

Morning dawns and I find that 'except for the mopping up party,' the 178th Brigade has been [officially] relieved and the 177th holds the entire front....I have never seen, in my limited experience, warfare carried on as it has been from this P.C. in the last 24 hours. It is not, however, for me to criticise.⁴⁷

Worse was yet to come.

With replenished supplies, enemy artillery pounded the Bois de Bantheville all through the night of 20 - 21 October, to prevent reenforcements from reaching the forces moving up through the wood. Over 750 HE rounds in alternate single rounds and surprise bombardments

46

MS History, pp. 171 - 72; Wright Diary, 21 Oct.

47

Msg, Bagley to Gen Malone 10th Brig 5th Div, 0830, 21 Oct (89th Div Box 16a, 32.16). See also Rpt, Mopping Up the Bois de Bantheville, p. 6a (89th Div Box 12, 20.7). This draft chapter was reduced to a page in the final MS History.

crashed into the southern half of the wood and the east edge of the Bois de Romagne, and towards morning another 1,020 HE rounds in annihilation fire fell on the center and east side of the wood. Without a let - up during the day of the 21st, enemy light and heavy guns alternated single harassing rounds in zone fire across the center of the wood.⁴⁸

Casualties reported by G - 3 that day, 13 killed and 42 wounded, did not include those in the two assault battalions. Their losses were said to be "considerable." Medical records indicate approximately 50 killed, 200 wounded, and more than 20 gassed.⁴⁹

All day on the 21st the two battalions of the 178th Brigade, beset by snipers and machine guns at the top of the woods, insisted that the woods were cleared and called on the 177th to relieve them. But the 177th Brigade, "dubious of its right and duty to participate in the necessary mopping up," particularly of the central portion of the woods, delayed until nightfall when General Wright, in something of a temper, ordered General Winn and his brigade to go in and take over. As Wright said on the morning of the 22nd: "Owing to the dilatoriness of...the 353rd Infantry, four companies of the 356th Infantry in the Bois de Bantheville [were] not relieved last night as ordered....and

48

13th Div Order, Arty Missions, 20 Oct (GFB 164, fol II, pp. 68 - 9).

49

DOR 71, 20 - 21 Oct; Analysis, p. 78.

the Boche have evidently filtered in there during the night."⁵⁰

It was 1300 on the 22nd before the 1st Battalion, 353rd Infantry, set out, clearing the woods as it went of enemy riflemen and machine gunners that had been bypassed by the 178th Brigade. Advancing on a one - kilometer front, its four companies abreast, the battalion captured four machine guns and two trench mortars with their crews as it progressed. At about 1700 hours, it arrived at the top and established connection with the 354th Infantry, already up on the left. As the relief was made, groups of enemy soldiers were seen withdrawing in the direction of la Dhuy Farm.⁵¹

The last of the enemy who either remained concealed in the woods or filtered back in were not routed until dawn on the 23rd. A German Fifth Army report said that morning: "To improve our position in the Maas West sector the inner flanks of the 13th and 123rd Divisions... pulled back to the hill north of the town of Bantheville," that is, to Hill 280 in the Senta Stellung (Map No. 5).⁵²

While the brigade relief was being debated, enemy artillery through the night of 21 - 22 October kept harassing fire on the Bois

50

Rpt, Mopping Up the Bois de Bantheville, p. 6; Wright Diary, 21 and 22 Oct.

51

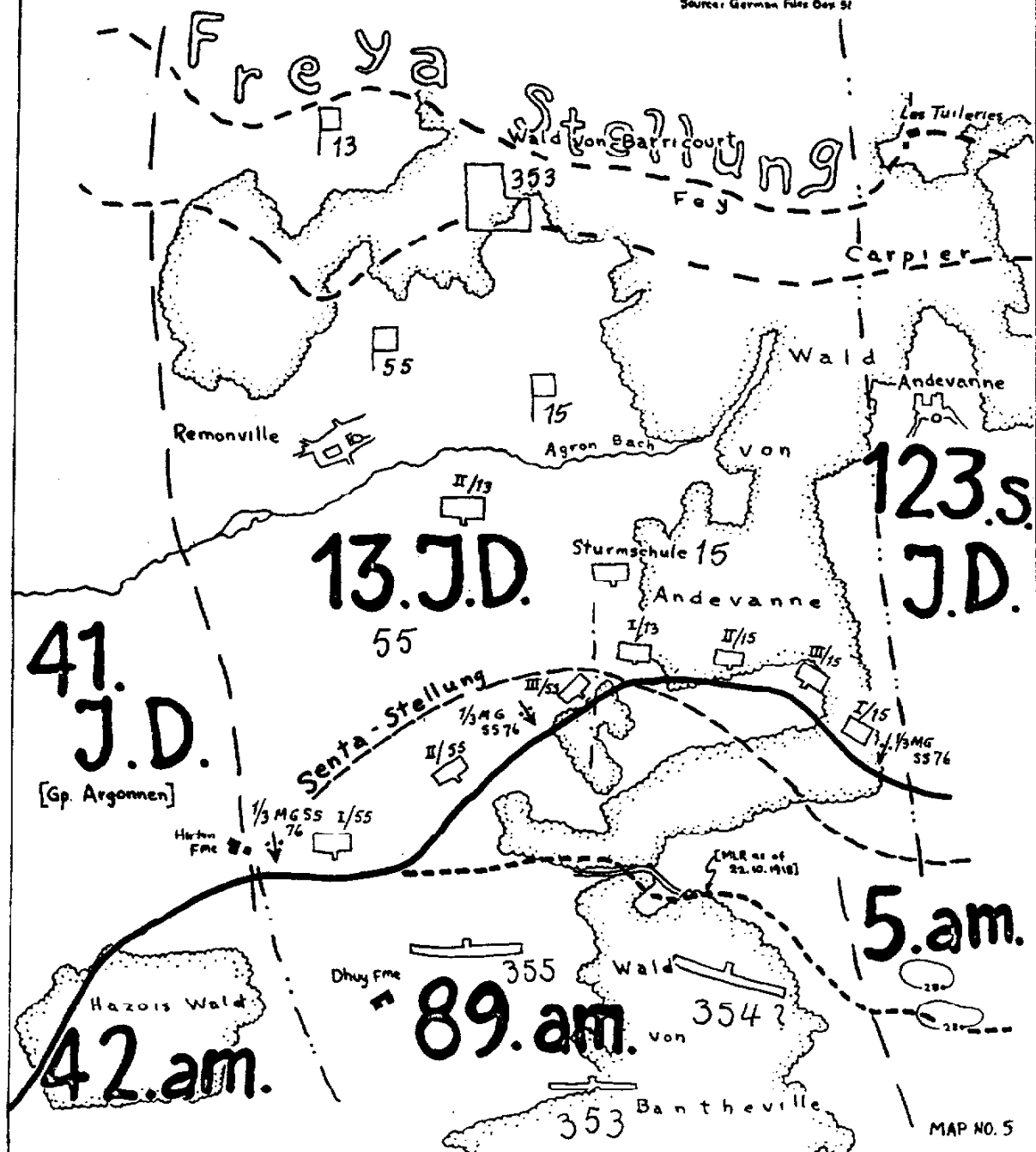
Col James H. Reeves, CO 353rd Inf, Rpt of Opns, Bois de Bantheville, 22 Oct (89th Div Box 21, 33.6); I&O Rpt, 353rd Inf, 21 - 22 Oct (89th Div Box 12, 20.7); Rpt of Opns, CG 178th Brig to CG 89th Div, n.d. (89th Div Box 19, 33); SOI 74, 22 - 23 Oct.

52

Msg, Hq 177th Brig to G - 3 89th Div, 0112, 23 Oct (89th Div Box 17a, 32.16), said the 353rd had reached its objective, with 7 casualties. I&O Rpt, 353rd Inf, 22 - 23 Oct; Morning Rpt, AOK 5, 23 Oct (in Gp Argonne file, GFB 26, fol VI, p. 42); 13th Div WD 22 and 23 Oct (GFB 164, fol II).

(SITUATION MAP, GROUP MAAS WEST, AS OF 0800, 23 OCT 1918)

Source: German Files Box 52



de Bantheville down to the Bois de Chauvignon, and in the early hours put 190 rounds, including 50 blue cross shells, on either side of the road through the central part of the woods. During the day of the 22nd, "the close support group continued the harassing fire on the east and west ravine of the Bois de Bantheville....[with 100 rounds of] blue cross on the ravine and [on targets in] Romagne forest. Also waves of annihilation fire." With little variation, these fire missions were repeated on the night of 22 - 23 October.⁵³

A report at noon on 22 October said that 10 men had been killed and 91 officers and men wounded in the fight for the Bois de Bantheville the previous day.⁵⁴

"In case the enemy gasses..."

The withdrawal of the 178th Brigade to bivouac in the Bois de Cierges left the 177th holding the division front, waiting for the Army order to continue the attack. But Army was in no condition to attack and for the next ten days the brigade remained in place, while the enemy worked furiously on the construction of his Senta and Freya

53

13th Div Order Ia 131, Arty Missions for night of 21 - 22 Oct, 22 Oct, and night of 22 - 23 Oct, 21 Oct; Msg, Arko 13 to 13th Div, 22 Oct; Morning Rpt, 13th Div, 22 Oct (GFB 164, fol II, pp. 77 - 8, 82). The fire is confirmed in SOI 73, 89th Div, 21 - 22 Oct, and 13th Div Morning Rpt, 22 Oct, above.

54

DOR 72, 21 - 22 Oct.

positions, above the broken Kriemhilde.⁵⁵

The 354th Infantry held the left half of the sector, connecting with the 42nd Division, immobilized below Landres et St. Georges, while the 353rd Infantry occupied the right half including the top of the Bois de Bantheville, and tried to maintain liaison with the 90th Division working its way up the right side of the wood. The 90th had relieved the 5th Division in the Bois des Rappes on the morning of the 22nd and shortly thereafter took the villages of Bantheville and Bourrut before it was stopped at the heights of les Grands Carrés.⁵⁶

The expected bombardment of the Bois de Bantheville began with the advance of the 177th Brigade on the afternoon of the 22nd and continued into the evening. About 750 shells were reported, principally in the central and southern portions of the wood, since enemy forces still held parts of the northern sector. "About 30 percent of the shells," said G - 2, "were gas shells, blue, green and yellow cross in the order named." Support troops of the 353rd Infantry, occupying the bombarded area, reported 5 men killed, 30 wounded, and 2 officers gassed. The machine gun company with the 353rd lost about 50 men, in-

55

13th Div WD, 24 Oct, said the Freya Stellung was to be prepared by the 88th Div. See also 1st Bn 13th Regt WD, 28 Oct (13th Div, GFB 164, fol III, p. 46).

56

MS History, p. 174. Les Grands Carrés, known to the Germans as the twin heights of Hill 280, was not taken until 1 Nov.

cluding its commander who was badly gassed. The company had to be replaced the next morning.⁵⁷

This initial shelling of the 353rd in the Bois de Bantheville, unconfirmed in German records so far as any green or yellow cross gas is concerned, seems to have triggered great concern in the command. A message that evening from General Winn, the brigade commander, said:

I have already reported the gassing of the Bois de Bantheville. The matter is a serious one. Gas extends over a wide area. Division should determine whether or not the situation justifies giving up extensive areas. I have directed organizations to change positions but remain in the general locality. It is a difficult and perplexing question, in view of the past experience of the division.⁵⁸

In his diary that night, General Wright summed up the situation:

The gas officer of the 353rd Infantry sent in quite alarming reports of the situation. Got Winn on the phone and he stated that the situation was evidently very serious. I told him to hang on to the woods as they were of great importance for the coming operations and not to give them up unless we had to; that there must be places in the woods where the men could hang on.

I called up General Burtt [Chief of Staff, V Corps] and told him the situation, and he said that owing to the great tactical importance of this part of the woods I had to hold on. I directed General Irwin [57th FA Brig] to call on the Corps for counterbattery work, to put down as heavy a barrage as he was capable of, and I also asked Burtt to get hold of the Army Artillery. Between them they ought to hurt the Boche pretty badly. The Boche is throwing yperite in

57

Msg, CG 177th Brig to Hq 353rd Inf, 1355, 22 Oct; Msg, CG 177th Brig to Hq 89th Div, 2125, 22 Oct (89th Div Box 17, 32.1); DOR 73, 89th Div, 22 - 23 Oct, rptd 2 killed, 93 wounded that day. See also SOI 74, 22 - 23 Oct; I&O Rpt, 353rd Inf, 22 - 23 Oct (89th Div Box 12, 20.7).

58

Msg, CG 177th Brig to CG 89th Div, 1840, 22 Oct (89th Div Box 26, 32.16). See other msgs fr Winn between 1747 and 2228 hrs requesting corps and Army counterbattery and retaliatory fire, and requesting the DGO to survey the gassed area, all in 89th Div Box 17a, 32.16.

— of which, unfortunately, we have no supply for retaliation.⁵⁹

Captain Rowan, Division Gas Officer, had already been directed to get out detailed instructions to the battalion and regimental gas officers of both brigades for terrain studies and plans of action in case of further gas attacks, these plans to be issued to all company commanders. The next morning Rowan went into the wood to locate and map the most dangerously gassed areas. (This map was subsequently lost, and the one he later reconstructed from memory [Map No. 6] actually represented conditions a week later.) He found the woods "just dense enough to hold gas for a long time, but not dense enough to protect against a bombardment with high explosive."⁶⁰

Whether or not the enemy hoped to retake the Bois de Bantheville or simply to delay as long as possible an advance above these woods cannot be known. But it is certain that his HE and gas fire on the central part of the forest was intended to cut off the troops at the top and force them to withdraw. General Wright knew that as soon as the enemy realized that the 89th was not going to withdraw, he would no longer hesitate to use quantities of mustard gas in order to neutralize the wood. Anticipating what was to come, the division order on the afternoon of the 23rd said:

59

Wright Diary, 22 Oct.

