CHAPTER XXV

SUPPLY, INTELLIGENCE, MEDICAL, GAS, ANIMAL CASUALTIES



Officers

Enlisted

OR the readers who would learn in more detailed manner than can be given in the text, of the war activities of a division, there will be given in this chapter reports covering such matters as supply, intelligence, medical activities, gas defense and animal care and casualties. These reports were prepared by the officers in charge of these several fields of effort.

The following report, covering the administrative side of the division's operations, prepared by Lieutenant Colonel Edward Olmsted, Assistant Chief of Staff (G-1), will give the reader an outline of the numerous and varied activities which affect administration and supply during war, and, as well, will serve to preserve for the convenience of the veterans and for future reference, a record of the methods employed in controlling such activities.

ADMINISTRATIVE REPORT ON OPERATIONS

France, December 20, 1918.

Period July 9 to August 20, 1918.—27th Division was included in and administered by XIX Corps in 2d Army of British Expeditionary Forces in Flanders. Corps Headquarters at Winnezeele and Division Headquarters at Oudezeele. Office of Assistant Chief of Staff, G-1, was in a billet in the village. Personnel of the office comprised:

Major Edward Olmsted, G-1.

Major James T. Loree, Quartermaster Corps, understudy.

Captain Robert W. Hanna, Staff Captain, British Expeditionary

Forces, attached.

First Lieutenant Edward B. King, Quartermaster Corps, assistant to G-1.

First Lieutenant H. A. Morriss, Infantry, assistant to G-1.

Battalion Sergeant Major Jack W. Boyd, Chief Clerk, Division

Headquarters, Detachment, General Staff Section.

Private Wm. C. Curtis, Office Orderly, Headquarters Troop.

Private James Lynch, Office Orderly, Headquarters Troop.

The services of the division whose activities were coordinated by the Office of G-1 were the following:

Adjutant Headquarters Troop Red Cross Baths Inspector R. R. and C. S. Billets Salvage Judge Advocate Burials Motor Transport Signals Chaplains Ordnance Surgeon Engineer Police Trains French Mission Postal Veterinarian Gas Quartermaster Y. M. C. A.

During this period the division was completing Phase "C" of training, which involved the attachment, for eight-day terms, of four battalions of infantry, two companies of machine gun

units, three platoons of engineers and signal detachments to the 6th and 41st British Divisions, which held the sectors of the corps front. Alternating with this duty, organizations were withdrawn for rifle practise in a back area while others occupied and held the East Poperinghe Line in anticipation of enemy attack. Moves between the forward area were made by road march, light railway and meter gauge railway, and with other administrative details became a matter of routine, covered by instructions as issued in orders. During this period occurred minor actions incident to occupation of the East Poperinghe Line. Plan of communication, supply and evacuation for such occupation is attached as a part of this report.

Period August 21 to August 30, 1918.—27th Division relieved the 6th British Division, taking over the Dickebusch sector of XIX Corps (British) front and under the same conditions as regards administrative details as had been developed during its long previous occupation by the 6th Division. Because of facility for enemy observation from the commanding height of Mont Kemmel in our front, the matter of ration supply was one of great difficulty and casualties to ration-carrying parties were more frequently nightly occurrences than exceptional

incidents.

The name of the sector has been given to the series of minor operations—raids, patrolling and counter-attacks—incident to its occupation. Division Headquarters was located at Douglas Camp, two kilometers north of Abeele, in Belgium. G-1 Office was installed in a Nissen hut in this camp. Personnel of the office remained unchanged. To the "services" of the division at this time was added the personnel of the Belgian Mission (liaison officers and interpreters). Administrative summary (Orders No. 76) covering details of the routine during this period is attached as a part of this report.

The division, being without its own artillery and trains, the supply of small arms ammunition was carried on by small arms ammunition section of 6th Divisional Ammunition Column,

under the direction of Captain Raymond T. Moniz, as Acting Munitions Officer.

Period August 31 to September 2, 1918.—Operations during this period covered the engagement at Vierstraat Ridge, incident to the general advance of 2d British Army. While the advance was in progress and as personnel of G-1 Office were engaged in making a reconnaissance of the forward area for the location of more advanced dumps for rations and ammunition supply, word was received that the division was to be relieved and withdrawn to another sector.

On September 3, 1918, relief of 27th Division, American Expeditionary Forces, was completed by 41st Division, British Expeditionary Forces. This was a matter of some difficulty for the following reasons: The advance having progressed to considerable distance, the communication of instructions to more forward elements was only accomplished under extraordinary conditions. By reason of the same extension, there was considerable distance to be covered by returning formations before the light railway system was reached. Fortunately the system of light railways in the XIX Corps was highly organized and it was possible to avail of the facilities thus afforded, for the return of the personnel to back areas. On reaching the back areas, however, owing to the presence of personnel of the 41st Division moving forward in the area at the same time that units of the 27th Division were moving back and billeting accommodations being limited, there was considerable congestion and lack of billeting facilities. On this and other occasions the fact that organizations of this division were equipped with shelter-halfs proved a great advantage. The necessity of entraining almost immediately upon the completion of the relief also made it difficult to furnish complete new equipment and arrange for baths for all personnel who came out of the line. Provisions had been made for the thorough accomplishment of this, but the lack of time, and other circumstances as set forth above, prevented its being done to the fullest extent.

On September 4th and 5th organizations of the 27th Division entrained at Proven, Waayenburg and Heidebeek by twenty-nine strategical trains, for detrainment respectively at Doullens, Mondicourt and Candas, in the back area of the IV Corps, British Expeditionary Forces, and administered by II Corps, American Expeditionary Forces, in 3d British Army, as General Headquarters, Reserve. This period was given over to refitting, rest and further training, which included several tactical exercises involving the issuance of Administrative Instructions and actual participation by all the "services" of the division under the conditions of battle.

During this time 3d Army Headquarters was located at Villers L'Hopital, II Corps Head-

quarters at Beauval, and Division Headquarters at Beauquesne, G-1 Office being situated in a schoolhouse in the village. The following personnel of G-1 Office were detached for other duty:

Major James T. Loree, Quartermaster Corps. First Lieutenant H. A. Morriss, Infantry. Private James Lynch, Headquarters Troop.

Lieutenant Colonel David McCoach, Jr., General Staff, under orders from General Headquarters, American Expeditionary Forces, was attached for observation and instruction for a period of ten days, from September 19th.

Commencing September 22d, the 27th Division entrained (nine tactical trains) at Doullens, Authieule and Roisel for detrainment at Tincourt, in 4th Army area.

On September 24th the 27th Division Headquarters "doubled up" with Headquarters of 74th Division of III Corps, British Expeditionary Forces, in Nissen Hut Camp, located in Bois de Buire, and on the following day the relief of that division by 27th Division in a sector of the line before Ronssoy was completed. There was also a change of corps at this time, Australian Corps of 4th British Army taking over the front. On September 24th conference of administrative officers from all divisions in the Australian Corps was held at Corps Headquarters, between Barleux and Assevillers, to go over all details preparatory to the coming operations. Administrative arrangements were discussed and all details settled for the contemplated operations, which involved the general advance of the 4th Army and the attack on the Hindenburg Line.

During these operations the following liaison officers of the Australian Corps were attached to G-1 Office:

Major Robert Kerr, D. S. O., D. A. and Q. M. G., 1st Division. Captain Bartlett, Staff Captain, 1st Division.

The division still being without its own artillery and trains, the supply of small arms ammunition was effected by small arms ammunition section of the 4th Australian Divisional Ammunition Column, which was attached during the operations and rendered most efficient service under the direction of Captain Raymond T. Moniz, acting as munitions officer.

Administrative instructions of 27th Division for the operations were covered by Orders Nos. 93 and 95 (Plan of Communication, Supply and Evacuation), which have been included in connection with Administrative Report.

On September 27th there was a second conference of administrative officers at Australian Corps Headquarters, for final verification of all administrative arrangements.

The engagement about the Knoll, Guillemont Farm and Quennemont Farm on September 27th, and the battle of the Hindenburg Line on September 29th and 30th, occurred during these operations.

During operations the Divisional P. C. was located in a quarry north of St. Emilie. G-1 Office continued at Divisiona Headquarters, Bois de Buire, but frequent daily visits were made to Divisional P. C. by G-1 and other personnel of the office in connection with inspections of the ammunition dumps, dressing stations, water tanks and supply arrangements generally.

When the 3d Australian Division "leap-frogged" the 27th Division, the latter withdrew to the rear for a period of rest in Tincourt and Peronne areas, returning at this time to administration by II Corps, American Expeditionary Forces.