60

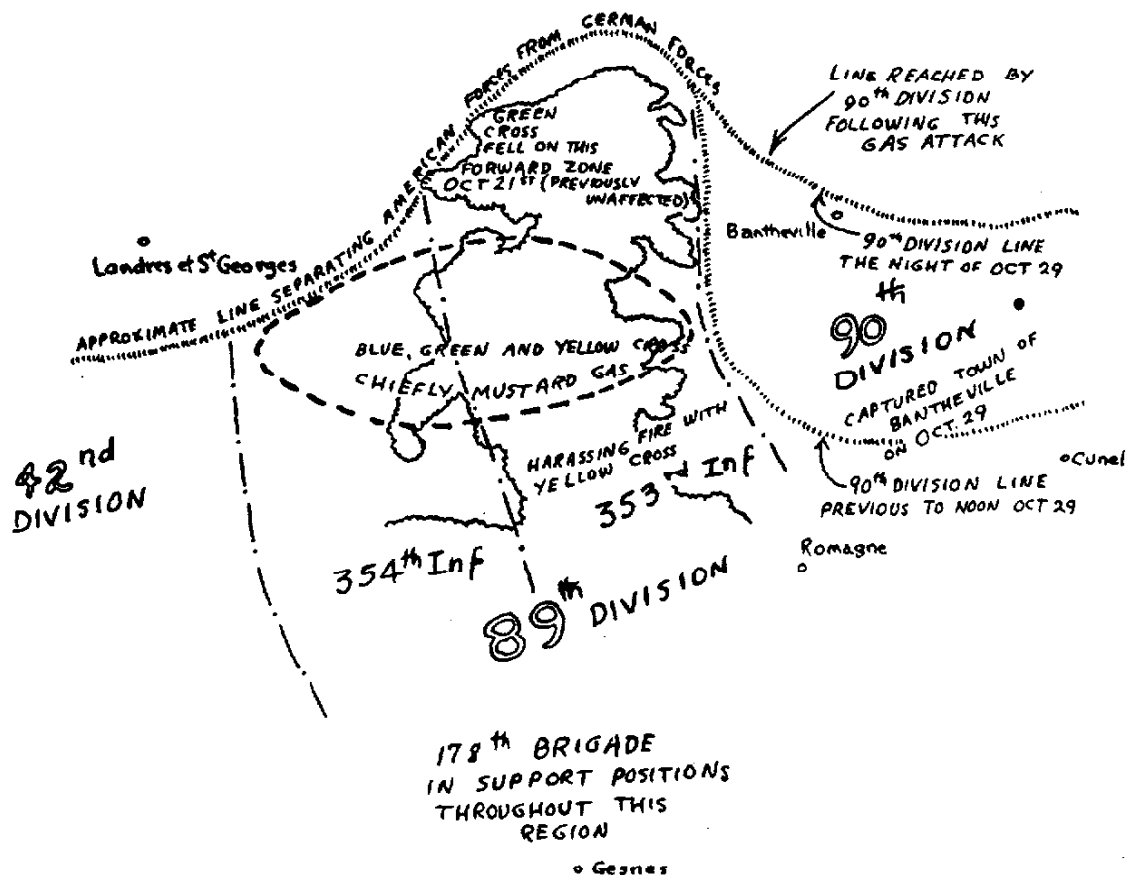
Ltr, DGO to CG 178th Brig, 22 Oct, sub: Present Duties of Gas Officers (89th Div Box 28, 63.32), which directed att to Sector Memos of 26 Sep and 1 Oct (in 89th Div Box 148); I&O Rpt, 353rd Inf, 23 - 24 Oct; Ltr, DGO 89th Div to C CWS Att Def Div, 2 Nov, sub: Gas Attack in Bois de Bantheville (GAF - 89th Div).

Note: Map No. 7, traced in 1920 "from original 89th Division battle maps" for the division history does not seem much more accurate.

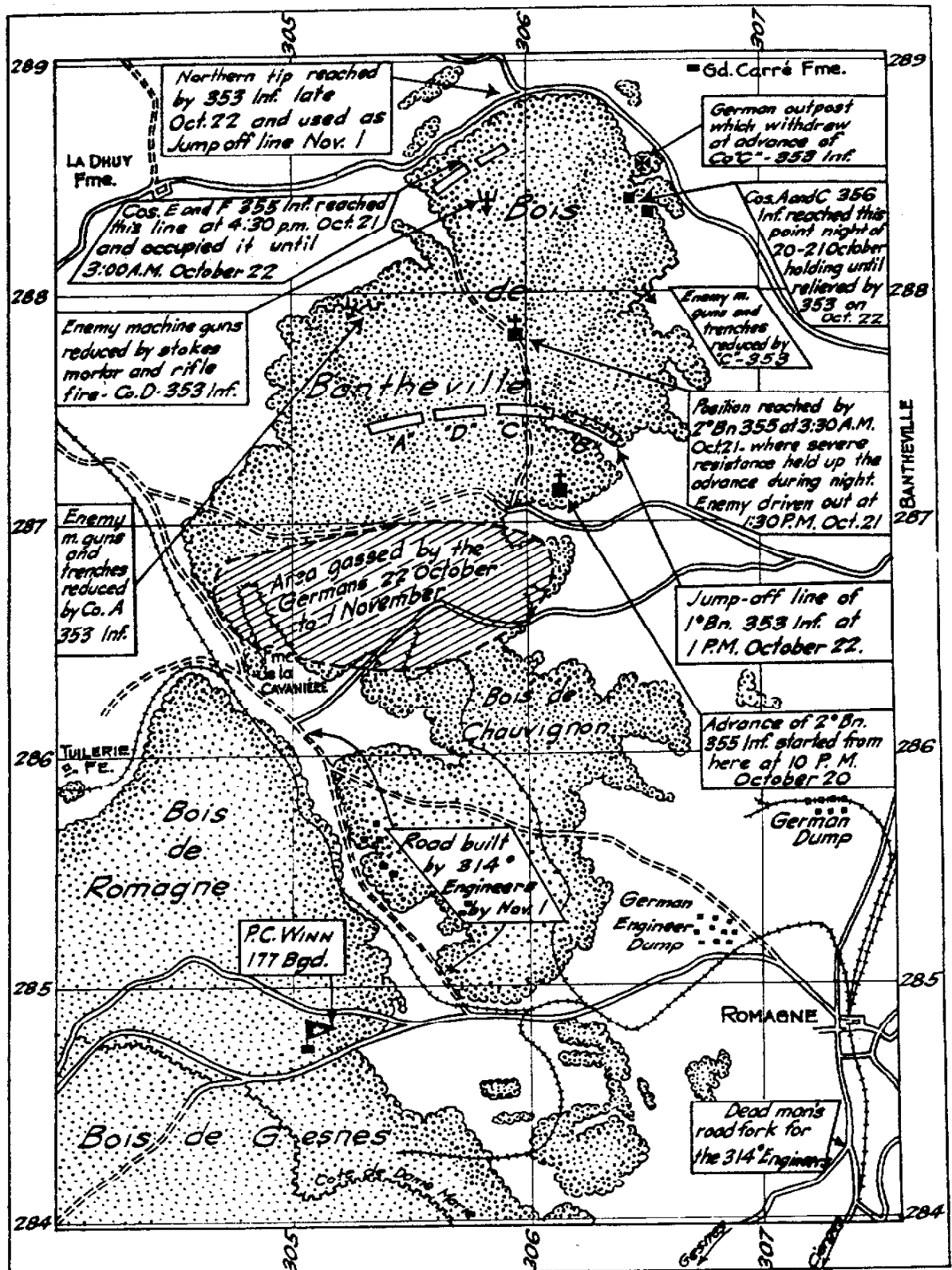
GASSING OF THE BOIS DE BANTHEVILLE OCT. 26-30, 1918

DICTATED FROM MEMORY BY CAPT. HUGH W. ROWAN, CWS,
 FEB. 24, 1928, AND DRAWN BY E.W. SPENCER, FEB. 24, 1928.

SOURCE: SPENCER, HISTORY OF GAS ATTACKS UPON THE AEF, VOL. IV.



MAP NO. 6



Source: 89th Div Bpx 18, 32, 4

MAP NO. 7

In case the enemy gases any portion of our position with mustard gas, that position will be immediately evacuated. However, no unpolluted area, which might be occupied by the enemy or which would be of tactical value to him if occupied, will be given up.⁶¹

The order also said that every effort was to be made to locate the hostile artillery. Since yperite was not available, the enemy batteries would have to be neutralized with high explosives, and until corps and Army could help, the attached French regiment and the 57th FA Brigade (32nd Division) would have to find and fix them.

From the 353rd Infantry observation post set up on Hill 288 in the Bois de Romagne, where the terrain for almost five and a half kilometers to the north could be seen, observers reported that the enemy's field guns seemed to be massed in the projection of the Bois d'Andevanne, west of Carré Farm and in the Bois des Hazois, where a battery of Austrian 88's also appeared to be located. Long-range fire was coming from the Bois de Barricourt, near Rémonville.⁶²

Conferring with General Irwin, 57th FA Brigade commander, to plan a retaliatory gas program with non-persistent agents, Captain Rowan was told that according to Army General Orders 25 the "use of gas by them [was] limited entirely to bombardment under the direction of the corps." Rowan could only ask corps to inform him of any gas bombardment ordered by corps. Actually, this General Order did no

61

FO 40, 89th Div, 1500, 23 Oct, repeated in FO 41, 24 Oct.

62

I&O Rpt, 353rd Inf, 24 - 25 Oct. Cf. map of 13th and 123rd Inf Div arty positions on 17 Oct (GFB 164, fol II, p. 41), which shows a number of guns west of the Bois d'Andevanne and the rest north of the villages of Rémonville and Andevanne.

more than direct division and corps gas officers to inform higher headquarters whenever their artillery fired yperite, and yperite alone.⁶³ The order Irwin may have referred to has not been found, nor has any further correspondence on the subject.

In any event, the guns of the 57th FA Brigade were no longer available. On the afternoon of the 23rd, General Irwin told General Wright "that his men and horses had been withdrawn from the guns and sent back for rest, and that the division would be supported by the French and Corps Artillery for the time being."⁶⁴

Over the next several days calls for counterbattery and retaliatory fire either did not materialize or was reported completely ineffectual.⁶⁵ Two days later General H. D. Todd's 58th FA Brigade (33rd Division) came into the sector as replacements, taking up positions west of the Romagne - Gesnes road. Sometime on 26 or 27 October, General Irwin and his horses returned to their guns.⁶⁶

63

Memo, DGO 89th Div to CGO V Corps, 25 Oct, n.s. (89th Div Box 148); GO 25, 1st Army, 14 Oct (1st Army Box 451).

64

Wright Diary, 23 Oct.

65

Msg, 353rd Inf to 177th Brig, 1000, 25 Oct (89th Div Box 29, 32.16); Msg, CG 177th Brig to CG 89th Div, 1715, 25 Oct (89th Div Box 26, 32.16).

66

Opns Rpts, 57th FA Brig, 27 - 31 Oct (32nd Div Box 24, 33.1), show an average of 2,300 HE shells fired per day and on 1 Nov, 9,655 shells. No gas at any time. Opns Rpts, 58th FA Brig, 28 - 31 Oct (33rd Div Box 22, 33.1), show a total of 11,137 HE fired and approx 10,000 HE on the morning of 1 Nov.

Eierziel and Rotpunkt

Beginning at midnight on 23 October the field guns of the German 13th Division hurled 400 HE and 100 blue cross rounds in annihilation and harassing fire through the center of Bantheville woods, thickening their fire with large caliber shells for two hours before dawn. During the day of the 24th another 70 large - caliber HE shells were put on the heights of Chatillon, the ravine north and south of Cavan-
ière, and the ravine in the Bois de Bantheville. And at the request of the 123rd Division, flanking fire was laid down on the ravine northwest of Bantheville village and along the Bantheville - Rémonville road.

Through the night of 24 - 25 October, 1,100 HE and 200 blue cross 77's fell on the center and east zones of Bantheville wood and the Côte de Chatillon, with 120 HE and 50 blue cross large-caliber shells in the area between Cavanrière and the Côte de Chatillon, and another 80 blue cross rounds in the Romagne - Sommerance east - west ravines. Again at the request of the 123rd Division, still fighting off the attack of the American 90th Division, four missions were fired in the early morning on the draw northwest of Bantheville village and along the east edge of the wood.⁶⁷

⁶⁷

13th Div Order, Arty Missions for 24 Oct and night of 24 - 25 Oct, 23 Oct (GFB 164, fol II, pp. 93 - 94); Noon Rpt, Arko 13 to 13th Div, 24 Oct; Evening Rpt, 13th Div to Gp Maas West, 24 Oct (ibid., p. 100); Rpt, Arko 13 to 13th Div, 1600, 25 Oct (ibid., p. 11).

1st Bn 109th Gren Regt (28th Div) WD, 25 Oct (GFB 180, fol V, p. 115), indicates this div took part in blue-crossing the Bois de Bantheville.

For one Arko 13 fire mission in the early hours of the 25th there are no details except the report: "The yellow cross shoot of our artillery against the Bois de Bantheville was carried out according to plan."⁶⁸ 89th Division G - 2 acknowledged that some time on the night of 24 - 25 October "Mustard gas in a high cloud was projected or drifted into our forward positions [and] arsene gas shells were fired into the Bois de Romagne."