Period October 9 to October 20.—In the early stages II Corps, American Expeditionary Forces, was moving to attack as part of a general continuance of the advance of 4th Army, British Expeditionary Forces; 30th Division was in the lead with 27th Division following closely as reserve. At this time II Corps Headquarters had moved to Bois de Buire. Headquarters of 27th Division moved successively as follows: October 9th, to quarry at Templeux le Guerard, Advance P. C. to Joncourt. October 12th, the Advance P. C. moved to Premont and the Rear Echelon to Joncourt. October 13th, the Advance P. C. moved to Busigny Chateau. In these moves G-1 Office was with the Advance P. C. Headquarters of II Corps moved to Wiencourt. Wire communications between Division P. C. and Rear Echelon or Corps Headquarters being practically impossible, frequent trips for consultation and instructions to the "services" by G-1 were required, in addition to necessary visits of inspection, etc., to dressing stations, ammunition or supply dumps, police posts, etc. Under the conditions which

existed, all movement in the immediate area of operations was on two main roads, so there was frequent delay due to congestion of traffic. The situation was further complicated by the fact that the enemy, on retirement, had fired many mines under bridges, cross roads at village entrances or exits and the like. Adequate forces of engineers and labor units made prompt repairs in such cases, however.

On October 12th the 30th Division "side slipped" to the south and the 27th Division came up abreast on its left (north) taking over certain of the 30th Division ammunition dumps. Captain Douglas C. Despard returned for duty with the 27th Division and was temporarily attached as an assistant to G-1.

During this series of operations occurred the battles of Le Selle River (on October 17th), and Jone de Mer Ridge (on October 18th), and the engagements at the St. Maurice River, October 19th-20th.

Administrative instructions for the operations were covered by Orders No. 111 (Plan of Communication, Supply and Evacuation), included in connection with Administrative Report.

On October 21st the relief of 27th Division, American Expeditionary Forces, by 6th Division, British Expeditionary Forces, was completed and the 27th Division moved by road march in three stages for entrainment (eight tactical trains) at Roisel and Tincourt, for detrainment, respectively, at Corbie and Villers-Bretonneux for a period of rest and further training in the Corbie training area (4th Army).

The Armistice was signed while the 27th Division was in this area.

Reports of certain of the directors of the "services" of the division, covering the activities of their several departments, are included in connection with Administrative Report.

EDWARD OLMSTED,

Lieutenant Colonel, G. S., Assistant Chief of Staff, G-1.

SECRET

PLANS FOR DEFENSE OF THE EAST POPERINGHE LINE 27th Division

PLAN OF COMMUNICATIONS, SUPPLY AND EVACUATION

REFERENCE	MAPS:	Army Railways1-40,000
		2d Army M. T. Circuits1-100,000
	*	XIX Corps Administrative Map A1-40,000
		XIX Corps Administrative Map B1-40,000
		Secret Map B1-20,000
		Sheets 27 and 28

PART I-COMMUNICATIONS

1. RAILROADS AND LIGHT RAILWAYS:

- (a) STANDARD GAUGE RAILROADS: Existing system—Army control—Through "Traffic"—St. Omer. Supply Railhead for Division—Arneke. Personnel Railhead—Esquelbecq.
- (b) ONE METER RAILWAY:
 Existing system—Army control—Through "Traffic"—St. Omer.
 Stations in XIX Corps area at Winnezeele and Steenvoorde.
- (c) LIGHT RAILWAYS:
 - 1. The system of light railway which serves XIX Corps is called the "L" system. It extends from Esquelbecq to neighborhood of Ouderdom.
 - 2. The priority of the allotment of trucks is:
 - (a) Heavy ammunition.

(d) Stone.

(b) Field ammunition.

(e) Supplies.

(c) Engineer material.

(f) Personnel.

- This priority can only be changed by Corps "Q" (by arrangement through G-1).
- 3. All demands for railway trucks, except as per paragraphs 5 and 8 below, must reach G-1 before 4 P. M. on the day previous to that on which trucks are required. When any trucks are required for reloading of salvage or for any other purposes, it must be stated in the demand. Trucks are not to be taken for reloading salvage, empty cases or other purposes without authority as above. All demands must state the loading station, the time at which trucks are required to be placed, the destination, the nature of the load and also the name or designation of the officer ordering. All trucks must be properly marked with a paper label to insure that they are correctly dealt with by Light Railway Operating Companies. When trucks have reached their destination all old labels must be defaced.
- 4. Six ambulance trucks (light railway) are available for the use of the corps.
- 5. Engineer stores will be delivered at the various engineer depots and also at sidings where required. All demands for trucks for engineer stores must be passed through Chief Engineer, XIX Corps. The Commanding Officer, 102d Engineers, will arrange for unloading parties to travel with trains when necessary, and to instruct all concerned that the material is to be unloaded and carried at least six yards from the light railway track.
- 6. All trucks are to be unloaded as rapidly as possible upon arrival at destination, and the nearest control informed when the trucks are ready for removal. As a general rule the time a truck is held at its destination, before becoming available for removal, should not exceed two hours.
- 7. Riding, walking or crossing light railways at any point except proper crossing places is forbidden. The A. P. M. is charged with the police of light railway lines within traffic control area of the division to prevent misuse.
- 8. Arrangements for movement of guns by light railways will be made by Head-quarters, Heavy Artillery, or Headquarters, Divisional Artillery, with the Corps Light Railway Officer at Headquarters, XIX Corps, giving point from and to which guns are to be moved and the time at each place the trucks are required. Guns are only to be loaded and unloaded from spurs. They must not be loaded or unloaded from any main line without special permission from the Light Railway Control.
- 9. Any traffic which can possibly be sent by light railway is not to be sent by road.
- 10. No ammunition is to be left or stacked within six yards of the main line.
- 11. Railheads, dumps, etc., with light railway connection are shown in Appendix A.

APPENDIX A

ARMY AMMUNITION RAILHEAD—None.
ARMY DEPOT—Watou.
Corps Reserve Heavy Ammunition Dump—Winnezeele, J.17.d.
A. R. P.—Right Division Beauvoorde K.27.a.5.3. Left Division Ungava L.27.d.7.7. Support Division (As may be designated by Corps)
Engineer Dumps—(a) Corps Park
Ambulance Sidings—RemyL.23
Winnezeele J.17.d. Esquelbecq B.12.c.
Salvage Dumps—Corps Main Railhead Salvage Dump
CAMOUFLAGE DUMP—Remy North Siding L.23.a.central

2. ROADS:

- (a) "Transportation" line in the corps area runs along the eastern boundary of the road H.19.b.4.6. to Zevecoten and along the southern boundary Zevecoten-Reninghelst. G.32.d.8.0., L.33.c.2.4., R.1.d.0.0.
- (b) The roads to be maintained in the area are those shown in red and blue on the Army M. T. Circuits Map.
- (c) "Transportation" maintains roads west and north of the transportation line per paragraph (a) above. Commanding Officer, 102d Engineers, is charged with the maintenance of roads in support divisional area east and south of the same line.
- (d) Demands for repair of the roads east and south of the transportation line will be made to the Commanding Officer, 102d Engineers. Demands of the roads west and north of the transportation line will be made to D. A. D. Roads, XIX Corps.
- (e) Stone dumps are located as follows:

G.35.b.1.5.

Abeele Station ... L.33.a.0.3. (Broad Gauge)
Steenvoorde ... K.31.c.5.3. (Meter Gauge)
Winnezeele ... J.17.c.4.7. (Meter Gauge)

3. TRAFFIC:

- (a) Under corps control throughout area.
- (b) Organization of traffic control.
 - 1. The A. P. M. will supervise the service within the support divisional area as may be directed by instructions from XIX Corps.
 - 2. STRAGGLERS:
 - (a) Battle straggler posts will be established in support divisional area on the Poperinghe-Steenvoorde road as follows:

L.17.b.4.0.—L.22.a.7.2.—L.21.b.3.0.—L.21.c.1.3.—L.26.b.7.3.

ABEELE

L.31.b.5.3.—K.31.d.1.6.—L.31.c.7.6.

(b) Corps straggler posts will run through:

K.24.d.9.9.—K.30.a.3.9.—K.35.d.central.

Corps Advance Collecting Station—At K.29.c.5.8.

- (c) Personnel for those posts are to be permanently warned and ready to take up their stations immediately order is given from Corps or Division Headquarters.
- (d) Each divisional straggler post will consist of one non-commissioned officer and four privates. The A. P. M. will detail an officer to supervise the straggler posts in support divisional area. Mounted patrols of military police will visit these posts at frequent intervals.
- (e) Stragglers not requiring medical attention will be collected at collecting stations and marched back in parties to their regimental headquarters.
- (f) Stragglers requiring medical attention will be taken to nearest dressing station. Stragglers found unfit will be brought back to the straggler collecting station and returned to their regimental or separate unit headquarters.
- (g) The A. P. M. will detail two non-commissioned officers and twelve privates for duty at the straggler collecting station at K.29.c.5.3. for the purpose of sorting out and disposing of stragglers.
- (h) The A. P. M. will issue detailed instructions in accordance with the provisions of Provost Regulations, Section 4, for the guidance of details employed on this duty, copy of such instructions to be submitted to G-1.
- 3. Mounted military police will be detailed for duty at collecting stations for slightly wounded.
- (a) To take over as stragglers men coming in wounded or gassed, who in the opinion of the medical officers are not justified in acting so.
- (b) To report to their units slightly wounded men coming in without their arms or equipment.
- 4. A receipt will be given to escorts bringing in prisoners of war to cages. At

divisional cages all prisoners are to be searched for arms; documents will be taken from officer prisoners. When an intelligence officer is present, he will be informed before a party of prisoners is despatched to the corps cage. Rations will be dumped, and arrangements made for water for guard and prisoners at divisional cages. The A. P. M. is responsible for supplying adequate guard at prisoners' cage. The responsibility for conducting prisoners of war to the advanced corps cage devolves on officer commanding escort detailed for the purpose.

5. For prisoners of war the division cage will be at K.29.c.5.3. The XIX Corps cage is at Winnezeele. The 2d Army transit cage is at Cassel.

6. Attention is directed to G. R. O. 3823, as amended by G. R. O. 3987—"Prisoners of War—Thefts from."

G. R. O. 3823.—Complaints have been received alleging cases of theft of personal property from freshly captured German prisoners of war. Such incidents are not only discreditable in themselves, but they provoke retaliatory measures on the part of the enemy against British officers and men who have been captured by them. All ranks are forbidden to remove from German prisoners any personal belongings, including watches and other jewelry, iron crosses, money, identity disks, pay-books and articles of personal clothing. Private papers, letters, documents and maps will only be removed under the authorized supervision of a General Staff or Intelligence Corps Officer or an officer of the Provost Branch of the Staff. This order will be promulgated at frequent intervals so that reinforcements may be made aware of it.

4. WORKS:

(a) The construction, maintenance and extension of roads and trails will be in charge of Commanding Officer, 102d Engineers (and as may be directed by Chief Engineer, XIX Corps).

(b) The Commanding Officer, 102d Engineers, is charged with the construction of such roads, trails, trench crossings and trench bridges as the Commanding General, Divisional Artillery, may require to push forward his batteries.

(c) The Commanding Officer, 102d Engineers, will arrange for the establishment of advance engineer dumps, at such locations and for material in such quantities as may be prescribed by Chief Engineer, XIX Corps.

(d) All troops using roads or tracks are responsible for the removal of any obstacles they encounter, provided this does not interfere with their mission.

(e) DEMOLITIONS AND DESTRUCTIONS.—Arrangements will be made for effecting such demolitions and destructions as may be directed by Chief Engineer, XIX Corps.

(f) Directing sign boards will be prepared and placed in trenches of each regimental sub-sector. The plan of nomenclature will be that adopted at Camp Wadsworth.

PART II—SUPPLY

1. RATIONS:

Distribution of rations on hand as follows:

- (a) One day's iron rations on each man.
- (b) Iron rations at dump per Table A.
- (c) One day's field rations in company kitchens.
- (d) One day's field rations in ration wagons.
- (e) One day's field rations in refilling points.
- (f) One day's field rations arriving at railhead.

2. DAILY SUPPLY:

- (a) Railhead—Arneke.
- (b) Upon occupation of East Poperinghe Defense System, ration refilling points for units, as may be designated in daily supply order at locations as follows:

27/J.18.b.9.1.

27/J.18.b.9.5. (Farm 113)

27/K.19.c.4.5.

27/J.24.b.8.8.

27/K.25.a.7.0.

(c) PLAN OF SUPPLY:

- 1. By mechanical transport to refilling points.
- 2. By 2d Line transport to battalion dumps.
- 3. By 1st Line transport, pack animals or carrying parties to company kitchens.

The supply officers of regiments or separate units are responsible for the establishment of battalion or company ration dumps, and for the supply by pack animals or carrying parties for troops in the line.

TABLE A

Iron rations will be dumped as below:

PART III

APPENDIX A

WATER SUPPLY—WATER CART FILLING POINTS AND DIXIE FILLING POINTS

Army					
No.	Location	\mathbf{N}	Iap Reference	Remarks	
1	AbeeleS	heet 27	_L.32.b.8.6	Mont des Cats Line	
2	RemyS	heet 27	—L.22.d.9.2	Mont des Cats Line	
3	HopoutreS	heet 27	—L.17.d.5.3	Mont des Cats Line	
51	Steen AkkerSl				
52	SodewaersveldeS	heet 27	—Q.18.a.6.7	Old Godewaersvelde Line	ļ
54a	BusseboomS				
55	HekskenS				
56	Hooccraat CabtSI				
342	Steenvoorde (Latorie)S	heet 27	-K.31.c.1.9		
				Installation	
343	Steenvoorde (Brasserie)S	heet 27	—Q.1.b.8.6		
				Installation	
170	Steenvoorde (Concrete Tank)S				
	Looge JoekS				
341	ArnekeS	heet 27	—H.24.a.8.4		
				Installation	
	Custom HouseSl	heet 27	—K.16.d.7.1	Sterilizer Lorry Supply	
-	T		1		

Note.—The Custom House water cart filling point will only supply when the stream is running. When this water cart filling point is not in action, water carts can fill at Watou. (Sheet 27/E.23.c.5.3.)

APPENDIX B

HORSE WATER POINTS

		No. of Horses Watering
Location	Map Reference	at One Time
Hoof Farm	Sheet 27—L.20.a.2.1	40
Remy	Sheet 27—L.23.c.4.9	8
Steenvoorde	Sheet 27—K.32.b.5.8	30
Remy	Sheet 27—K.23.c.4.9	16

APPENDIX C

CAMP SUPPLY

	Loca	ation Map Reference	Remarks	
Wippenhoek		Sheet 27—L.23.a.3.7. Sheet 27—L.28.d.6.6.	C. C. S.	
Ste	en A	kkerSheet 27—R.2.b.4.6		
2. TWO-GALLON TINS WILL BE KEPT FILLED WITH DRINKING WATER FOLLOWS:				AS
	(a)	Seventy-two tins to each battalion headquarters dump as below:		
Condiment Cross Sub-sector, French Lodge				
	(b)	Thirty-three tins to each dump at machine gun support section local	alities as below	:
		Bala Cottages28/G.3Bida Farms28/G.3Gower Building28/G.2	32.a.4.4.	
	(c)	Two tins to each machine gun position (six machine gun positions a gun support section locality—exact locations to be determined).	bout each macl	hine
		DADE IV		
1.	AM	PART IV MUNITION SUPPLY:		
		XIX Corps dumps for S. A. A. and grenades—At Haut Midi At Shuzy		
(b) Support division ammunition refilling point, to supply 66th K.22.a.2.0.		ivision Artiller	' y—	
	(c)	Division S. A. A. and grenade dump—At K.30.c.7.2.		
	(d)	Regimental S. A. A. and grenade dumps as follows:		
		Right Sub-sector At L. Center Sub-sector At L. Left Sub-sector At L.	.28.b.0.7.	
	(e)	In the vicinity of battalion headquarters, dumps have been estab	lished as belov	v:
		(Right) Condiment Cross Sub-sector, French Lodge28/G.3 (Center) Hoograaf Sub-sector, Ebden House28/G.2 (Left) Anjou Farm Sub-sector, Orwell Farm28/G.1	25.d.45.50.	
		At each of the foregoing dumps the following ammunition and stored:	grenades will	l be
		S. A. A Grenades, Hand Grenades, Rifle Very Lights Rockets	200,000 rds. 22,000 2,000 100 40	
	(d)	In the vicinity of machine gun support section localities, dumps have as below:	ve been establis	shed
		(Right) Bala Cottages.28/G(Center) Bida Farms.28/G(Left) Gower Building.28/G	.32.a.4.4. .26.a.1.8.	
		At each of the foregoing dumps the following ammunition and stored:	grenades will	l be
		S. A. A. (for machine gun)8	0,000 rds.	
		531		

- (e) Dumps will be established at each of six machine gun positions in the vicinity of machine gun support section localities as above.
 - At each machine gun position there will be stored:
 - S. A. A. (for machine gun) 5,000 rds.
- (f) No large dumps of cartridges, etc., are to be made in any position. They are to be divided into a number of small dumps at intervals, and where possible traversed. No ammunition is to be dumped within six yards of a road, railway or canal.
- (g) The mobile reserve of S. A. A. and grenades will not be used except for the purpose of effecting a turnover or in emergency. Whenever an issue is made from mobile reserve, a demand will immediately be made on Ordnance Officer for replacement.
- (h) All units will move with their limbers (mobile reserve equipment of S. A. A. and grenades) whether on transfer or going into rest areas.
- (i) Empty boxes or cartridge cases are not to be accumulated at ammunition refilling points or battery positions. There should always be a sufficiency of boxes to clear all used cartridge cases. Where this is not possible, cases are to be tied up in bags. A list of railheads to where empties can be returned is given below:

XG	Swiss Cottage
XGA	Straffhem27/F.2.c.
XGD	Heidebeek
XGF	Watou27/E.18.c.8.9.
XCB	Peselhoek
XCA	Westonhoek28/G.4.a.
\mathbf{XC}	Pacific
OKB	Abeele27/L.27.b.
ODA	Ebblinghen

In all cases empties must be handed over to ordnance representative. They must not be dumped without authority from above representative.