G - 2 said no more about gas fire, reporting only some 800 77 - mm. and 105 - mm. shells on the front lines on the afternoon of the 24th and 1,281 77 - mm. and 150 150 - mm. HE on the front and across the rear west of Romagne that night.⁶⁹

While the 353rd Infantry held fast under the steady rain of fire, German orders for the 25th called for 200 HE and 300 blue cross shells in lively harassing fire at daybreak on the road through the center of the woods, the ravine south of that road, the Bantheville - Rémonville road, and on the hills on either side of the Bantheville - Romagne road, with 50 150 - mm. HE and 20 blue cross rounds on three Rotpunkt

⁶⁷ (continued)

SOI 75, 89th Div, 23 - 24 Oct, said "Gas, including mustard, phosgene and arsene, as well as high explosives" fell all through the night, principally along the northern and eastern edges of the wood to a depth of about one kilometer. SOI 34, V Corps, 23 - 24 Oct, rptd heavy mustard and phosgene fire that day on the Bois de Bantheville, Romagne, Hills 272 and 263, Côte de Chatillon, Bois de Romagne, Côte de Maldah, Exermont, Baulny, and Sommerance.

⁶⁸

Morning and Noon Rpts, 13th Div to Gp Maas West, 0418 and 0945, 25 Oct (GFB 164, fol II, p. 22).

⁶⁹

SOI 76, 89th Div, 24 - 25 Oct.

and Eierzeil targets and in the ravine on the west edge of Bantheville woods. In the morning hours 300 HE and 420 blue cross shells fell on Eierzeil and Rotpunkt targets in the wood and in the ravine northwest of Bantheville village. During the night of 25 - 26 October, 600 HE and 100 blue cross rounds were scheduled for the central and eastern parts of the Bois de Bantheville and the ravines west and northwest of Bantheville, and 60 HE and 50 blue cross 150 - mm. and 10 - cm. shells in the ravines of the wood and on the road west of Romagne — a total of 1,210 HE and 890 blue cross shells that day.⁷⁰

The 353rd Infantry reported 16 wounded and 5 gassed on the 24th and just 25 wounded the next day. G - 3, reporting for the division, listed 4 killed, 28 wounded, and 2 officers gassed on the 24th, 27 men wounded and 5 gassed on the 25th. But G - 3 seems not to have heard from the 354th Infantry. The regiment referred to a "heavy gas attack," apparently meaning the yellow cross shoot fired on the morning of the 25th. It "cost us 250 men and 6 officers" in the 2nd Battalion.⁷¹

70

Arko 13 Order for 25 Oct and night of 25 - 26 Oct, 24 Oct (GFB 164, fol II, pp. 104 - 05); Arty Missions, 58th FA, 24 Oct (ibid., fol III, p. 108); Msgs, Arko 13 to 13th Div, 0400 and 0845, 26 Oct (ibid., fol II, pp. 117 - 18).

71

I&O Rpt, 353rd Inf, 24 - 25 Oct; DOR 74 and 75, 89th Div, 23 - 25 Oct; MS History of the 354th Inf, n.d. (89th Div Box 30, 11.4). Note: Although this history specifically says these 256 casualties occurred on 25 - 26 Oct, medical records (Analysis, 78 - 80) do not support it, nor is this large number elsewhere confirmed, then or later.

That same day, 25 October, Group Maas West reported to Fifth Army on the battle condition of its divisions. The 13th Division, in continuous combat since 1 October, had just 569 effectives left in its three regiments, exclusive of the machine gun and mortar units. Back of the front it had 1,367 recruits, of which only 120 could be used in the near future.

The 123rd Saxon Division, with an average battalion field strength of 300 men, not counting 1,570 recruits and 431 promised replacements, was being relieved that day by the 28th Division, whose battalion strength was 445 men. The 28th had 1,090 recruits, but only 80 of them were available for line duty. In addition, owing to casualty losses and sickness, one of its field artillery regiments was being reorganized into six batteries. The battle estimate made it clear that the German forces above the Bois de Bantheville were in no condition to drive the 89th Division out of the wood.

The relief of the 13th Division, said the Maas West report, was "especially pressing in consideration of its meager combat capacity in relation to the importance of the sector." It was to be relieved on 29 - 30 October by the 88th Division, coming in with an average battalion field strength of 517 men and a total of 785 recruits, only 184 of them available for use. That division, which had met the 89th once before, at St. Mihiel, was again considered fully capable of battle.⁷²

⁷²

Weekly Rpt, Gp Maas West to AOK 5, 25 Oct (in 13th Div WD&A, GFB 164, fol II, p. 114). For 88th Div comment on the 89th as a shock division, see G - 2 Memo 1, 89th Div, 5 Nov (89th Div Box 12.21). Further details on these German divs are in rpts in 89th Div Box 13, 22.1.

Note: The recruits referred to by Maas West may have come from the 150,000 men long stationed on the home front and in service echelons, some of whom were released to Ludendorff in October. See Ludendorff's Own Story (New York and London, 1910), II, 213, 411 - 12.

WALDFEST

The grip of the 89th Division on the Bois de Bantheville, despite the gas and annihilation fire, and what appeared to be excessive movement in the rear of the American lines on 24 and 25 October -- the next general attack of First Army was originally scheduled for 28 October -- led Group Maas West to order intensive patrolling. Through prisoners it was hoped to learn the extent of preparations and when the attack would take place. Meanwhile,

The enemy is to be injured continually by gas and HE fire, especially [in] the Bois de Bantheville, as planned by the 28th Division. The Bois des Rappes is to be thoroughly gassed so that the enemy assembly areas there will be untenable.

Referring to the gas fire put on Maas West targets by V Corps the week before, Group Maas West ordered the 13th Division, with the 28th, to make

more preparations for yellow cross shoots. It is not necessary to fire retaliation shoots as such on the enemy positions directly opposite. Retaliation targets should not be rigid; instead those targets which are especially troublesome to our infantry should be sought out.⁷³

Strong patrol activity of the 89th Division indicated to Maas West that another attack was coming soon and that the Bois de Bantheville, like the Bois des Rappes, would be used for concentration of troops. Because of their strategic importance to the protection of the heights of Barricourt (in the new Freya position), they had to be denied, and

73

13th Div WD, 25 Oct, and Gp Maas West Order Ia 997, 25 Oct (in 13th Div WD&A, GFB 164, fol II, pp. 21, 109 - 10). Gp Argonne WD, 25 and 26 Oct (GFB 25, fol I), observed that the situation on the front was reminiscent of that just before 26 Sept.

to do this, "every target that the enemy offers will be energetically shelled by the artillery."⁷⁴

If the Bois des Rappes could readily be neutralized, the extent of the Bois de Bantheville -- more than four square kilometers -- made drenching the whole of it with mustard gas impractical. Moreover, this was not necessary. The main body of the Americans was still well below the wood, and a band of mustard gas maintained across the lower section of the wood where it joined the Bois de Chauvignon would force attacking troops out of the woods into the open fields on either side.

Contamination of the lower section of Bantheville wood was ordered carried out by the artillery of the 13th and 28th Divisions under the code name WALDFEST -- "Forest Festival." On 25 October the two divisions were alerted: "Upon order of Group Maas West a contamination fire with yellow cross will take place against the Bois de Bantheville that will lay a belt of yellow cross through the entire wood." Seven batteries of the 13th Division artillery and three of the 28th Division were to put down a total of 5,300 rounds of yellow cross, approximately 4,200 in the initial two - hour gas shoot, reserving 1,100 for the follow - up gassing.

74

28th Div WD, 24 Oct (GFB 179, fol II, p. 11); 28th Div Order, 25 Oct (GFB 180, fol IV, p. 219); 1st Bn 58th FA (13th Div) WD, 26 Oct (GFB 164, fol III, p. 150).

The shoot was to begin with five batteries laying down a sudden concentration of blue cross gas (diphenylchloroarsine) in the target area. During the yellow cross fire a single battery was to lay a band of HE below the east edge of the gassed area (where Bantheville and Chauvignon woods joined), to prevent any tropps from evacuating the target area (Map No. 8).⁷⁵

A supplement to this order said that WALDFEST would be carried out between 0300 and 0530 on the morning of 26 October, with the follow - up from 0530 to 0730. Only two batteries were to be supplied with blue cross for the surprise concentration. Two more would therefore be available to thicken the band of HE fire below the gas target. A second supplement specified that during the contamination shoot 550 rounds of blue cross and 300 of HE would also be fired on the Bantheville - Remonville road and into the ravines above and below the gas target.⁷⁶

On the morning of 26 October, the 13th Division reported that "the yellow cross bombardment...against the Bois de Bantheville [was carried out] according to plan." Reports from two of the three 13th Division artillery regiments confirm this but indicate that owing to a shortage

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Arko 28 Order Nr 5964, 25 Oct (GFB 164, fol III, p. 114).

⁷⁶

Supplements to WALDFEST, in 58th FA Annexes, 25 Oct (GFB 164, fol III, pp. 110, 116).

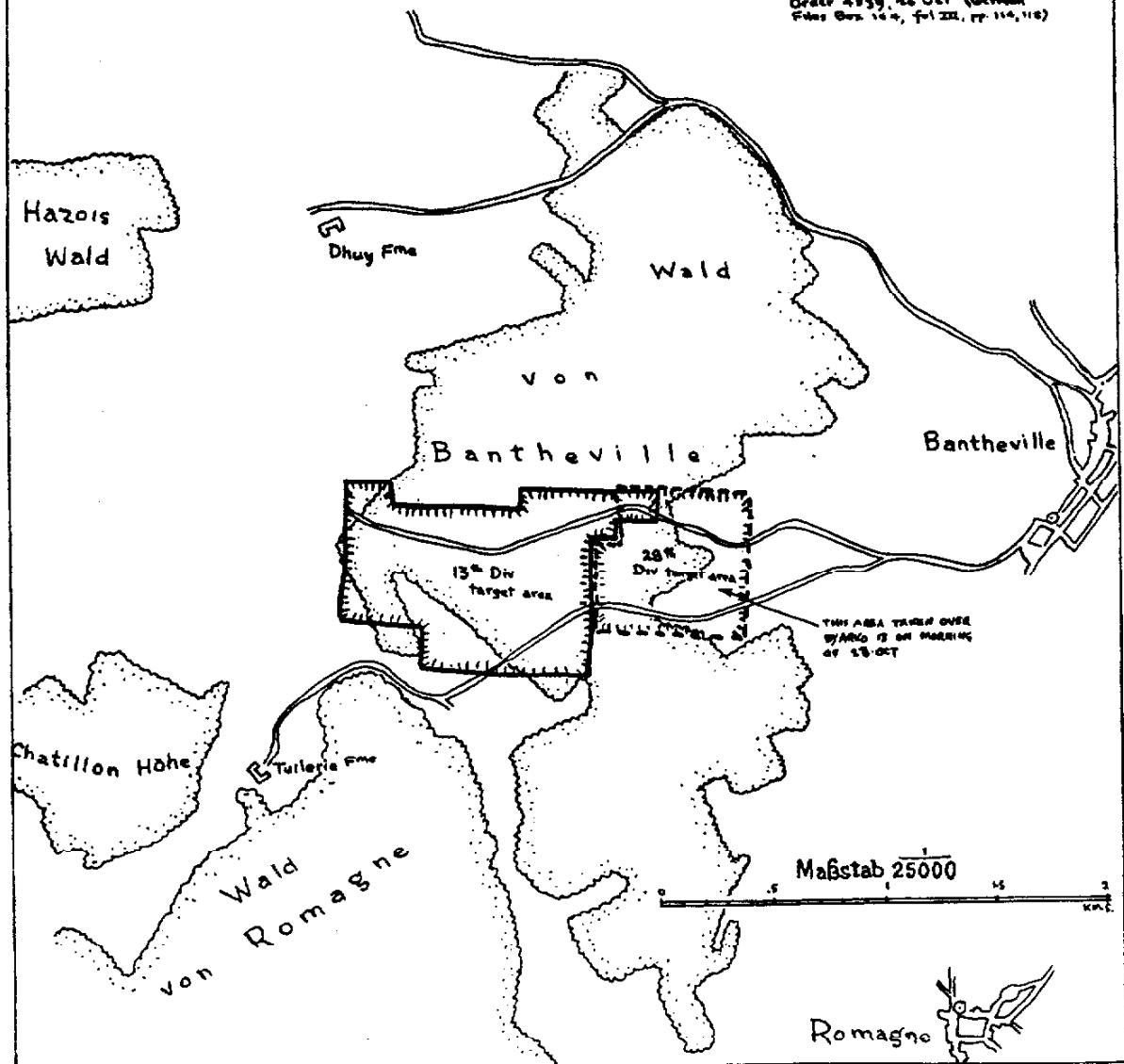
YELLOW CROSS FIRE

ON BOIS DE BANTHEVILLE

MORNINGS OF 26 & 27 OCT

Based on Plan Quadrant
Targets listed in German
Orders to the Artillery

Source: Area 28 Order 5964,
25 Oct and Area 13 Fire
Order 4839, 26 Oct (German
Files Gers 104, fol 22, pp 114, 116)



MAP No 8

of blue cross the target area had been largely ringed with HE fire.⁷⁷

Aware of the heavy bombardment on its front through the night, V Corps reported that "This fire seems to be counter preparation against an expected attack." G - 2, 89th Division, somehow managed to ignore completely the mustard gas bombardment of the Bois de Bantheville. In its report for the 24 hours ending at noon, 26 October, it reported a count of 2,203 HE and shrapnel shells in "bursts of artillery activity" on the Bois de Bantheville, Bois de Romagne, and Romagne, with "much less gas than usual."⁷⁸

The 353rd Infantry in the wood also said nothing of the gas bombardment, reporting only some 25 green cross (phosgene) shells on the previous afternoon and 453 HE shells in the 24 - hour period, exclusive of the two half - hour HE bombardments in the wood in which the number of shells was not estimated. Casualties in the regiment were 5 men killed and 18 wounded; in the division 2 killed, 23 wounded, and 4 gassed. Medical records agree that there were no more than 6 or 7 gas cases on the 26th.⁷⁹

77

Morning Rpt, 13th Div, 26 Oct; Noon Rpt to Maas West, 26 Oct (GFB 164, fol II, p. 117 - 18). 151st Foot Bn WD, 26 Oct, rptd firing 600 yellow cross and 152 HE; 1st Bn 58th FA WD, 26 Oct, rptd 400 yellow cross and 738 HE (ibid., fol III, pp. 173, 80, 150). Records of other elements of the 58th FA and of the 235th FA are not available.

78

SOI, 36, V Corps, 25 - 26 Oct; SOI 77, 89th Div, 25 - 26 Oct.

79

I&O Rpt, 353rd Inf, 25 - 26 Oct; DOR 76, 89th Div, 25 - 26 Oct; Analysis, pp. 78 - 80.

It is just possible that none of the 353rd Infantry was in the bombarded area that night, and it is more than likely that the enemy was using Lorraine cross mustard gas shell, whose high HE content made the sound of the shell almost indistinguishable on burst from ordinary HE. But unaccountable is the failure of division to report on the 354th Infantry, some of whose troops along the west edge of the Bois de Bantheville were caught in the bombardment.⁸⁰

The machine gun company with the 354th Infantry said that "On the 26th many of the men were gassed. In fact the 2nd Platoon was sent to the hospital suffering from gas. The 1st Sergeant was also gassed [and] a chow detail from the 3rd Platoon was gassed on its way back with chow." In Company F of the 354th, one man was killed by shell fire that night and 118 gassed, one of whom died during the day; the death of another, who lingered until late November, was attributed to the same gas attack.⁸¹ Division Surgeon records were to show most of these casualties admitted to the hospital the next day, the 27th.

Immediately upon the completion of WALDFEST, the enemy batteries

80

Cf. Msg, Hq 177th Brig to Hq 89th Div, 0230, 26 Oct (89th Div Box 27, 32.16): "Heavy bombardment has just commenced to the west of the woods. CG 177th Brig requests counter battery and retaliation fire."

The conjectures are probably correct. The shelling of the 354th Inf may have been overlooked since the constant shelling and constant presence of gas made it almost impossible to distinguish specific gas bombardments. Interv. Brig Gen Hugh W. Rowan (ret.), 1 Jun 1960.

81

MS Hist of MG Co, 354th Inf; Record of Co F, 354th Inf (89th Div Box 30, 11.4).

resumed their harassing fire on the wood, putting 200 HE and 100 blue cross shells into the area above the gassed zone, flanking fire on the Bantheville - Remonville road, and the ravines south of that road. The heavies fired 30 HE and 10 blue cross on four sensitive points in the wood. During the rest of the day and into the evening the light and heavy guns again alternated in harassing missions, with a total of 1,110 HE and 280 blue cross rounds on these same targets and others as far south as the Romagne - Sommerance road.⁸²

That evening the 13th Division artillery commander (Arko 13) was notified that "The gassing of the Bois de Bantheville must be maintained daily by follow - up gassings with yellow cross [nachgelben]. This program must be coordinated with the artillery commanders of the neighboring divisions."⁸³ A repeat of WALDFEST with 3,389 rounds of yellow cross was to be carried out between 0330 and 0530 on 27 October. Eight batteries in the three regiments of Arko 13 would cover all the targets assigned Arko 13 and Arko 28 the night before. Since two of the units confirmed firing their missions, the whole of the shoot may be assumed to have been completed.⁸⁴

82

Arko 13 Order, 25 Oct (in 58th FA Annexes, GFB 164, fol III, p. 109); Evening Rpt, Arko 13 to 13th Div, 26 Oct (GFB 164, fol II, p. 119).

83

13th Div WD, 1905, 26 Oct; 13th Div Order to Arko 13, 26 Oct (GFB 164, fol II, pp. 23, 120).

84

Arko 13 Fire Order 4539, 26 Oct (GFB 164, fol III, p. 118). 151st Foot Bn WD, 27 Oct, rptd firing 800 yellow cross, 15 blue cross, and 246 HE; 1st Bn 58th FA WD, 27 Oct, rptd 530 yellow cross, 559 HE (ibid., fol III, pp. 174, 150).

A German battalion war diary said the next morning: "In the night a lively yellow cross shoot was carried out by our artillery on the Bois de Bantheville and the remaining assembly points from which an attack was expected. Enemy artillery appeared paralyzed as a result of this gas-sing." 13th Division headquarters did not agree, reporting "Enemy artillery very lively [with] heavy fire in single rounds and sudden bombardments mixed with gas on [our] infantry, artillery and rear areas. Our batteries [nevertheless] continued the ordered yellow cross bombardment on the Bois de Bantheville."⁸⁵

"Slight losses and light cases"

At 0421 on the 27th, the 177th Brigade phoned and said that for over an hour the front lines of the 353rd Infantry had been under gas attack and that mustard gas was being used. The brigade asked for counterbattery fire, and General Wright sent the message at once to the two artillery commands. At noon, division G - 2 reported that the northern edge of the Bois de Bantheville had been under mustard gas fire for about three-quarters of an hour that morning.⁸⁶

The G - 3 report, also issued about noontime, said that hostile fire in the period had been lighter than usual, probably because the

⁸⁵

1st Bn 13th Regt WD, 27 Oct (GFB 164, fol III, p. 45); Msg, Arko 13 to 13th Div. 1000, 27 Oct (ibid., fol II, p. 126); Noon Rpt, 13th Div to Gp Maas West, 0940, 27 Oct (ibid., fol II, pp. 23, 127).

⁸⁶

Tel msg, 177th Brig to Hq 89th Div, 0421, 27 Oct (89th Div Box 27, 32.16); SOI 78, 89th Div, 26 - 27 Oct.

divisional artillery had "plastered le Carré Farm, the road north of the Bois de Bantheville, and [had put gas on] the southern part of the Bois d'Andevanne through the night" of 26 - 27 October, to neutralize the enemy machine guns at Carré Farm and the artillery that had stopped the 90th Division, on the right, that day.⁸⁷ (The plastering may have cut down enemy fire but it did not otherwise help the 90th. Carré Farm was not taken until 1 November.)

It was later estimated that in the enemy bombardment on the morning of the 27th several thousand gas and HE shells had blanketed the wood between the Bantheville road and the northern part of the Bois de Romagne, with the greatest concentration between the front line battalion of the 353rd Infantry at the top of the wood and its support battalion in the southern portion. Although neither battalion was said to have been in the target area, all communication between them was cut off.⁸⁸

The 354th Infantry was not so fortunate. In its sector along the left edge of the wood, the area of greatest gas concentration was almost directly on the positions occupied by the support battalion,

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DOR 77, 89th Div, 26 - 27 Oct. The only 89th Div record of this gassing is Msg, CG 177th Brig to Hq 89th Div, 1830, 26 Oct (89th Div Box 27, 32.16): "At 2000 hrs...the woods extending from 05.1 - 89.2 to 05.8 - 89.2 will be gassed." Available arty records suggest the gas was fired two nights later. See p. 60 - 1.

⁸⁸

MS History, p. 175.

and Company F in particular suffered severely as a result of "direct hits splashing gas on the men" (Maps No. 9 and 10). The intensity of the bombardment and the darkness of the night made it impossible to move these men back until towards morning. Despite the shelling, runners, food details, and a signal men continued to operate through the night in both regiments.⁸⁹

Colonel Babcock, 354th Infantry commander, said that morning:

I have investigated the outpost line in the Bois de Bantheville and find even the high ground shelled strongly with gas, and numerous men stationed there more or less affected....From my experience in the gas today and from the number of working parties, ammunition carriers, engineers and others found in the gassed area, and food details going up to the 353rd Infantry, it is very possible that there will be many more gas casualties during the next 24 hours. The woods seemed to be saturated with gas and the sunshine is bringing it out over a vast area.⁹⁰

In the afternoon, General Winn, the brigade commander reported:

354th Inf had 3 officers and 80 men gassed up to 6 hours and numbers increasing. I have authorized changes in the gassed area by reducing the number of companies on 354th Inf forward positions to two. The effects of the gas are not so much the result of a single attack on specific areas as the continued gas spread for several days over a wide area.⁹¹

At noon on the 27th, the 353rd Infantry reported "some mustard gas in the front position about 3:15 A.M.," but there were no gas casualties. Division G - 3 may have been justified in reporting no

⁸⁹

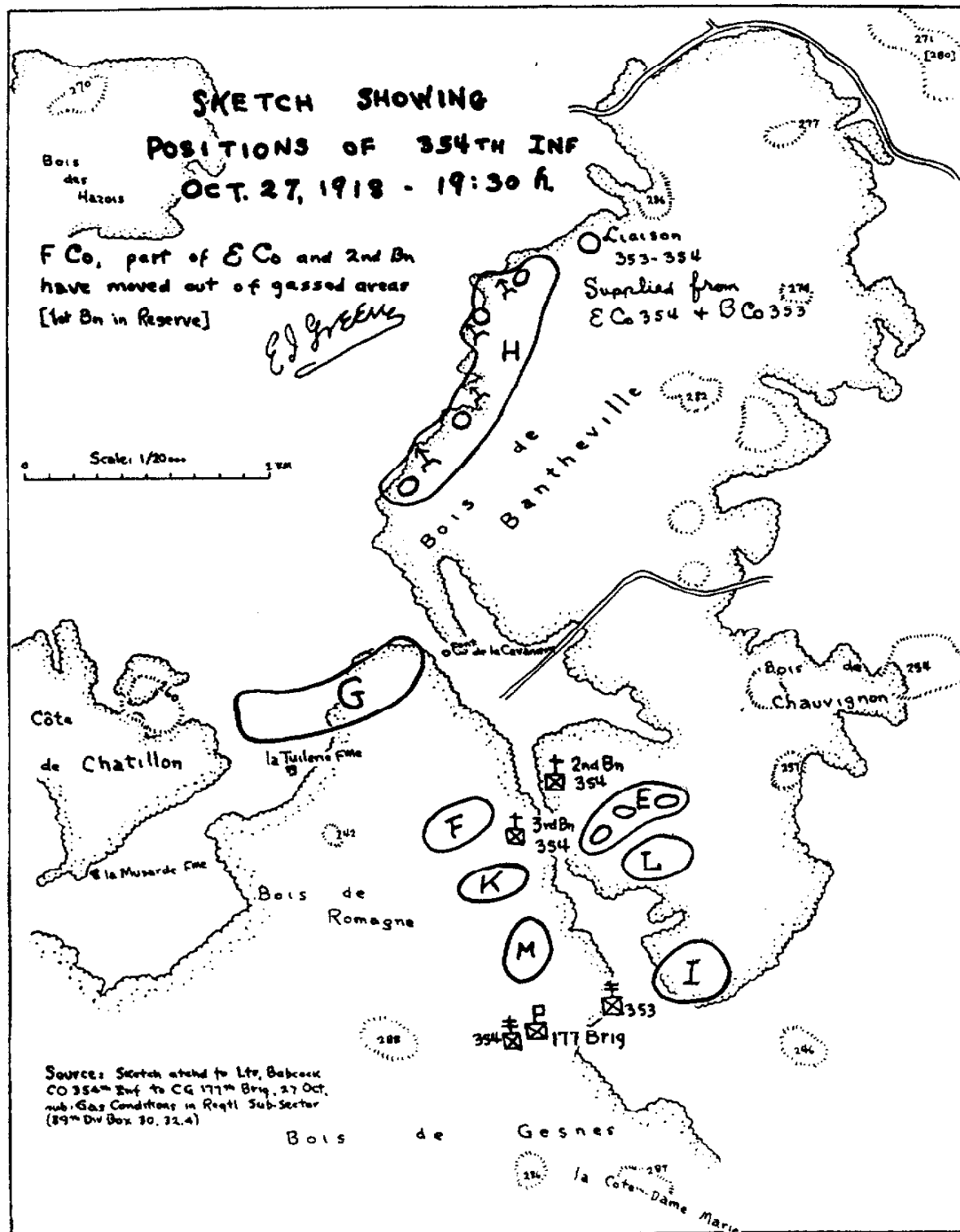
MS History, p. 175.

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Ltr, Col Conrad S. Babcock to CG 177th Brig, 27 Oct, sub: Gas conditions in Regtl Sub - Sector (89th Div Box 30, 32.4).