ARMY AND CORPS RAILHEADS

XK	Esquelbecq
XGD	Heidebeek
XGA	Straffehem
XGF	Watou
XD	Blendecques
XDA	Campagne
*XG	Swiss Cottage, II Corps
*XCB	Pese'hoek, II Corps
*XCA	Westonhoek
*XC	Pacific
ODA	Ebblinghen, No. 1 Dump
*ODB	Hondeghem, No. 2 Dump
*OKB	Abeele Siding27/L.27.b.
XKA	Bavinchove, Heavy
	Light

^{*}Advanced corps railheads. No army stocks.

XIX CORPS RESERVE DUMPS

- Le Nouveau—For Field Ammunition, S. A. A., Grenades, etc. Not yet in Monde—For Heavy and Siege Ammunition..... operation.
- (j) Defective ammunition, grenades, etc., are not to be returned with empties. They must be properly picked, fuses set at safety, grenades detonated, packages labeled (labels showing contents, destination and where from).

A certificate to the effect that they are safe for transit must be furnished by the officer loading them for return.

PART V-EVACUATIONS

- 1. The evacuation from the divisional front will be carried out by the 2/2 East Lancashire Field Ambulance reinforced by Bearer Division of 2/1 East Lancashire Field Ambulance.
- 2. ADVANCED DRESSING STATIONS:

 Right Sector
 27/L.25.b.2.9.

 Left Sector
 27/L.21.a.4.5.
 (Hillehoek)

3. WALKING WOUNDED COLLECTING STATION:

M. D. S.—Trappists Farm.

4. MAIN DRESSING STATION AND GAS CENTER:

Trappists Farm—K.17.b.2.5.

- 5. PLAN OF EVACUATION:
 - (a) Stretcher and gassed cases will be carried to R. A. P.'s by regimental stretcher bearers, thence by field ambulance bearers by wheeled stretchers or hand carriage to collecting posts or A. D. S. O. C., 2/2 East Lancashire Field Ambulance will arrange for relay post and collecting posts.
 - (b) Wounded will be conveyed by divisional cars to main dressing station, Trappists Farm, thence by M. A. C. cars to C. C. S., Esquelbecq, or by narrow gauge train from Beauvoorde Junction, 27/K.27.a.8.8. Walking wounded cases will also be evacuated by this train or by train from Watou (Farm, 27/K.5.a.6.4.).
 - (c) The M. D. S. at Trappists Farm will be capable of dealing with all cases, including gassed.
- 6. In the event of it being impracticable for ambulance cars to use cross roads at Abeele and the main Abeele-Poperinghe road, all evacuations southeast of the Abeele-Poperinghe roads will be by wheeled stretchers or hand carriages. The O. C., 2/2 East Lancashire Field Ambulance will establish relay posts.

RIGHT SECTOR:

LEFT SECTOR:

Collecting and Car Posts......L.17.c.2.7.

A. D. S..... Trappists Farm

Location of M. D. S., if change is necessary, will be designated later.

7. EVACUATION OF SICK AND INJURED ANIMAL:

Cases will be evacuated to:

No. 52—Mobile Veterinary Station (41st Division) at........27/K.22.a.2.2.

No. 6—Mobile Veterinary Station (6th Division) at.......27/L.13.d.2.5.

Cases unable to walk will be immediately reported to the Division Veterinarian.

The following Administrative Summary covers the period of occupation of the Dickebusch Sector in Belgium, taken over from the 6th British Division and includes the Battle of Vierstraat Ridge:

27TH DIVISION

August 31, 1918.

SECRET

ORDERS

No. 76

REFERENCE MAPS: Hazebrouck 5A 1-100,000. Sheets 27 and 28, 1-40,000.

1. ACCOMMODATIONS:

The divisional area is subdivided into four sub-areas, all of which have Area Commandants

who are responsible for the administration of their areas as far as accommodation and care of billets, area stores, etc., are concerned.

Area	Area Commandants	Location
Ratterot Second	Lieutenant H. S. Ransom	.27/K.16.d.8.9.
Hillhoek Second	Lieutenant G. P. Cooper	L.19.b.3.5.
Busseboom	Captain J. J. Everatt	. L.24.c.2.9.
Dickebusch I	ieutenant L. S. L. Hallam	.28/L.15.d.2.2.

2. AMMUNITION:

(a) Divisional reserve dump at location—L.15.b.9.2.

There will be maintained at this dump the following reserve:

S. A. A							 300,000 rounds
Grenades,	hand						 15,000
Grenades,							15,000
Pistol, Col	t						 12,960
Stokes, T.	M. C., con	mplete	with	n ring	gs and	fuses.	 9,000
V. P. A.,	white						 25 boxes*
S. O. S. se	ts						 200*
Flares, wh	ite						 512*
Flares, red							 512*
Flares, gre	en						 512
S. A. A. "	K" (M. G	only)					 300,000 rounds
S. A. A. tr	acer						 11,232*
S. A. A., A	A. P						 6,240*
Blanks for	rifle grena	des					 7,020
37 mm, A	. P						 60
37 mm. C.	I						 1,140

(b) Regimental dumps will be established as follows:

Dumps in vicinity of Left Regimental Headquarters (H.27.b.6.7.) and Right Regimental Headquarters (H.31.a.3.6.) will each contain the following:

S. A. A	150,000 rounds
Grenades, hand	7,500
Grenades, rifle	4,500
Pistol	3,240
Stokes, T. M. C., complete with rings and fuses	1,350
V. P. A., 1" white	2,100*
S. O. S. sets	50*
Flares, white	512*
Flares, red	512*
Flares, green	512*
S. A. A. "K" (M. G. only)	75,000
S. A. A. tracer	2,486*
S. A. A., A. P	1,248*
Blanks for rifle grenades	2,808
37 mm. C. I	570
37 mm. A. P	30

(c) Six small dumps in the Dickebusch system between regimental headquarters at H.27.b.7.7, and Gretna Cross at H.32.b.4.9. will each contain approximately:

S. A. A	15,000 rounds
Grenades, rifle No. 23 or 20	1,170

SALVED DUMP AT H.25.b.15.55 CONTAINS:

S. A. A	112,500 rounds
Grenades, rifle No. 23	1,170
Stokes, T. M. C	600

RIGHT INFANTRY REGIMENT:

(a) The following ammunition, etc., is to be held between H.33.c.5.7. and N.2.c.8.2. 6 boxes of S. A. A. dumped at each platoon post, i. e.,

This amount will be held at each

8 posts, 6 boxes = 48 boxes.

If necessary, ammunition and grenades needed to augment this supply will be drawn from the regimental dumps located at H.27.b.6.7.

(b) The following ammunition, etc., will be dumped in reserve regimental area, in the Ouderdom system:

1.	S. A. A	15,000 rounds 180* 150	of the following points: G.36.a.8.4. G.24.c.6.6. G.35.b.1.5. G.30.b.3.0. G.24.a.2.6.
2.	S. A. A	30,000 180 150	To be established at each of the following locations: G.29.d.2.9. G.23.d.9.1.

(c) Stokes T. M. C. ammunition will be held at each of the following gun positions:

150 at G.36.c.87.99. 150 at G.36.b.30.30. 150 at G.30.d.80.10. 150 at G.30.d.75.20. 300 at G.30.b.90.75. (two positions) 300 at H.19.a.15.10. (two positions)

Ammunition and grenades needed to augment this supply will be drawn from division grenade dump.

Advance posts which would not be held in case of serious attacks will not maintain a reserve.

IN THE LINES

- (a) 200 rounds S. A. A. per man. This will include 120 rounds carried on the man.
- (b) In each occupied post and strong point, 100* rounds S. A. A. per man of the garrison in addition to that carried on the man, and 10* boxes rifle grenades.
- (c) At each company headquarters, 10* boxes, S. A. A., 10 boxes rifle grenades, 10* boxes hand grenades.
- (d) At each battalion headquarters, 75 boxes S. A. A., 25 boxes rifle grenades, 25* boxes hand grenades.
 - (e) At each machine gun position, 15,000 rounds S. A. A. per gun.
 - (f) At each Lewis gun position, 4,500 rounds S. A. A.

3. SUPPLY:

Railhead Esquelbecq Broad Gauge Winnezeele Meter Gauge

Supplies arriving by daily train at Esquelbecq will be transferred by personnel of Railhead Supply Detachment to meter gauge for shipment to Winnezeele, where they will be handled by the same personnel.

Trains of 2d Line Transport (G. S. wagons) will move supplies from Winnezeele to refilling points.

These trains will consist of necessary G. S. wagons and personnel detailed from units attached.

Rations will be drawn one day for consumption the following day.

Organizations will draw from refilling points as indicated below, at 8:30 A. M.:

Dump "E" at K.17 central....For Division Troops and Brigade Machine Gun Battalions.

Dump "E" at K.18.a.8.8..... For 53d Infantry Brigade

Dump "H" at K.18.a.3.2..... For 54th Infantry Brigade

L. G. S. wagons of units will move supplies from refilling points to rolling kitchens.

LOCATION OF FIRST LINE TRANSPORT:

Unit		Locat	ion	
Headquarters, 105th Infantry	27/	K.23.c.1.7.	(Details	Camp)
1st, 2d and 3d Battalions		L.13.c.8.1.		
Headquarters, 106th Infantry	27/	K.18.a.8.8.		
1st Battalion		K.24.a.9.9.		
2d Battalion		K.24.a.1.1.		
3d Battalion	٠,	K.24.a.1.7.		
Headquarters, 107th Infantry	27/	L.31.a.1.1.		
1st Battalion		K.29.c.3.4.		
2d Battalion		K.34.d.3.9.		
3d Battalion		K.17.b.1.1.		
Headquarters, 108th Infantry	27/	L.25.a.9.8.		
1st Battalion				
2d Battalion		K.30.c.7.1.		
3d Battalion		K.34.b.1.1.		
Headquarters, 106th Machine Gun Battalio	n.27/	K.27.d.5.5.		

The exact subdivision of rations according to distribution of units in the line, proper packing of same in bags and the plain labeling thereof with the designation of the unit for which intended are matters of vital importance.

All concerned will be held to strict accountability for the return by carrying parties of all empty water tins and food containers which are needed for bringing up supplies for the following night.

Officers' Rations.—Will be packed separately and may include such components as they arrange to have purchased. Under no circumstances will the division of rations for a small number of officers be made so that they receive a disproportionate quantity to the detriment of the enlisted men.

SOLIDIFIED ALCOHOL.—The weekly allowance of solidified alcohol for the division is 20,000 ounces, and is drawn on Thursday by units, through Division Quartermaster.

This will be issued only to troops actually stationed east of the Dickebusch Line.

There are no reserve rations held by the division at reserve or supporting points, as it is considered that rations can be sent when required.

MEDICAL ARRANGEMENTS:

1. The evacuation from the division front will be carried out by the 106th and 107th Ambulance Companies, reinforced by the 105th and 106th Field Hospitals.

The Director of Ambulance Companies will be the officer in charge of advance area evacuation with headquarters at Remy Siding, 27/L.23.a.4.7.

- (a) ADVANCE HEADQUARTERS.—Long Barn, 28/G.30.d.6.7.
- (b) DIVISION MAIN DRESSING STATION.—Remy Siding, L.23.a.4.7.
- (c) DIVISION COLLECTING STATION.—Trappiste Farm, K.17.b.2.5.
- (d) ADVANCED DRESSING STATIONS.—St. Dunstan, H.22.b.8.3.—Long Barn, G.30.d.6.7.

	Mic Mac
	Railway No. 1
Railway Posts	Gunner
	Red House
·	Bethune N.1.a.9.9.

(e) REGIMENTAL AID POSTS:

Right—Tiger Farm, N.2.a.1.1. Mic Mac, N.34.d.4.9. Left—Vijverhoek, H.29.c.2.6.

RESERVE REGIMENT (left Brigade), H.26.d.3.3.

- (f) WALKING WOUNDED COLLECTING POSTS.—Busseboom, G.16.c.2.8.
- (g) DENTAL.—Dental Surgeons with necessary equipment are located as follows:

Headquarters,	53d Infantry Brigade
Headquarters,	54th Infantry BrigadeL.20.c.2.6.
Headquarters,	105th Infantry
Headquarters,	106th Infantry
Headquarters,	107th Infantry
Headquarters,	108th Infantry
Headquarters,	102d Engineers
Headquarters,	104th Machine Gun BattalionK.30.d.3.6.
Headquarters,	105th Machine Gun Battalion G.23.d.0.0.
Headquarters,	106th Machine Gun BattalionBeauvoorde Wood

- 2. WATER SUPPLIES, WATER POINTS AND BATHS.
- (a) The Commanding Officer, 102d Engineers, is responsible that all pumps and water appliances in the divisional area are in working order, and any failure in the water supply will be reported at once to the office of G-1. (L.14.a.2.0.)
- (b) Horses are not to be watered directly from reservoir tanks; sufficient water troughs will be erected in the vicinity of horse lines, into which water is to be pumped.
- (c) An officer, or, in exceptional cases when no officer is available, a senior non-commissioned officer will be in charge of every watering party. Men are to dismount when watering, and remove bits.
- (d) Water troughs are to be so arranged that horses are not taken along or across main roads to water. Horses are not to be taken along tram lines, railway lines, or through fields where railway lines are in process of construction. Horses are not to be allowed to drink until water troughs are full.
- (e) In the event of a move into a new area, all sources of drinking water must be tested before using by the testing cases in possession of medical officers of units. These testing cases will be always available for use by the medical officers. Sentries and warning notices will be posted on suspected water supplies, and samples sent in at once to the Division Surgeon for confirmation.

5. WATER.

The drinking water supply carries through a pipe line from Mont des Cats. Horse water supply is pumped from Yieterbeer.

HORSE WATER POINTS

*	No.	of Horses Watering
Location	Map Reference	at One Time
Hoop Farm	27/L.20.a.2.1	80
Hoop Farm	L.14.c.1.1	8
Remy	$L.26.c.4.9.\ldots$	8

DRINKING WATER

MAP REFERENCE:

27/L.17.d.7.3	carts and dixies
L.23.c.7.8	carts and dixies
L.22.d.9.5	carts and dixies
28/G.21.8.6.3	only
G.31.b.2.8	carts and dixies
G.32.c.2.2	carts and dixies

BATHS

The Division Sanitary Inspector is officer in charge of baths. Divisional baths are located as follows:

27/L.17.d.5.8. L.14.c.3.2. K.21,a.3.5.

Each bath is in charge of one non-commissioned officer and four privates. Units will make time bookings with the non-commissioned officer in charge of bath, for use of same.

MILITARY POLICE ARRANGEMENTS

(a) The following battle straggler posts will be maintained when required: STRAGGLER POSTS:

28/G.16.c.8.3.—Adjoining post of 30th Division, A. E. F., G.17.c.6.9. 28/G.21.a.5.0.—Adjoining post of 34th Division, B. E. F., G.26.c.5.3.

27/L.17.d.6.4.—Advance straggler collecting post.

27/L.19.a.3.4.—Main straggler collecting station.

Straggler posts will be manned by one non-commissioned officer and four privates of the Military Police.

Regiments, when ordered to do so, will send a representative to advance collecting station during operations. Such representatives must know the positions of the transport lines of each unit of their regiment and will hand over stragglers at such transport lines.

Arrangements will be made to obtain and hold the following supplies at collecting posts in case of necessity:

400 Complete iron rations.

50 Box respirators.

50 Field dressings.

50 Blankets.

20 Petrol tins for drinking water.

Empty boxes for small arms ammunition and bombs.

The rations will be held by the Division Quartermaster. The Assistant Provost Marshal will draw and be responsible for the remainder.

(b) PRISONERS OF WAR CAGES:

The advance and main prisoners of war cages are being erected at:

27/L.17.d.6.4. 27/L.19.a.3.4.

Before the two prisoners of war cages are built and in case of emergency the existing cage at L.22.a.1.9. will be used.

TRAFFIC CONTROL POSTS:

K.17.b.6.9.

K.24.d.9.9.

L.19.b.4.9.

L.14.c.3.2.

L.21.c.9.8.

L.17.d.6.4.

L.17.b.2.1. (Under Assistant Provost Marshal, 30th Division, A. E. F.)

TRAFFIC.—Mounted Military Police posts will be established in the divisional area along the Poperinghe-Renighelst road as indicated below:

The Poperinghe-Renighelst road and the cross roads leading from the Poperinghe-Renighelst road to the Abeele-Renighelst road.

Cross roads at G.20.a.4.5.—Hoograaf Cabaret—Cross Roads at G.32.d.8.1. through M.2.a.—M.1.d. to boundary, will be closed between 5 A. M. and 8 P. M. within the corps area, east of road G.14.d.7.7. to

- (a) All Motor Trucks.
- (b) All Columns of Horse Transport.

Roads in the corps area east of the above line and not under observation by the enemy ground observers, will be open to:

- (a) Cars conveying Staff Officers.
- (b) Horse transport, single vehicles.
- (c) Motorcyclists.
- (d) Single ambulances.

No vehicle, however, is to exceed a speed limit of eight miles per hour, or any speed which raises dust above the height of the vehicles.

GAS RESPIRATORS

Box respirators will be carried east of the road running from Droglandt through Winnezeele to Weld.

Box respirators will be worn in the alert position east of the line Busseboom-Boeschepe.

STEEL HELMETS

Steel helmets will be worn east of a line Busseboom-Boeschepe.

LIGHTS

No head lights or side lights are permitted east of the Poperinghe-Abeele road. All lights must be extinguished or completely shaded one hour after sunset.

6. RAILWAY EQUIPMENT STORES:

(a) Engineer parks and dumps are situated as follows:

Stores are drawn from (a) by light railway and motor trucks; from (b) by light railway; from (c) by light railway and horse transport.