⁹¹

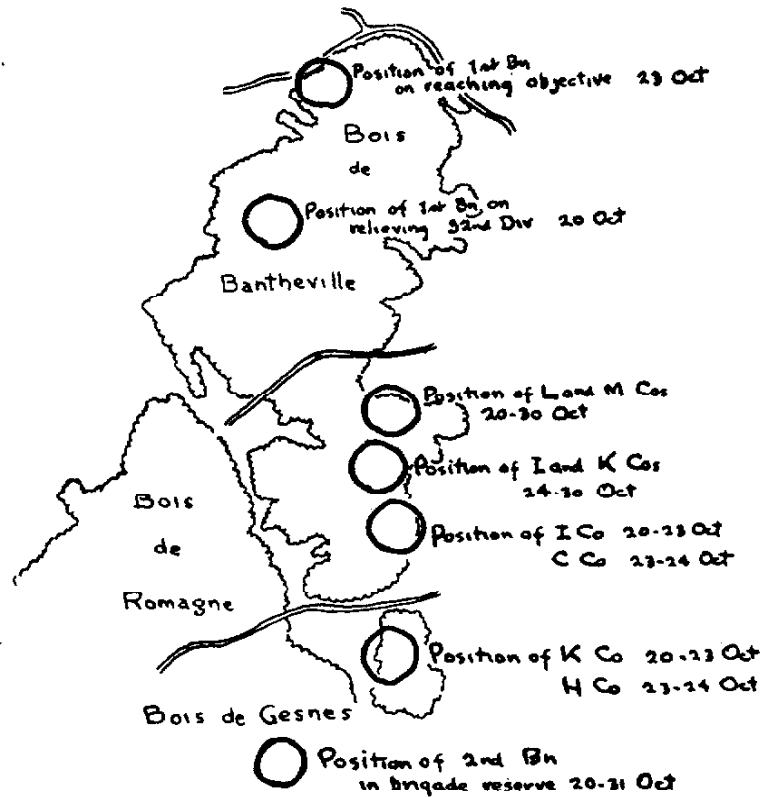
Msg, Winn to G - 3 89th Div, 1449, 27 Oct (89th Div Box 17a, 32.16).



MAP No. 9

SITUATION SKETCH, 353RD INFANTRY 20-30 OCTOBER

Source: 89th Div Box 29, 32.6



MAP No 10

gas cases at that time, although 9 men had been killed and 29 wounded by the shell fire. Then, late that afternoon, the commander of the 353rd Infantry, Colonel Reeves, suddenly called for help:

Request immediate relief for 353rd Inf....Must have more medical help in order to carry on first aid and evacuation...1st and 3rd Battalions without any surgeons...All stretcher bearers of 1st Battalion are casualties....The situation is critical.⁹²

Colonel Reeves may have had a moment of panic, finding himself isolated at the top of the wood. At any rate he wasn't relieved, and most of the 250 or more gas casualties taken out of the wood that day and the next were not from his regiment but from the 354th.⁹³ Meanwhile, the Division Gas Officer had been sent in again to assess the danger to the troops remaining in the wood.

After surveying the gassed area, Captain Rowan reported that the front line positions of the 353rd Infantry had not been gassed, due to the proximity of the German lines. But the heavily gassed area back of those positions would make supplying and rationing the forward troops difficult. Since the 90th Division was soon to take over a portion of the 353rd sector on the right, the troops relieved there should be brought back to reserve positions and not used to reenforce or replace those at the top. The front in the Bois de Ban-

92

I&O Rpt, 353rd Inf, 26 - 27 Oct; DOR 77, 26 - 27 Oct; Msg, Reeves to G - 1 and Div Surg, 1745, 27 Oct (89th Div Box 17a, 32.16).

93

Analysis, pp. 78 - 80.

theville should be held as lightly as possible.⁹⁴

In the 354th Infantry sector, the outposts in the open country beyond the woods had not been gassed, but the woods, almost to the extreme outer edge, had been "heavily filled in places with mustard gas." The contaminated area appeared even more extensive than in the 353rd Infantry sector, and Captain Rowan agreed with the regimental commander that one battalion should be moved back to reserve.⁹⁵

Rowan made no reports on the blue cross gas fire that had begun as soon as the division moved into the Bois de Bantheville on 20 October nor of the specific mustard gas attacks on 25, 26, and 27 October, waiting until early in November to make a general report only on the gas experience of the 89th in the period 26 - 31 October. As "a liberal estimate," he put the total casualties at about 400, most of them occurring on the 27th and 28th of October, and about 70 percent very slight.⁹⁶ He agreed, for the most part, with the summary of that gas experience in the division history:

Troops who were well disciplined and [well] instructed in gas defense, who used their masks intelligently, kept their clothes carefully buttoned up, did not sit down or linger in low places, and reported for treatment at the first sign of injury from the effects of the gas, es-

94

Wright, Rpt on Meuse - Argonne Offensive, 11 Nov (89th Div Box 19, 33), said the eastern edge of the Bois de Bantheville was turned over to the 90th Div on 25 Oct, but a gas map of the 90th Div for the period 22 - 31 Oct shows its left boundary outside the wood (90th Div Box 87,33).

95

Rpt...of DGO on conditions, Oct 27, 1918, in 177th Brig Sector (89th Div Box 27, 63.33).

96

Ltr DGO to C CWS Att Def Div, 2 Nov, sub: Gas Atk on Bois de Bantheville (GAF - 89th Div); Spencer, III, 551 - 54.

caped with slight losses and light cases.

It was also noticeable that the quality of the German gas had deteriorated. It was not nearly so virulent as the gas which had been thrown upon us in the Lucey sector [in August].⁹⁷

The division historian seems not to have known about Lorraine yellow cross, with its high HE content.

Keeping all the rules of good gas discipline was not easy. At first, attempts were made to supply the troops at the top by going up in the open along the sides of the wood. This was hastily abandoned when the slightest movement out of the wood brought down intense fire. Since moving through the wood by day brought down the same fire, supply had to be carried out at night. A sergeant in Company K, 353rd Infantry, described the perils along the "narrow, winding, muddy paths, full of shell holes," in the wood.

Worst of all in Bantheville Wood were the chow details, which carried food to the companies in the front line. The trip, four kilometers through the underbrush, had to be made twice daily, and every man in the company had to take a turn at least every other day. By some mysterious means the Germans knew the exact time the detail started and the path it took, so that every trip had to be made through bursting shells, shrapnel and gas. Scarcely a trip was made without at least one casualty.⁹⁸

If those making the trip from the rear were cautious, some holding positions in the wood took chances with gas discipline. A

97

MS History, p. 176. Rowan denies that the virulence of German yellow cross ever deteriorated. Interv. 1 Jun 1960.

98

Sgt S. A. Johnson, Hist of Co K (89th Div Box 28, 11.4).

member of the one - pound cannon platoon, with the 354th Infantry in the wood, later said that

Jerry tried his best to shell [our] positions....One evening...he dropped a few gas shells on the top of the hill and let the gas settle down on us. The boys ducked into their gas masks, and a few important ones who had left their masks in their dugouts came flying up the hill spilling coffee and chow [and] falling over the barbed wire and stuff the Germans had left behind a few weeks before.⁹⁹

To the very end of the month preparations continued in the wood for the coming assault. To get the artillery through there later, the 314th Engineers hauled rock for two weeks from Romagne, building a corduroy road over an old trail that passed "through an area two kilometers in extent, filled with mustard gas, which the Germans had thrown over in hopes of cutting [the front] off from the rear, a gas so thick that it resembled a heavy mist." For all their efforts, the new road wasn't used when the time came for the advance. A shorter way was found outside the woods.¹⁰⁰

"Morale and spirits....remain fine"

After the repeat of WALDFEST on the morning of the 27th, 13th Division artillery began a thick harassing fire in the ravines in the Bois de Bantheville, the front edges of the wood, and across the sector from Cavanière to the Bantheville - Romagne road that lasted into

99

MS Hist of One - Pound Cannon Plat, Hq Co 354th Inf (89th Div Box 30, 11.4).

100

MS Hist of Co B, 314th Eng (89th Div Box 38, 11.4).

the night. The field guns fired approximately 600 HE and 600 blue cross shells that day, while the heavies put 60 HE and 50 blue cross rounds on Romagne, the ravine to the northwest, and on the Romagne - Gesnes road.¹⁰¹

Before dawn on 28 October, said Arko 13, there was to be "a regassing with yellow cross...on the part of the Bois de Bantheville that was contaminated last night and the night before last." Six batteries were to fire a total of 1,014 yellow cross shells in one hour, beginning at 0330. Supporting batteries, as they had on previous mornings, were to put harassing and covering fire, including 100 blue cross rounds, in the wood. The missions were carried out.¹⁰²

Division G - 2 reported "continued heavy harassing of the Bois de Bantheville and Bois de Chauvignon with gas, HE and shrapnel," and for about three-quarters of an hour in the early hours of the 28th "a bombardment of the Bois de Bantheville in which some gas was used." G - 2's comment that "Our own artillery was more active than the enemy artillery" was true for the first time since the division had come into the sector, and continued so over the next four days.¹⁰³

¹⁰¹ 13th Div Order Ia 175, Arty Missions for 27 Oct and night of 27 - 28 Oct, 26 Oct (GFB 164, fol II, p. 121).

¹⁰² Arko 13 Order for Yellow Cross Shoot on night of 27 - 28 Oct (GFB 164, fol II, p. 128); confirmed in Rpt, Arko 13 to 13th Div, 0845, 28 Oct, and Noon Rpt, 13th Div to Maas West, 0940, 28 Oct (ibid., fol II pp. 133, 25). 151st Foot Bn WD, 28 Oct (ibid., fol III, p. 174), rptd firing 446 yellow cross and 414 HE.

¹⁰³ SOI 79, 89th Div, 27 - 28 Oct.

The artillery supporting the 89th began firing about 5,000 HE shells a day.

A reconnaissance patrol on the 28th, leading elements of the 178th Brigade into reserve positions in the Bois de Romagne north of the Romagne - Sommerance road, found that the whole section of the woods east of Tuilerie Farm had been heavily contaminated with mustard gas the previous night.¹⁰⁴ This was adjacent to 354th Infantry (177th Brigade) positions, and it may have been that regiment that accounted largely for the 87 gas casualties reported by G - 3 that day. The 353rd Infantry, in the right sector of the wood, reported the bombardment of its "entire front area" and the use of some gas, but no gas casualties. Observers had counted 628 HE shells, killing 2 men and wounding 10. The other 9 men killed and 11 wounded that day were probably in the 354th Infantry sector.¹⁰⁵

Enemy harassing fire continued on the Bois de Bantheville through the day of the 28th. Early the next morning a concentration of blue cross gas was put in the wood and unspecified amounts of yellow cross and blue cross gas in the Bois de Gesnes.¹⁰⁶ On the 29th the 353rd

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Msg, CO 356th Inf to CG 178th Brig, 1323, 28 Oct (89th Div Box 30, 11.4).

¹⁰⁵

DOR 78, 89th Div, 27 - 28 Oct; I&O Rpt, 353rd Inf, 27 - 28 Oct.

¹⁰⁶

Morning Rpt, Arko 13 to 13th Div, 0845, 29 Oct (GFB 164, fol II, p. 142).

Infantry reported no new gas in its sector of the wood but said some 226 HE shells had caused 4 deaths and 12 wounded. The division reported 6 killed and the surprising but unexplained figure of 142 wounded.¹⁰⁷

Curiously, there was no comment either by division or by the regiments in the Bois de Bantheville on what is almost certainly the first gas bombardment of enemy positions by the 89th's attached artillery, on the early morning of 29 October. The 89th Division was concerned about enemy use of gas but not interested in using it. This was made clear several days earlier, when General Winn, the 177th Brigade commander, suggested that just before the next general advance the Bois des Hazois be neutralized with yperite, leaving it to be mopped up from the rear. The division commander, General Wright, was inclined to agree, but Colonel Lee, the Chief of Staff, turned the suggestion down flatly and no more was said about it.¹⁰⁸

This lack of conviction about the use and value of gas, and perhaps the fact that the gas bombardment on the 29th was made with #9 shell, an obsolete lachrymator supplied by the French to American artillery, may account for the absence of any sign of interest in the shoot. Reported only by the 58th FA Brigade was the fact that it had exhausted its supply of gas shells in firing 3,788 #9 rounds into the edges of the Bois des Hazois, 1,000 #9 into the southwest corner of

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I&O Rpt, 353rd Inf, 28 - 29 Oct; DOR 80, 28 - 29 Oct.

¹⁰⁸

Wright Diary, 23 Oct.

the Bois l'Epassé, and 944 into the west edge of the Bois d'Andevanne that morning, along with 3,338 HE shells during the 24 - hour period.¹⁰⁹ The German 13th Division reported "heavy harassing fire with gas included on our infantry, artillery and rear areas at daybreak!" The astonishment indicated by the exclamation point in the report was interesting, but nothing was said about casualties.¹¹⁰

Between 19 and 29 October, said General Winn in a summary report on his 177th Brigade, losses in the 354th Infantry, on the west side of the Bois de Bantheville, had been 28 killed, 105 wounded, and 211 gassed. The 353rd Infantry, on the right, had lost 52 men killed, 265 wounded, and 38 gassed, and the 341st Machine Gun Battalion with them had suffered 11 killed, 66 wounded, and 15 gassed. "Notwithstanding the losses [791 officers and men] on account of shells and gas, the morale and spirits of the men remain fine."¹¹¹

As General Winn implied, enemy shelling had caused most of the casualties in the brigade. After the clearing of the Bois de Bantheville, losses to rifle and machine gun fire from the enemy positions just above the wood had been negligible. And far more annoying than

¹⁰⁹

SOI, 58th FA Brig, 28 - 29 Oct (33rd Div Box 22, 20.1); Opns Memo, 58th FA Brig, 1600, 28 Oct (ibid., 32.15); Opns Memo, 58th FA Brig, 28 - 29 Oct (ibid., 33.1). Opns Rpt, 58th FA Brig, 28 - 29 Oct (ibid., 33.1), said a total of 5,786 gas shells (not 4,732) had been fired. Memo for file, Actg Opns O, 58th FA Brig, 30 Oct (ibid., 31.22), said this exhausted the supply of gas projectiles.

¹¹⁰

Noon Rpt, 13th Div to Gp Maas West, 29 Oct (GFB 164, fol II, p. 142).

¹¹¹

Ltr, CG 177th Brig to CG 89th Div, 30 Oct, sub: Rpt regarding brigade (89th Div Box 26, 10.5); Strength Rpt, 177th Brig, 29 - 30 Oct (89th Div Box 28, 10.5).

lethal had been the machine gun fire of the gorgeously painted planes of the Richthoven Circus that daily swept unchallenged up and down the front lines, and led to "the doughboys' unchangeable opinion of the air service -- all air and no service."¹¹²

Gas Pockets

Ten days had passed since the 89th Division had come into the line and except for clearing the Bois de Bantheville and a certain amount of patrolling it had remained in place, holding with small forces the sides and top of the wood. The other divisions across First Army front, worn down from long combat and high losses, had also remained more or less in place, confining themselves to adjustments in their lines preparatory to a new general advance.

The Côte de Chatillon and Bois de Bantheville had been taken by V Corps and Cunel heights by III Corps, but the corps on either side of these two still fought to clear strategic enemy positions on their fronts, the Bois des Loges and Bois de Bourgogne above the Argonne forest and the ridge of the Bois de la Grande Montagne east of the Meuse. Plans to neutralize with yperite the Bois de Bourgogne and Grande Montagne and drive the next attack through the center of the First Army line were first broached on 24 October and then fixed in the final order for the attack on 27 October.¹¹³

¹¹² MS History, p. 176.

¹¹³ Study No. 10, "The Use of Gas in the Meuse - Argonne Campaign," pp. 48 - 9.

By that time, too, the objective of the 89th Division was no longer the Bois des Hazois but the heights of Barricourt, almost seven kilometers farther north. To ensure as much surprise as possible the 177th Brigade, then in place, was to make the attack, with the fully rested 178th Brigade and its machinegun battalion in close reserve, ready to pass through and continue the attack on the second morning.

It is difficult to estimate the accumulative effect of the ten days of gas and HE fire on the 177th Brigade in the Bois de Bantheville. The 354th Infantry was to say that the gas attack of 25 [26?] October, which cost 6 officers and 250 men, "together with the many shell fire casualties, so far depleted the 2nd Battalion as to make it later necessary to put them in reserve and use the 1st Battalion for the assault."¹¹⁴

Even though no more troops than necessary had been kept in the woods, the toll, particularly in officers, had been high. Uneasy over his shortage of officers, the loss of his gas officers, and unable to get replacements of either officers or men, General Winn asked G - 1 on 30 October whether at least he might have two or three assistant gas officers on the division staff as regimental gas officers. He did not get them.¹¹⁵

¹¹⁴

MS History of 354th Inf (89th Div Box 30, 11.4).

¹¹⁵

Msg, Winn to G - 1 89th Div, 1736, 30 Oct (89th Div Box 17, 32.1); Interv. Brig Gen Hugh W. Rowan (ret.), 1 Jun 1960.

Some idea of how understrength the 177th Brigade was for the attack may be deduced from General Wright's report on 6 November, after the brigade had reportedly lost over 900 killed and wounded in the attack, that it was then at 60 percent strength. The division as a whole, said, Wright, needed replacements of 306 officers and 6,153 men.¹¹⁶

While preparations for the attack filled the rear areas with turmoil, enemy fire raked the Bois de Bantheville through the day of the 29th and that night, and gassed the road through the center of the wood for an hour during the evening. G- 3 reported 8 men killed, 68 wounded, and 4 gassed in the period.¹¹⁷

All enemy fire except large caliber had for some time been observed coming from two points, the Bois d'Andevanne and the western part of the Bois de Barricourt, near Rémonville. The hostile artillery in the Bois des Hazois, the source of so much fire a week earlier, now seemed to have been withdrawn. Nevertheless, on the night of 29 - 30 October, enemy reports said the American artillery "heavily shelled the Bois des Hazois with gas" and put strong surprise bombardments, including some gas shell, on the village and forest of Andevanne, Rémonville, and the forest of Barricourt.¹¹⁸ It was corps, not 89th Division,

¹¹⁶ MS History, p. 235.

¹¹⁷ DOR 80, 89th Div, 29 - 30 Oct.

¹¹⁸ DOR 80, 29 - 30 Oct; Evening Rpt, 13th Div to Maas West, 1740, 30 Oct (GFB 164, fol II, p. 26); Ltr CGO V Corps to CGO 1st Army, 19 Oct, sub: Rpt on Recent Opns (V Corps Box 43, 63.3) said 5,976 #7 chlorpicrin and 28 #5 phosgene (the latter in 155 - mm. shells) were fired on 29 Oct.

fire.

For several days activity along the enemy front above Bantheville wood had been negligible, but reports that the enemy was withdrawing were violently denied by patrols on the 30th who found German crews behind machine guns all across the front. That same day saw increased enemy harassing fire as 460 HE and 420 blue cross shells fell in the Bois de Bantheville, in the back areas, and in the ravines on either side of Cavanière Spring and Tuilerie Farm. In addition, the heavies fired 80 rounds of blue cross in searching fire on the Romagne - Gesnes, Romagne - Sommerance, and Bantheville - Cavanière roads.¹¹⁹

Enemy artillery units, for which there are no records, were apparently firing small quantities of mustard gas daily into the 89th Division sector, for G - 2 not only reported gas shells in the southwest corner of the Bois de Bantheville that day, keeping that area of the wood thoroughly neutralized, but said that "A Yellow Cross gas pocket [had now] been caused by enemy artillery fire in the Bois de Gesnes," above Côte Dame Marie.¹²⁰

Through the night of 30 - 31 October, light and heavy German guns slammed 500 HE and 230 blue cross rounds into targets in Bantheville wood and in the ravine on the east side of the wood, while the heavies

¹¹⁹

13th Div Order, Arty Missions for 30 Oct and night of 30 - 31 Oct, 29 Oct (GFB 164, fol II, p. 146).

¹²⁰

SOI 81, 89th Div, 29 - 30 Oct.

repeated with 60 blue cross shells their gassing of the roads. G - 2 made no mention of the gas, saying only that intermittent fire continued on the Bois de Bantheville. G- 3, reporting 6 killed, 34 wounded, and 8 gassed as of noon on the 31st, said a 354th Infantry patrol had found the hollows west of la Dhuy Farm full of gas -- the probable reason it had encountered no enemy that far north.¹²¹

In the last order to its artillery, as it waited relief after thirty full days in the line, the 13th Division ordered annihilation fire at 0710 on the 31st across the top of the Bois de Bantheville by both its light and heavy guns, assisted by the 41st Division artillery on its right. During the day targets in Bantheville wood and as far south as Robinette Farm (Transvaal Farm) were kept under harassment, with 810 HE and 150 blue cross shells allotted for the period.

Harassing fire was maintained on the wood through the night of the 31st from the top all the way down to the Romagne - Sommerance road, with special attention to the north and west edges of the wood and the vicinity of Robinette Farm where batteries of the 89th had been located. For this, 600 HE and 130 blue cross rounds were to be expended, while the 10-cm. guns put 60 blue cross shells on batteries observed along the Sommerance - Romagne and Romagne - Gesnes roads.¹²²

121

13th Div Order, 29 Oct, above; SOI 82, 30 - 31 Oct; DOR 81, 30 - 31 Oct.

122

13th Div Order Ia 201, Arty Missions for 31 Oct and night of 31 Oct - 1 Nov, 30 Oct (GFB 164, fol II, p. 156).

Their artillery remained in place as the 13th Division made way for the 88th. Twenty - four hours later the 88th Division was to face the assault of 1 November.

Number 9 Gas

To allow the artillery to pound the enemy front above the Bois de Bantheville during the preparation, the assault troops of the 177th Brigade were halted in the woods 200 yards below their jump - off line. Behind them, the advance elements of the 178th Brigade were assembled south of the Romagne - Sommerance road.¹²³ The day before this concentration, on the 30th, the Chief of Staff had the 178th Brigade commander make a reconnaissance of the Bois de Bantheville to locate the gassed areas and mark safe passages for the advance of his brigade through the woods. Captain Rowan went in with General Hanson to bring his gas map up to date.¹²⁴

At the last minute the 2nd Division, on the left, was given the Bois des Hazois as its initial objective. The 89th was to strike directly for the heights of Barricourt and carry them at all cost the first day, pushing on if possible to the exploitation line, Nouart - Tailly. The assault troops were to advance without their packs, but in addition to his poncho each man would have two bandoleers of rifle ammunition, three sand bags, two hand grenades, a clip of automatic rifle ammunition, and a white cloth for a signal panel to the observation planes

¹²³

FO 45, 89th Div, 28 Oct.

¹²⁴

Memo, CofS 89th Div for CG 178th Brig, 30 Oct, n.s. (89th Div Box 28, 32.14).

overhead.¹²⁵ With his reserve rations and other gear, he was not traveling lightly.

For the attack in the center of the Army line, V Corps had a total of 608 guns massed behind the assault brigades of the two divisions. Back of the 177th Brigade were the attached 57th and 58th FA Brigades, a regiment of French artillery, and half the corps artillery. Prior to the two - hour HE preparation, said artillery orders, non - persistent gas was to be used on all woods, towns, and other points where enemy forces had been located in accordance with the gas plans of the divisions "submitted to the Chief of Corps Artillery for scrutiny before putting into execution."¹²⁶ Finally, three minutes before H hour, all field guns were to fire white phosphorus smoke shells to mask the advancing waves.

Just hours before the gas preparation was to begin, General Winn, the 177th Brigade commander, sent word to G - 3 and both artillery commanders that he wanted no gas on his front.

Re supplementary artillery program. Request gas program for 22 to 24 hours tonight be cut out. It will bring retaliation in gas which would be very bad in view of the movement of troops into positions. Please direct artillery to stop it and inform me.

¹²⁵

Wright, Rpt on Meuse - Argonne Off, 19 Oct - 11 Nov (89th Div Box 19, 33); MS History, p. 185; FO 45, above.

¹²⁶

Opns O 4, Plan of Attack, V Corps Arty, 25 Oct, p. 3 (V Corps Box 17, 32.13); FO 101, V Corps, 1000, 28 Oct. For map showing 89th Div arty locations, see V Corps Box 22, 32.2.

A pencilled note on this message, made an hour later, said Winn had been notified that the gas would be fired. Corps and Army had ordered it.¹²⁷

Plans had been made to fire a considerable quantity of #9 lachrymatory shell (no record has been found giving the precise number), but shortly before firing time, the 2nd and 89th Divisions were sent orders not to fire it. 2nd Division received the order five minutes before firing time, the 89th never got the order, but in any event had not been able to obtain the #9 shells.¹²⁸

Brig. Gen. Dwight E. Aultman, Chief of Corps Artillery, said he had ordered 2nd and 89th Division artillery to use #9 gas, followed by #5 (phosgene), in their gas missions, after the Assistant Corps Gas Officer had assured him that #9 persisted for a maximum of six hours in wooded areas. When the 2nd Division artillery commander questioned this degree of persistency, Maj. C. E. Joly, the Corps Gas Officer, was consulted. Joly said the gas lasted for two days in wooded areas. If used in the preparation, it would be harmless by morning but would still "burn the eyes of the infantry" when they ran into it. Aultman at once called

127

Msg, Winn to G - 3, CG 57th Brig, CG 58th FA Brig, 1843, 31 Oct, and pencilled note at 1950, signature illegible (89th Div Box 17, 32.1); Wright Diary, 31 Oct. Directives for the gas program are in MS Hist of 57th FA Brig, pp. 96, 99 (32nd Div Box 24, 11.4).

128

V Corps G - 3 Memo for Divisional Artilleries, 31 Oct (V Corps Box 41, 32.11, and annotated copy in 2nd Div Box 17, 32.11); Rpt made by Inspector of Advance Sec, IGD GHQ, 3 Nov (V Corps Box 39, 60.3).

off all use of #9.¹²⁹

At 2200 hours on 31 October, 89th Division artillery fired just 300 #5 gas shells, on crossroads and woods to the south of Remonville. The 2nd Division fired no gas in the preparation, and it must have been the attached French artillery that fired the rest of the "2,000 gas shells [that] were placed by Corps order on...sensitive points...battery positions, machine gun nests, important crossroads, command posts, headquarters, ammunition and supply depots, kitchens and the like." During the two - hour HE preparation beginning at 0330 on 1 November, the field guns supporting the 89th fired almost 60,000 HE shells on the enemy front while the heavies, assisted by corps and Army guns, put destructive fire on the rear areas.¹³⁰

129

Ltr, CofArty V Corps to CG V Corps, 1 Nov, sub: Chemical Warfare Service (V Corps Box 43, 63.6). Atchd corresp indicates that this conflict of opinion between the gas officers resulted in the replacement of Joly by Maj E. E. Corry a week later.

130

MS History, p. 199; Opns Memo, 58th FA Brig, 31 Oct (33rd Div Box 22, 32.15); Opns Rpt, 58th FA Brig, 31 Oct - 1 Nov (ibid., 33.1).

Of 9,000 75-mm. gas shells in 57th FA Brig dumps on 31 Oct, 5,000 were turned over to the 203rd Fr FA and 58th FA Brig that day (Mun Rpt, 57th FA Brig, 30 - 31 Oct, 32nd Div Box 24, 44.2). These were presumably all #5 gas since the 89th said it had no #9.

Memo, CO 121st FA for CG 57th FA Brig, 28 Oct, and pencilled notes (32nd Div Box 25, 32.15), said 500 #5 shell were to be fired on Bois d'Andevanne, Andevanne village, les Tuileries, and rear slope of Hill 329 at 1800, 30 Oct. Note says it was not fired after all.