(b) Light railways can now deliver stores as far as:

Yale Siding H.15.d.1.4. Zevecoten G.36.c. central

Christ Church....H.25.a.9.7. (Not to be used except under specific direction of Division Engineers.)

(c) As soon as dumps are opened for traffic it is proposed to form advance dumps as follows:

(d) Advance divisional dump will be at Mt. Elgin, G.16.d.85.75. Light railway will deliver stores to Mt. Elgin.

Tramways will deliver to the advanced dumps.

(e) An old engineer corps park exists at Zevecoten, G.8.c.central. The stores can be drawn from there on receipt of authority from C. E. XIX Corps, through Divisional Engineer.

This dump will shortly be cleared by salvage companies.

7. SALVAGE:

(a) The division is responsible for salvage and evacuation to the divisional dumps forward of the line:

Road running from 28/G.14.c.2.7.—G.26.c.3.3.

(b) SALVAGE DUMPS ARE LOCATED AS FOLLOWS:

Main Divisional Dumps and Office	e	L.23.a.4.7.
Esquelbecq Station	************	C.18.b.0.1.
Ration Dump "E"		K.17.central
Ration Dump "F"	*************	K.18.a.8.8.
Ration Dump "G"		K.18.a.8.8.
Ration Dump "H"		K.18.a.3.2.
Ration Dump "J"		K.18.a.3.2.
Also at		L.14.d.5.6.

(c) All units should exercise particular care to send in to salvage the following:

Water and petrol tins.

Surplus fat not absolutely needed in cooking.

Bully beef tins.

Sand bags.

1st Line Transport of battalions, etc., when returning empty from forward area, are to bring back salvage.

Waste paper will be placed in old sacks and turned in to divisional salvage dumps in the same manner as other salvage. All paper marked "Secret," "Confidential," or "Not to be Taken into the Front Line Trenches," is to be burned.

8. CROPS:

It does not appear to be generally recognized that unnecessary damage to crops in the forward evacuated areas is as reprehensible as in areas where inhabitants are still living.

Crops in the evacuated area will be harvested under arrangement made by the military authorities. Such crops form a valuable addition to the available food resources of the country.

Commanding officers will be held responsible unless such damage is rendered unavoidable by urgent military necessities.

9. ORDNANCE:

Ordnance stores and dumps are at K.18.c.7.9. Ordnance stores are drawn from rail-head at Grubhem and delivered at ordnance stores. Old stores received at ordnance stores. Ordnance salvage will be shipped twice weekly from railhead.

10. VETERINARY ARRANGEMENTS:

No. 6 Mobile Veterinary Section and 105th Mobile Veterinary Section are located at 27/L.13.d.2.5.

Animals are evacuated from there to No. 22, V. E. S., at E.12.d.5.9. and thence by rail to Calais.

Regimental and lesser units supply officers will notify the Divisional Veterinarian immediately upon the death or evacuation of animals in their organizations, giving the following: Date, unit, class of animal and the cause of death or evacuation.

11. BURIALS AND CEMETERIES:

The following are the cemeteries available for use by this division:

Nine Elms	 	 						4	27/L.10.b.4.4.
Lijssenthork (military)	 	 					٠		L.22.d.6.3.
Ouderdom (military)	 	 		 				2	28/G.30.d.9.4.
Dickebusch Huts (military									
Abeele Airdrome	 	 							27/L.31.a.8.2.*

^{*} Not to be used except in case of urgent necessity.

BY COMMAND OF MAJOR GENERAL O'RYAN: STANLEY H. FORD,

Colonel, G. S.,

Chief of Staff.

SECRET

SUMMARY OF ADMINISTRATIVE INSTRUCTIONS

APPENDIX A

(Orders 76)

ENGINEER WORK

The following works are now under construction by the engineer troops of this Division aided by infantry details of various strength as necessity requires:

TRENCH CONSTRUCTION

Outposts—Dickebusch Line	—H.27.c.5.7					
Westoutre—Goed Moet Lin	ne—Right battalion area					
Westoutre—Goed Moet Lin	ne—Left battalion area					
Gold Moet Line	-Right battalion area	Rivetting	and	placing	"A"	frames.
Gold Moet Line	—Left battalion area					
Dickebusch 1st, 2d and 3d I	ines and 1st Line support					
Dickebusch Bund, C.T		}				
Melon Farm, C.T.		,				
Scottish Wood, C.T. to	-H.36.c.5.2.					
Post No. 3, Melon Farm	—H.20.d.30.35.					
Post No. 2, and No. 4, near	—H.20.d.	× .				
Bristol Camp Post	—H.35.d.3.5.					

SHELTERS AND MACHINE GUN EMPLACEMENTS, ETC

Opium Farm	—H.21.c.90.75 Filling
Indus Farm	—H.28.a.2.0. Filling
Moose Jaw Farm	-H.14.a.7.0 Filling and concrete
Dominion Farm	-G.24.c.0.5Filling
Medoc Farm	-G.35.a.4.9 Filling and gas proofing
"E" Co. Farm	—G.15.c.6.9
Hecla Farm	—H.25.d.85.05Filling
Walker Farm	—H.27.b.9.8 Filling
Mersey Cross	—G.23.c.9.3 Excavation, refill, etc.
Shelter	—G.36.a.9.7 Filling, bursting blocks, gas proofing
Testoutre, Goed Moet Line	—G.35.b.3.7Camouflage repair
Pill box	—H.28.d.3.5 Concrete and camouflage
Hague Farm	—H.31.a.6.9 Concrete and gas proofing
	(Camouflage complete)
Gretna Redoubt	—H.32.b.5.6 Concrete and gas proofing
Artillery O. P.	—H.8.a.92.55 Concrete, practically completed
Mic Mac Farm	-N.31.d.5.9Gas proofing
Tiger Farm	Gas proofing
Right brigade shelter	Gas proofing
Left battalion shelter	Gas proofing
and the second s	A COMPANY OF THE PROPERTY OF T

MISCELLANEOUS WORK

Erecting clothes disinfector, Hopoutre.

Repairing billets.

Salvaging material for construction

Placing signs on foot tracks

Construction and maintenance of wire entanglement.

Road screening, Ouderdom, Busseboom Road, etc.

Road patrol and repairs (by Pioneer Platoon, Headquarters Co., 105th Infantry).

Demolition of bridges, etc. Preparation, patrols and inspections.

Construction of a bath at Trappiste Farm—K.17.b.0.4.

Completed Moire pill boxes, machine gun emplacements, trenches and wiring as shown on map, C. R. E. 6th Division, scale—1:100,000.

Engineer details are also at Hopoutre dump making burster blocks.

Mt. Elgin dump issuing engineer materials.

LISTS, MAPS, PLANS, ETC.

Trench map—Divisional area—part sheets Poperinghe, Ypres, Kemmel and Wytschaete	. 1							
Tracing—Divisional area—work on trenches and wire	. 1							
XIX Corps Administrative map "A"	. 1							
XIX Corps Administrative map "B"	. 1							
Divisional area, 1:100,000 machine guns and wire	. 1							
Message map, part sheet 28, schale 1:100,000—Dickebusch area	. 1							
Dickebusch Support Line—wire	. 1							
Left brigade section—scheme of wiring—from 46th French Division								
Monolithic pill box, for Brigade Headquarters	. 2							
Goed Moet Mill Line								
Fracing showing strong points—N.1.b.3.6.								
Middlesex Camp—H.32.c.—N.1b.90.98.								
Albemarle House	. 1							
Water supply XIX Corps area								
II Corps light railway map								
Light railways—sheet 28, scale 1:20,000								
Defense lines—sheet 28, scale 1:40,000								
Sheet 28, N. W., scale 1:20,000								
Sheet 28, S. W., scale 1:20,000								
Sheet 27, N. E., scale 1:20,000.								
Sheet 28, N. W., and 28, S. W., combined, 1:20,000								
Sheet 27, N. E. (Eastern half), 1:20,000								
Sheet 28, N. W. S., Poperinghe—1:10,000								
Sheet 28, N. W. 4 Ypres—1:10,000								
Sheet 28, S. W. 1 Kemmel								
Sheet 28, S. W. 2 Wytschaete								
Sheet 28, N. W. 1 Elverdinghe								
Route map—forward roads								
Message maps, scale 1:10,000.								
Nos. 9228, 9229, 9230, each								
Ouderdom Line								
Intelligence maps								
Aeroplane photographs, miscellaneous								
Miscellaneous maps received from 46th French Division, rolls								
Left Divisional sector defense scheme (provisional) with Appendix I to XI.								

SUMMARY OF ADMINISTRATIVE INSTRUCTIONS

APPENDIX B

(ORDERS 76)

ORGANIZATION OF ANTI-GAS DEFENSES—Sheets 27 and 28, 1:40,000.

1. The following are limits of the "Precautionary" and "Alert" zones of the 27th Divisions:

Precautionary Zone—East of the road running from Broglandt through Winnezeele to Rweld.

Alert Zone—East of line, Busseboom, Boeschepe.