Meg, CofS 2nd Div to CofS V Corps, 0840, 1 Nov (2nd Div Box 27, 33), said the division guns fired no gas and explained the refusal to fire #9.

V Corps later reported that 11,748 #3 white phosphorus shells were included in the hurricane of fire put on enemy positions on the morning of 1 November. Although this white phosphorus is unconfirmed from any other source, it may have been part of "the artillery fire on the Freya position in the south edge of Barricourt wood [that] broke the line" and forced the Germans to withdraw half a kilometer north of the Bois de Barricourt.¹³¹

To the Heights of Barricourt

Advancing with the barrage at first light, in three hours the assault battalions of the 354th and 353rd Infantry reached la Bergerie Farm and the top of the Bois de Andevanne projection. In this first rush the brigade captured rearguard elements of the 52nd Division west of la Dhuy Farm, of the 88th Division east of the farm, and of the 28th Division in the Bois d'Andevanne, for a total of 400 prisoners.¹³²

In another three hours they were on the ridge in the center of the Bois de Barricourt, after surrounding an entire battalion of the 88th Division at Rémonville. Apart from these prisoners, G - 2 reported at noon that the enemy was dropping back through the Bois de Barricourt without becoming disorganized, his rearguards keeping in contact with the advancing troops. The final objective for the day, the north edge of the

¹³¹

Ltr, CGO V Corps to CC CWS, 3 Feb 1919, sub: Arty gas attacks -- Amer Army (V Corps Box 43, 63.3); Notes on American Arty Fire, Nov 1, 1918, Army War College rpt based on records of German divisions, Potsdam, 11 May 1923 (GFB 5, 60.5).

¹³²

1st Army Arty WD, 0930, 1 Nov (1st Army Box 90, 60.32); Chronological Statement of Events, V Corps, 1 Nov (V Corps Box 28, 33.3).

Bois de Barricourt - les Tuileries Farm, between seven and ten kilometers from the jump - off line, was reached about 1600 hours (Map No. 11). When it was reported to Marshal Foch that the heights of Barricourt had been taken, he is said to have exclaimed, "Then the war is over!"¹³³

Casualties among the advancing troops were thought to have been light that day, but long - range enemy fire on support and reserve positions was severe and damaging. General Wright heard from the Division Surgeon that 813 wounded had passed through the triage by nightfall and guessed that the dead might be about 180 or 190.¹³⁴

Although the 2nd Division, on the left of the 89th, could not have known it, the German 52nd Division covering the Landres et St. Georges - la Dhuy Farm front all but disappeared that morning. Almost 1,000 men were captured in Landres et St. Georges, and while light rearguard forces delayed the pursuit, its artillery - over 80 guns - and the remaining forces withdrew deep into the rear. By evening there were only a handful of German officers and men holding the front between Buzancy and Nouart. Virtually a ten - mile open slot existed in the enemy line. By morning, the artillery was again in position and the 41st Division was coming down fast to fill the gap left by the 52nd. All that remained of the 52nd, far in the rear, were 28 noncoms and 178 men.¹³⁵

¹³³ SOI 83, 89th Div, 31 Oct - 1 Nov; MS History, pp. 196, 212.

¹³⁴ SOI 83, above; Wright Diary, 2 Nov.

¹³⁵ Notes on American Arty Fire, Nov 1, 1918, AWC rpt based on personal diary of a staff officer of the 52nd Div, 24 Oct 1923 (GFB 5, 60.5).



Comparable information on the 88th Division, directly opposite the 89th, is not available, except for the information that on the morning of 1 November its rifle strength of 2,300 found itself no longer a match for the 12,000 riflemen of the 89th.¹³⁶ Representative, perhaps, was the situation in a regiment of the 28th Division, which had retreated as far as the Bois de Raux (east of les Tuileries Farm) by nightfall. One of its battalions had just eight men, four heavy machine guns and one light machine gun left, with 1,500 rounds of ammunition for those guns. The other two battalions together had 13 noncoms and 30 men, and three light machine guns without ammunition. The regiment had not had a hot meal since dawn of the 31st, and said it had been almost destroyed by the artillery fire that morning of 1 November and the "unusually great amounts of gas." It waited in the wood, calling for reinforcements and munitions in order to make a stand the next day.¹³⁷

Just 22 of the 608 guns that had prepared the way for the 177th Brigade the first day were in advanced positions on the morning of 2 November. The brigade was to continue the attack at 0530, but so ineffective was the barrage that neither regiment advanced, nor did the 2nd Division units beside them. On the morning of the 3rd, the 177th was relieved by the 178th Brigade; with casualties of 169 killed, 755 wounded, and 189 missing, the brigade was used up.¹³⁸

¹³⁶

Ibid., Extracts from records of German divisions, 11 May 1923.

¹³⁷

Msg, 40th Foot Regt to 55th Brig 28th Div, 1700, 1 Nov (GFB 180, fol V, pp. 20 - 1).

¹³⁸

MS History, pp. 214 - 17; Rpt, 177th Brig, 6 Nov, sub: Casualties in atk of Nov 1 - 3 (89th Div Box 26, 12.3); Wright Diary 2 and 3 Nov.

Advancing through the 177th Brigade, the 178th entered the village of Barricourt about noon on 3 November and reached the line Nouart - Taily in the late afternoon. Continuing its wheeling action in the direction of the Meuse the next day, the brigade advanced in the footsteps of the slowly retreating enemy forces until it finally reached the banks of the Meuse on 7 November. The town of Stenay was a river's breadth away.

There, stubbornly contesting every maneuver of the brigade, enemy artillery and machine guns across the river held the 178th until the night of 10 - 11 November. When the enemy withdrew from the river edge, the lead battalions of the 355th and 356th Infantry, with elements of the 90th Division, crossed the river. An hour before the Armistice, a patrol of the 89th Division entered Stenay.¹³⁹

Division G - 2 said nothing about enemy gas fire until the division reached the Meuse, when on two days it reported woods occupied by the troops under gas fire. Nothing was said of gas casualties. Medical records show gas casualties every day from 1 to 11 November, for a total of 168 in the 89th Division. The 2nd Division on the left took 56 gas casualties in this same period, the 90th on the right 465.¹⁴⁰

Unable to learn or to estimate the daily gas casualties of the

¹³⁹

MS History, pp. 248 - 49, 254, 280 - 81.

¹⁴⁰

Med Dept Statistics; Analysis, p. 78

brigades, Captain Rowan, Division Gas Officer, could only say of those ten days that there were frequent short bursts of blue and green cross shells and that "numerous [gas] casualties were caused owing to the bursting of the gas shells in close proximity to the troops....The gas casualties which occurred were not in excess of what might be expected from a well trained and disciplined organization."¹⁴¹ Total casualties of the 89th in the pursuit to the Meuse was 479 killed, 1,662 wounded, and 168 gassed.¹⁴²

¹⁴¹

SOI 89 and 90, 89th Div, 6 - 8 Nov; Ltr, DGO to C CWS Att Def Div, 30 Nov, sub: Monthly Rpt for Nov (89th Div Box 148); Ltr, DGO to C CWS, 13 Feb 1919, quoted in Spencer, III, 533.

¹⁴²

Analysis, p. 78

ANALYSIS

89th Division Battle Casualties

There is fair agreement concerning the total battle casualties suffered by the 89th Division in World War I. The totals arrived at for the Battle Monuments Commission study of the 89th and in a final report by the Division Adjutant, as shown in Table No. 1, are almost identical.¹⁴³

Table No. 1

A. BATTLE MONUMENTS COMMISSION DATA

		Killed & Wounded
Lucey sector, St. Mihiel Offensive, and Euvezin sector	4 Aug - 11 Sep	757
	12 - 16 Sep	833
	17 Sep - 11 Oct	1,419
Meuse - Argonne Offensive	12 - 19 Oct	131
	20 - 31 Oct	1,473
	1 - 2 Nov	1,001
	3 - 9 Nov	1,063
	10 - 11 Nov	327
		7,004

B. DIVISION ADJUTANT DATA

August - November 1918		
Killed and Died of Wounds	1,266	
Severely Wounded	2,002	
Slightly Wounded	1,384	
Undetermined Wounds	350	
Gassed	1,942	
Missing	58	
	7,002	

¹⁴³ 89th Div Sum of Opns in the World War (USGPO, 1944), pp. 20, 44; Memo, Pers Adj 89th Div for CO 3rd Bn 353 Inf (Div Historian), 14 Apr 1919, sub: Total Rpt of Casualties (Med Dept Box 3968, fol 1). Smith, Masseck, and English all use the Div Adj figures in their div histories (in 89th Div Boxes 1 and 2, 11.4).

Official statistics compiled by the Medical Department show somewhat lower figures, in part at least because they include the casualties of the organic artillery of the division, which remained in a quiet sector east of the Meuse to the end of the war, but not the casualties of the artillery brigades attached at various times to the 89th. There were not, however, 600 casualties in the attached artillery, and it can only be assumed that the wide difference is that commonly found in all estimates of casualties in the AEF. Medical Department casualty figures, as assembled on a monthly basis for this study, are represented in Table No. 2.¹⁴⁴

Table No. 2

MEDICAL DEPARTMENT STATISTICS

Date	Killed	Wounded	Gassed
January - June	0	4	3
July	2	10	7
August	3	42	535
September	209	933	224
October	222	927	1,026
November	473	1,592	179
	909	3,508	1,974 = 6,391

One other final gas casualty figure, that of the 89th Division Surgeon, is available. His total of 2,135 gas casualties (626 in August, 289 in September, 1,080 in October, and 140 in November) was accepted by the

¹⁴⁴

Medical Dept of the U S Army in the World War, XV, Statistics, Part II, Medical and Casualty Statistics (GPO, 1925), pp. 1030 ff. Note: Ltr DGO 89th Div to C CWS, 26 Nov, sub: Gas Casus for Month of Oct (GAF - 89th Div), shows 752 gas casualties in Oct; Rpt, Div Surg, Med Hist of 89th Div (89th Div Box 19, 33.6), shows 858 casualties in October.

Division Gas Officer as the official count based on division records.¹⁴⁵

The Cost of a Holding Operation

General Winn's report of casualties as of 30 October (p. 61), was offered as the price for taking and holding the Bois de Bantheville in those days preceding the final assault. His count for the brigade was 91 killed, 436 wounded, and 264 gassed. (G - 3 figures for the period, which included the 178th Brigade, in training well back of the front, are obviously unreliable: 69 killed, 618 wounded, and 110 gassed.)¹⁴⁶

Considerably more reliable are three sets of medical figures (represented in Tables No. 3 and 4), even though they vary some among themselves.¹⁴⁷ According to these figures, there were 193 killed in the period, the wounded ranged between 741 and 822, and gas casualties between 395 and 427.

¹⁴⁵

Ltr, DGO 89th Div to C CWS, 13 Feb 1919, sub: Rpt in compliance with Circ Ltr 89 (89th Div Box 25, 63.3).

¹⁴⁶

DOR 70 - 81, 89th Div, 19 - 31 Oct.

¹⁴⁷

Div Surg data from Ltr, Div Surg 89th Div to Ch Surg V Corps, 11 Dec, sub: Casualties rptd from Oct 15th to Nov 13th, which also showed 800 killed in that period (Med Dept Box 3968, fol 1). These same figures appear in Ltr, CGO V Corps to C CWS, 22 Jan 1919, sub: Enemy gas activity in the 5th A.C., and in Ltr, DGO 89th Div to C CWS, 13 Feb 1919, sub: Rpt ...Circ Ltr 89 (89th Div Box 25, 63.3).

Med Dept statistics from volume previously cited as Med Dept Statistics, pp. 1050 ff. These figures exclude the organic arty, the 164th FA Brig, but include the 57th FA Brig (atchd 20 Oct - 2 Nov) and 58th FA Brig (atchd 24 Oct - 11 Nov).

Field hospital data from 89th Div FH 353 admission lists (Med Dept Box 3975), FH 354 (Med Dept Box 3976), FH 355 (Med Dept Box 3978), FH 356 (Med Dept Box 3980); 32nd Div FH 127 (Med Dept Box 3696); 90th Div FH 357 (Med Dept Box 3991), FH 358 (Med Dept Box 3993), FH 359 (Med Dept Box 3995).

For the sake of statistical matter to come, the largest of these figures will be assumed reasonably accurate, i.e., 193 killed, 822 wounded, and 427 gassed.

Table No. 3

DIVISION SURGEON AND MEDICAL DEPARTMENT STATISTICS

Date	Div Surg		Med Dept Statistics		
	Wounded	Gassed	Killed	Wounded	Gassed
16 Oct	1	2	0	2	8
17 Oct	1	2	0	3	2
18 Oct	0	1	0	9	4
19 Oct	1	0	1	8	0
20 Oct	19	0	13	63	8
21 Oct	160	8	48	200	22
22 Oct	187	25	23	65	16
23 Oct	58	16	18	48	13
24 Oct	38	16	17	55	6
25 Oct	55	1	14	43	11
26 Oct	43	6	11	40	76
27 Oct	40	160	23	59	131
28 Oct	46	123	7	42	38
29 Oct	28	32	4	50	17
30 Oct	40	7	8	22	6
31 Oct	33	4	6	42	8
Date not specified			0	71	29
	<u>750</u>	<u>403</u>	<u>193</u>	<u>822</u>	<u>395</u>
1 Nov	33	2	145	390	27
2 Nov	407	17	57	267	25
3 Nov	155	17	45	209	13
4 Nov	280	21	51	296	17
5 Nov	106	2	65	98	14
6 Nov	227	23	14	56	31
7 Nov	42	7	6	48	9
8 Nov	38	29	11	59	13
9 Nov	50	3	9	26	7
10 Nov	32	4	23	69	5
11 Nov	218	6	53	143	7
Date not specified	103	5	-	1	-
	<u>1,691</u>	<u>136</u>	<u>479</u>	<u>1,662</u>	<u>168</u>
October -- November TOTALS	2,441	539	672	2,484	563

Table No. 4

FIELD HOSPITAL ADMISSIONS
89th Division
less organic & atchd arty

Date	Inf		MG Bn		Eng		Others		Total	
	HE	Gas	HE	Gas	HE	Gas	HE	Gas	HE	Gas
1 Oct	3	3	-	8	-	1	-	-	3	12
2 Oct	7	20	1	8	-	-	1	2	9	30
3 Oct	6	19	-	6	1	-	-	1	7	26
4 Oct	3	7	-	2	1	-	-	-	4	9
5 Oct	4	83	-	61	-	1	2	5	6	150
6 Oct	25	128	1	3	-	-	3	1	29	132
7 Oct	7	216	-	2	-	1	-	1	7	220
8 - 11 Oct	-	2	-	-	-	-	-	1	-	3
	55	478	2	90	2	3	6	11	65	582
12 - 19 Oct	4	1	-	-	-	-	5	-	4	1
20 Oct	19	1	-	-	-	-	-	-	19	1
21 Oct	155	4	1	3	-	-	2	1	158	8
22 Oct	167	15	12	12	3	-	1	-	183	27
23 Oct	45	1	-	-	7	-	2	-	54	1
24 Oct	29	7	8	8	1	-	1	-	38	15
25 Oct	29	1	17	-	4	-	4	-	54	1
26 Oct	32	5	5	2	2	-	2	-	41	7
27 Oct	25	124	2	16	9	10	5	14	41	164
28 Oct	34	137	4	10	1	-	3	2	42	149
29 Oct	27	26	3	4	1	2	-	1	31	33
30 Oct	32	8	4	4	2	1	7	1	45	14
31 Oct	18	5	4	-	4	-	5	1	31	6
	616	335	60	59	34	13	32	20	741	427
1 Nov	322	14	57	1	8	-	5	1	392	16
2 Nov	157	14	9	2	9	1	7	3	182	20
3 Nov	208	19	9	4	1	2	2	-	220	25
4 Nov	107	5	10	-	-	1	-	-	117	6
5 Nov	214	15	10	3	-	-	2	1	226	19
6 Nov	31	35	-	1	-	1	4	-	35	37
7 Nov	35	4	6	-	2	-	3	-	46	4
8 Nov	42	10	9	1	7	-	8	1	66	12
9 Nov	22	4	4	-	2	-	4	-	32	4
10 Nov	13	1	2	-	-	-	-	-	15	1
11 Nov	95	4	6	1	-	-	2	-	103	5
12 - 18 Nov	-	3	-	-	-	-	-	-	-	3
	1,246	128	122	13	29	6	37	6	1,434	152
October - November TOTALS	1,917	941	184	162	65	22	75	37	2,240	1,161

The fairly detailed fire orders of the German units opposite the 89th Division make it possible to arrive at a likely estimate of the volume of enemy fire in the period, a large percentage of it directed at the Bois de Bantheville and perimeter targets. Shell counts reported in the narrative, passim, and covering the same period as the casualty count, indicate that the enemy fired approximately 10,000 77-mm. yellow cross shells (most of them Lorraine mustard gas shell, with its relatively low charge of mustard gas and high charge of HE¹⁴⁸), 2,920 77-mm. blue cross shells, and 340 150-mm. blue cross shells -- a total of 13,260 gas shells. No German record of firing green cross (phosgene) shell has been found. In the same period the enemy fired at least 7,840 77-mm. HE and 630 150-mm. and 10-cm. HE shells -- totaling 8,470 HE.

Based on the available data, gas casualties in the Bois de Bantheville were thus incurred at the rate of one for every 31 gas shells, and wound casualties at the rate of one for every 8 or 9 HE shells. These proportions are quite different from any found in previous studies, and may be explained by the special nature of the situation in the Bois de Bantheville.

The decision to hold the wood with a minimum of troops proved feasible when the enemy made no attempt to counterattack the forces there -- largely because he was in no condition to do so. But every position in the wood was a pinpoint target for the artillery, and his guns were registered on every trail and path through the woods used for supply. He had no need to waste HE in large - scale bombardments.

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See ltr, CGO V Corps to CGO 1st Army, 19 Nov, sub: Rpt on Recent Opns (V Corps Box 43; 63.3).

Of some importance is the fact that almost 80 percent of the gas shells fired was Lorraine yellow cross, the HE - mustard gas shell that in October largely replaced the earlier straight yellow cross shell. No estimate has been found of its shrapnel effect, but in the Bois de Bantheville it may have been of some importance in the several instances when yellow cross bombardments fell directly on troops.

The relatively low effectiveness of the gas shell fired into the Bois de Bantheville was owing to the fact that the division was particularly alert to the danger of gas and took all possible precautions against it, and that much of the mustard gas was put on an unoccupied part of the wood. The high effectiveness of the HE was owing principally to the exposed situation of the troops left to hold the wood, and to the hazard offered by the necessity of supplying them daily.

In his reports of the contamination of the Bois de Bantheville, Captain Rowan said that "For several days the enemy poured thousands upon thousands of gas shells into the Bois de Bantheville in a desperate effort to cause the abandonment of this important position...For the remainder of the week this area was kept constantly filled with mustard gas by constant slow fire. Finally, the night the offensive started, the enemy, evidently realizing what was coming, laid down a bombardment of green cross and yellow cross in the forward area, right close to his own lines."¹⁴⁹ This last bom-

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Ltr, DGO to C CWS, 13 Feb 1919, quoted in Spencer, III, 533; Ltr, DGO to C CWS Att Def Div, 2 Nov, sub: Gas Atk on Bois de Bantheville (GAF - 89th Div).

bardment is dramatically apt but is not substantiated in German records (see narrative, p. 66) or in accounts of the attack on 1 November.

Rowan accepted the Division Surgeon's report of some 400 gas casualties in the period and had no choice but to rationalize them: "Had the offensive come off when planned or [had we]...gassed this area with mustard ourselves and gone around it instead of mopping it up, these casualties might have been avoided. It is considered, however, that having adopted the plan of mopping up the woods and occupying it as a salient, it was worth 400 gas casualties not to have to evacuate the position that was won with such difficulty."¹⁵⁰

Capt. E. E. Corry, Corps Gas Officer, in his final report to First Army, quoted as typical of enemy use of gas in wooded areas of the corps sector the whole of Rowan's letter on the gassing of the Bois de Bantheville. Commenting on Rowan's justification, he said:

It may be stated that, as a rule, commanding officers objected to making the full use of gas on targets contained in areas covered by their objective, fearing the possibility of gassing their troops with our own gas; yet, on the other hand, if the same targets were gassed by the enemy, a reluctance prevailed generally in the changing of plans to avoid the exposure of our troops.¹⁵¹

It was an inconsistency of attitude on the part of command that irked good gas officers all during the war. What is more, the whole operation

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Ltr, DGO, 2 Nov, above.

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Ltr, CGO V Corps to CGO 1st Army, 19 Nov, sub: Rpt on Recent Opns (V Corps Box 43, 63-3).

in the Bois de Bantheville seems to have been contrary to general instructions given to Pershing by Foch on 21 October. In that memo Foch said he wanted a powerful attack, as soon as possible, in the direction of Boulton - Bois and Buzancy, "while avoiding getting engaged in combats in the woods of the Argonne [i.e., Bois de Bourgogne] and of the Bantheville region."¹⁵²

The Bois de Bourgogne could not be taken, but was successfully bypassed after thorough drenching with yperite just before the attack. The Bois de Bantheville fell to large - scale patrol action. The spirit of Foch's memo was not violated.

Enemy Casualties

Enemy casualty data are as usual fragmentary. Two daily reports, on 24 and 29 October, issued by the 13th Division, the German unit opposite the 89th Division, indicated losses of 40 and 24 men, respectively, including 6 gas casualties on the 24th.¹⁵³ By that time the fighting had died down and these were probably for the most part losses to artillery fire. The cumulative losses of the division, though unknown, must have been considerable, since it had been in the line since 1 October. The division was said to be badly in need of relief as well as replacements when it came out of the line on 30 October.¹⁵⁴

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The Memoirs of Marshal Foch, tr. by Col T. B. Mott (New York, 1931), p. 439.

¹⁵³

Msg, 26th Brig to 13th Div Hq, 1630, 24 Oct (GFB 164, fol II, p. 102); Evening Rpt, Gp Maas West to AOK 5, 29 Oct (GFB 50, fol III, p. 15).

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Above, p. 42.

A better indication of enemy losses is given in a monthly summary of the 28th Division. On 1 October this division was in the line east of the Meuse. On 5 October it was rushed across the front to Cunel and remained there until driven back from the Cunel heights. On 25 October it relieved the 123rd Division, on the left of the 13th Division, and withstood the determined attacks of the 90th Division before Bantheville and Grands Carrés heights. Its artillery played a major part in the gassing of the Bois de Bantheville.

At the end of the month the 28th Division reported its losses in October while at Cunel and above Bantheville as 296 killed, 1,154 wounded, and 695 missing (or taken prisoner). Gas casualties were not distinguished from the wounded but it is known that one of its three regiments reported 59 gas casualties in the period 5 - 20 October; total gas cases may therefore have been well over 200. Scattered daily reports indicate that its sick (influenza) approximately equalled its daily wounded.¹⁵⁵

The plight of one unit of the 28th Division on the evening of 1 November (narrative, p. 75) suggests that its regiments may have numbered few more than 50 or 60 by that time. Clausewitz's dictum on the few men needed for successful defensive action was never better illustrated than during the eleven days of November.

Lessons Learned

Of interest is a letter of "lessons gained," sent at the direction of

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55th Brig WD, 31 Oct (28th Div, GFB 180, fol IV, p. 18; Combat Rpt, 40th Fus Regt 28th Div, period 3 - 20 Oct (GFB 179, fol II, p. 173)).

General Summerall, corps commander, to General Wright and presumably to the other division commanders in the sector, on 19 October, as the 89th came up to the Bois de Bantheville. Corps had learned after three weeks of combat that

1. Straggler posts were a prime necessity in the rear of support and reserve positions, and every case of straggling must be subjected to severe discipline.

2. The amount of equipment and arms salvaged from the field was out of all proportion to the losses in casualties. Much of it was heavy equipment, particularly automatic rifles and packs. Division commanders were told to divide up the equipment of overloaded troops, put Chauchat riflemen into squads, make non-coms responsible for seeing that the men did not discard their equipment, and put heavily equipped men together under an officer.

3. Self-inflicted wounds were becoming increasingly common, indicated by the number of wounds of the left hand and foot and arm wounds. Closer supervision by non-coms and officers was necessary.

4. Authorized straggling had to be watched, particularly excessive numbers of men in authorized details such as those helping wounded to the rear, going after ammunition, taking prisoners to the rear. Excessive numbers of stretcher bearers and kitchen details had also been observed.

5. All these observations were reflections on discipline, either its lack or its breakdown under the strain of battle. It was an officer problem that had to be solved.¹⁵⁶

Except for the natural complaints of those that made up the ammo and ration details supplying the men at the top of the Bois de Bantheville, 89th Division records do not indicate that the problems of discipline and morale observed by corps seriously affected the division. The concern of the present report, however, is with tactics rather than with morale.

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Ltr, CofS V Corps to CG 89th Div, 19 Oct, sub: Lessons Gained (V Corps Box 43, 64.8).

The decision made just prior to the enemy contamination of the center of the Bois de Bantheville, to evacuate any portion of the wood that was mustard gassed, would in all likelihood not have been considered a month earlier. The British and French had long been certain that the enemy would not attempt to occupy or advance over contaminated terrain, but even though the Chemical Warfare Service of the AEF had made this fact widely known, field commanders refused outright to accept it, since it meant giving up ground they had fought for and won or ground they had been told to hold at all cost.

The 89th Division, from its commander down to its company officers, would not believe, in their first encounter with German yellow cross gas in August, that contaminated ground could not be occupied. The division suffered over 600 gas cases before its French superiors arrived on the scene and ordered the gassed area evacuated.

It would be interesting to speculate on the number of companies and battalions that might have been used up through continuous replacement of gassed units on that occasion before the division finally came to realize its folly.

That experience was very much in the minds of the staff officers as the Bois de Bantheville was cleared and the division learned it was to hold that wooded salient for the next week or more. Thus the order that contaminated areas in the wood were to be immediately evacuated. When the center of the woods became thoroughly contaminated, making supply of the forces at the top of the wood difficult, all but token units were withdrawn below the gassed area.

Areas at the top and sides of the wood that were gassed only with diphylchloroarsine, which usually dissipated before wearing the gas mask became intolerable, were ordered held, since they "might be occupied by the enemy or...be of tactical value to him if occupied." These lessons at least about gas had been learned.

Captain Rowan's rationalization of the loss of 400 men to gas in the Bois de Bantheville points to a lesson never learned in World War I, that terrain is not valuable simply because it has been fought for and won. The enemy on the heights above the Bois de Bantheville commanded the woods, and as Rowan pointed out, the woods could just as well have been neutralized by the 89th as by the enemy. There is no evidence that jumping off from the top of the woods aided the advance of the 89th in the slightest. The artillery road built at such cost through the wood wasn't even used in the attack, for such artillery as advanced that day found easier ways outside the wood (narrative, p. 57). And the 2nd Division, jumping off from below Landres et St. Georges, advanced just as swiftly on 1 November as did the 89th. The 89th Division did it the hard way.