List of Alert Signs:

G.23.c.8.5.	H.18.b.2.2.
G.27.d.8.6.	G.22.d.7.1.
G.24.c.5.5.	G.28.a.6.2.
G.28.a.5.5.	H.19.b.4.7.

- 2. The method of warning in the case of a cloud gas attack, will be as prescribed by General Order 54, Headquarters 27th Division, July 11, 1918.
- (a) System of Strombos Horn for warning: Permanent sentries will be mounted at the following points in order to give warning to the troops in the divisional area forward of the Poperinghe-Abeele road.

		No. of		
Location	Local Name	Cylinders	Pressure	Condition
	105TH INFANTRY			
H.27.b.7.7.	Regimental Headquarters	4	75K	Good
H.28.a.2.0.	Right Battalion Headquarters	2	75K	Good
H.26.d.3.3.	Support Battalion Headquarters	2	75K	Good
H.28.d.6.7.	Left Battalion Headquarters	2	75 K	Good
H.35.b.6.3.	Left Company Headquarters	2	75K	Good
N.5.a.6.4.	Right Company Headquarters	2	75K	Good
	106TH INFANTRY			
H.31.a.6.9.	Hague Farm	3	100 lbs.	Good
H.31.d.5.9.	Mic Mac Farm	2	100 lbs.	Good
H.32.b.6.6.	Dickebusch Lake	2	100 lbs.	Good
	108TH INFANTRY			
G.14.a.3.3.	Medoc	2	70-80 lbs.	Good
G.36.a.4.9.	Medoc	3	70-80 lbs.	Good
	66TH DIVISIONAL ARTILLERY			
G.18.b.10.30.	Brigade Headquarters	2	120-120	Good
G.30.b.03.96.	Battery Position	2	139- 90	Good
H.19.b.31.07.	Battery Position	2	120-120	Good
H.8.c.65.10.	Brigade Headquarters	2	120-120	Good
H.14.c.30.10.	Battery Position	2	120-120	Good
K.23.a.30.50.	D. A. C	2 .	120-120	Good
	DIVISION HEADQUARTERS AREA			
L.14.a.2.0.	Division Headquarters	2	120-120	Good
L.17.b.20.10.	Traffic Post	2	110-110	Good
K.17.c.00.07.	Siege Battery A. C	2	110-120	Good
G.27.a.50.90.	Field Co	2	120-120	Good
G.20.a.40.40.		2	120 - 125	Good
K.23.d.30.30.	D. A. C	2	120-120	Good
L.20.a.2.8.	Transport Lines	2	80- 80	Good

(b) In addition to the above, Division Headquarters will warn all troops as shown in Table, and area commandants in the area. Every signal office will have a list of all units whom they are responsible for warning. In Division Headquarters, Signal Office, this list will be a Table.

The Assistant Provost Marshal will make arrangements for warning all his Traffic Control Posts, who will, in turn, pass on the warning to all persons, including drivers of vehicles passing their posts.

On receipt of the warning, all troops will observe gas alert position, remaining so until the order is cancelled by Division Headquarters.

(c) The following will be the sequence in which warning will be sounded in case of a gas attack:

Regimental Headquarters will first warn their flank and reserve regiments and then Division Headquarters signals.

The division signal office will order the Strombos Horn at Division Headquarters sounded and to warn:

- (a) Officer on duty.
- (b) Flanks Divisions.
- (c) XIX Corps Signals.
- (d) All Signal Offices and Units in the Table.

LIST OF DUGOUTS

- 1. Locations.
- 2. Dugout (D). Shelter (S). Pillbox (P). Cellar (C). Farms (F).
- 3. Unit in occupation.
- 4. Number accommodated.
- 5. Number of entrances.
- 6. Number of blanket or union cloth doors in each entrance.
- 6a. Gas proof or not gas proof.

1	2	3	4	5	6a	6	
H.31.a,6.9.	13 D	Reg. Hdqtrs	78	14	8 Yes 5 No	$ \begin{array}{c} 4-2 \\ 8-1 \end{array} $	Need repair
H.32.b.6.6.	7 D	3d Bn. Hdqtrs	16	4	2 Yes 3 No	$\begin{bmatrix} 2-2 \\ 1-1 \end{bmatrix}$	Need repair
H.31.d.5.9.	4 D	2d Bn. Hdqtrs	40	4	2 Yes 2 No	$egin{pmatrix} 1-2 \\ 1-1 \end{pmatrix}$	Need repair
N.2.a.1.1.	4 D	1st Bn. Hdqtrs	26	4	No	1-1	Poor
H.28.d.9.1.	1 D	Co. Hdqtrs	12	2	Yes	1	Poor
H.28.d.5.1.	1 D	Bn. Hdqtrs	3	1	Yes	1	Poor
H.35.a.4.4.	1 D	Co. Hdqtrs	5	2	No		Poor .
H.28.d.5.1.	3 D	Bn. Hdqtrs	12	2	2		Poor
H.28.d.5.1.	2 D	Signals	6	2	1		Poor
H.26.c.3.6.	1 C	R. A. P	20	1	No		Poor
H.27.b.7.7.	4 D	Reg. Hdqtrs	65	6	Yes	2	Good
H.28.a.2.9.	3 D	Bn. Hdgtrs	20	3	1 Yes		1 good
H.29.c.3.6.	1 D	Ciamala	20	- 1	2 No	* * *	2 poor
	1 D	Signals	8		No		D
N.5.a.6.3.		Co. Hdqtrs		1 1		$\frac{1}{2}$	Poor
N.5.a.6.9.	1 D	Co. Hdqtrs	6	1	Yes	Z	Poor
G.14.a.3.3.	1 D	Reg. Hdqtrs					
G.36.a.4.9.	6 D	Bn. Hdqtrs		1	No	None	Poor
G.24.b.7.8.	1 D	2d Bn. Hdqtrs					
G.20.b.3.1.	1 D	3d Bn. Hdqtrs.					
H.8.c.6.1.	18 D	Brig. Hdqtrs					Single curtain
H.9.c.0.6.	10 D	Battery					Single curtain
H.14.a.2.7.	2 D	Battery					Single curtain
H.10.c.3.2.	3 D	Battery					Single curtain
H.19.c.5.7.	1 D	Battery					Single curtain

	The same of the sa						
1	2	3	4	5	6a	6	
H.21.b.4.9.	8 D	Battery					Single curtain
H.20.a.9.6.	4 D	Battery		* *			Single curtain
H.14.d.2.2.	4 D	Battery					Single curtain
H.10.c.0.5.	6 D	Battery					8 double, 2 single
H.18.c.6.6.	2 D	Battery					Single curtain
0 101 10	2 F						2 double curtains
G.18.b.1.3.	2 D	Brig. Hdqtrs					9 single curtains
H.14.c.3.4.	7 D	Battery					3 double, 3 single
B.19.b.3.1.	8 D	Battery					Single curtain
H.20.c.1.9.	1 C	Battery					Single curtain
H.14.c.1.17.	4 D	Battery					Single curtain
G.30.b.0.9.	1 D	Battery					Double curtains
G.30.b.5.6.	8 D	Battery					2 double, 6 single
H.25.b.1.1.	1 D	Battery			****		Single curtain
G.25.c.9.7.	1 D	Battery					Single curtain
H.13.d.6.4.	2 D	Battery				***	Single curtain
G.23.c.9.3.	7 D	Brig. Hdqtrs	25	7	No	None	
G.23.c.9.3.	1 C	Brig. Hdqtrs	6	1	No	None	
N.1.b.3.6	1 D	Co. Hdqtrs		2	No	None	
H.33.c.1.1.	1 D	Platoon Hdqtrs		1	No	None	
H.32.d.2.2.	1 D	Platoon Hdgtrs		1	No	None	
H.34.d.2.7.	1 D	Platoon Hdqtrs		1	No	None	
Nc.9.8.	1 D	Platoon Hdqtrs		1	No	None	
G.3.d.5.1.	1 D	Platoon Hdgtrs		1	No	None	
N.4.a.1.6.	1 D	Platoon Hdgtrs		1	No	None	
H.34.a.5.9.	1 D	Platoon Hdgtrs		1	Yes		Need repair
H.28.a.4.5.	1 D	Platoon Hdqtrs		1	Yes		Need repair
H.28.d.2.6.	1 D	Platoon Hdqtrs		1	Yes		Need repair
H.27.a.2.4.	1 D	Platoon Hdqtrs		1	No	None	

Work on hand consists at the present time of gas proofing of dugouts and the locations of Strombos horns and Alert signs.

The urgent work outstanding is the investigation and report of the XIX Corps upon the gas material and anti-gas appliances of the enemy located in the reoccupied territory.

SUMMARY OF ADMINISTRATIVE INSTRUCTIONS

(Orders 76)

APPENDIX C

DEMOLITIONS

1. Charges have been placed under the following bridges and the officer responsible for giving the order for them to be fired is as shown.

I. H.29.c.4.9.

Brigadier General Commanding Left Brigade, who in turn may delegate it to his Left Front Battalion Commander. The Brigade and Battalion on his left flank must be notified when the order has been given. The R. E. party to fire the charge live at the Sluice House at the northeast corner of Dickebusch Lake.

II. H.31.b.65.15.

III. H.25.c.35.00.IV. G.36.b.35.15.

Brigadier General commanding Right Brigade. The R. E. parties to fire these charges are at Right Brigade Headquarters and will be sent to their posts upon receipt of the order "Precautionary Action" from these headquarters.

V.	G.24.c.98.15.	The O. C. Troops in the Westoutre—Goed Moet Mill System.
VI.	G.24.d.35.36.	This will, in the first instance, be the Brigadier General com-
VII.	G.24.d.95.78.	manding Reserve Brigade. If his Brigade moves forward of
VIII.	H.19.a.70.25.	this System, he will hand over these orders to the O. C.
IX.	H.19.a.80.20.	relieving troops. The R. E. parties for these charges live at
X.	H.19.b.00.50.	Mud Farm—G.27.a.4.6.
XI.	G.35.a.20.30.	Further orders regarding the demolition of these bridges will be
XII.	G.29.d.15.10.	issued should the situation demand their destruction. Mean-
XIII.	G.30.c.00.95.	while the parties for carrying the demolitions are situated
*XIV.	G.21.d.35.15.	at 509th Field Company's Headquarters, at G.15.c.5.5.
*XV.	G.22.a.85.95.	

*Demolition charges withdrawn.

- 2. All orders for the firing of charges will be given in writing and signed by an officer.
- 3. Any demolition carried out will be reported as soon as possible to Divisional Head-quarters.

SUMMARY OF ADMINISTRATIVE INSTRUCTIONS

(ORDERS 76)

APPENDIX D

SIGNAL WORK

- 1. Burying cable from Hague Farm—H.31.a. to Mic Mac Farm—H.31.d. Burying cable from Walker Farm—H.27.b. to Q. Test Point in—H.27.d.
- 2. Testing out and repairing abandoned buried cable in the Dickebusch sector, diagram of locations to be handed over.
 - 3. A. D. Signals, XIX Corps, British Expeditionary Forces, will arrange for cable supply.

A SHORT HISTORY OF THE INTELLIGENCE SECTION

The Divisional, Regimental and Battalion Intelligence Sections were organized while the division was at Camp Wadsworth, S. C.

Immediately upon the arrival of the division in France, an advanced course of training of the division, regimental and battalion sections was instituted. This course began with a series of lectures on scouting, patrolling, use of the compass and alidade, reading and making of maps and sketches, etc., which were attended by regimental intelligence officers, battalion Scout officers, two non-commissioned officers from each regimental section, and the division observers. Before completing the course, each regimental and battalion section sent details of officers and men to the front lines in the Albert sector, where they received practical instructions in establishing and manning of observation posts, listening posts, patrolling, scouting, sniping, etc. A detail from the Division Observers Section was also sent to a British division observation post for practical instructions in the use of the telescope and alidade.

Early in July, 1918, the division moved to Flanders, where the training of the sections was continued. Here the men of the various sections established observation and listening posts, patrolled no man's land, sent out reconnaissance parties, etc., and the practises of trench warfare were carefully studied.

During the period July 9th-August 20th the division took over the defense of the East Poperinghe Line, a reserve system. Here the intelligence sections of the regiments and battalions were given their first opportunity to put to use the knowledge which they had gained during the preceding months. Observation and listening posts were established, and in addition regimental and battalion sections occupied the front lines with the British divisions then holding the outpost line, and participated in patrol and reconnaissance operations. The division observers established a division outpost near Abeele. During the holding of the Poperinghe

system, regimental intelligence officers and the division observers were required to render daily intelligence reports, as in the occupation of the front line.

On August 23d the division took over the Dickebusch Lake sector from the 6th British Division, two of our regiments taking over the front line and two being in reserve. It was during this period that the division took their first prisoner, an "unteroffizer" of the 153d I. R., 8th Division, who walked into our lines during the night of August 26th–27th. He was brought to the division prisoners of war cage, where he was questioned by an officer of the Corps of Interpreters. The man would give but little information. The work of the regimental and battalion sections during this period was carried out under difficulties, as the positions were under the constant observation of the enemy, who occupied Mt. Kemmel. These sections, nevertheless, established observation and listening posts, snipers' posts, and carried out numerous small but successful raids and patrols, while the snipers aided considerably in repelling enemy raids and patrols.

On August 30th forty-five prisoners, all enlisted men, were brought to the prisoners of war cage. These prisoners belonged to the following units:

It was ascertained that the enemy intended to retire to a position on the Messines Ridge where powerful defensive positions were being constructed. The fact that many "booby traps" and delayed-action mines had been placed on Mt. Kemmel was also established. During the night of August 30th-31st a wounded German prisoner gave the information that the Germans would retire to a position on Wytschaete Ridge, leaving a screen of machine guns on the ridge to cover the retirement. Reconnaissances were immediately carried out and the fact that the enemy had evacuated Mt. Kemmel was definitely established. The divisional observers were promptly put forward and worked their way to the summit of Mt. Kemmel. They obtained much valuable information and brought back valuable and interesting documents. The probable enemy order of battle opposite the divisional front from north to south was:

On September 2d this division was relieved by the 6th British Division, and the division moved down to the Albert front, in the Beauquesne area.

During the operations in Flanders, the regimental and battalion sections suffered many casualties, necessitating a reorganization. This was accomplished during the next three weeks while the division was in rest.

When the division again went into action, on September 27th, the intelligence sections were fully prepared to take over their important duties. The engagement of September 27th was a planned attack, with the aid of tanks and an artillery and machine gun barrage, to capture the strong advance line of the Hindenburg system. The scene of the action was the Knoll, Guillemont Farm and Quennemont Farm, near Ronssoy. The various sections participated in this engagement and rendered invaluable aid in helping to maintain liaison with the flanks. The men also performed the duties of "runners" in splendid manner. Much information was obtained concerning machine gun emplacements, enemy wire and special data on the St. Quentin Canal. The main attack was launched on September 29th and continued throughout the day and the following day. The regimental and battalion sections rendered invaluable aid in observing and destroying enemy strong points and machine gun nests, and acted as runners after all communication with headquarters had been severed through shell fire. They assisted in laying the "forming up" tape and acted as guides for tanks to their proper start positions. The utter disregard for danger of the officers and men resulted in extremely heavy casualties. The attack was launched behind a smoke screen. Fog also greatly hindered observation. Battalion sections guided the attack with the aid of prismatic compasses and the regimental sections manned and operated observation posts. Patrols under the battalion scout officers maintained flank liaison and aided in collecting the scattered units during the reorganization and consolidation of the reserve line on Egg, Doleful and Duncan posts. The division observers established and operated a divisional outpost just to the rear of the front line and established a forward outpost when the troops advanced. This forward post, however, had to be abandoned, as it was under enemy observation and subject to continual shelling. The prisoners taken during this operation were carefully examined at the division prisoners of war cage by officers of the Corps of Interpreters attached to the Divisional Intelligence Section, and much valuable information was obtained from their statements and from documents captured during the operation. Seventeen officers and 782 other ranks belonging to:

153d I. R	8th Division
90th I. R.—27th R. I. R.—84th R. I. R	.54th Division
7th R. I. R	.121st Division

were captured and passed through the division cage. The probable enemy order of battle from north to south on September 30th was as follows:

153d I. R		.8th Division
90th R. I. R.—27th R. I. F	R.—84th R. I. R	.54th Division
7th R. I. R		.121st Division

The division was relieved from the line on October 2d and went to a rear area where another reorganization of the regimental and battalion sections was again necessitated through the heavy losses sustained during the recent battles.

On October 11th the division again entered the line in the vicinity of St. Souplet. The enemy occupied strong positions on the heights overlooking Le Selle River. The river was carefully reconnoitered by the battalion sections and the information obtained as a result of these reconnaissances enabled the tanks to effect a crossing of this stream. The intelligence sections established outposts and from them located machine gun nests and other targets for the artillery and reported on the effect of our fire. The various sections also furnished guides, runners, and assisted in maintaining liaison. Snipers' posts took many prisoners during this battle. On October 15th, as a result of a daylight raid, twenty-three prisoners belonging to the 414th I. R. and 129th R. I. R., 204th Division, were cleared through the division prisoners of war cage at Busigny. Considerable information concerning the Le Selle River was obtained and it was at this stage of the operations that a distinct weakening in the enemy morale became noticeable. The total prisoners captured during this operation totaled forty-eight officers and 1,463 other ranks. The probable enemy order of battle from north to south on October 19th was as follows:

163d I. R
76th R. I. R17th Res. Division
162d R. I. R17th Res. Division
478th R. I. R
56th I. R121st Division
479th I. R243d Res. Division
122d Fus. Reg143d Res. Division
84th I. R54th Division
120th R. I. R204th Division
413th I. R204th Division
414th I. R204th Division

The total number of prisoners captured by this division is as follows:

	Officers	Men
Vierstraat Ridge	**	47
Hindenburg Line		782
Le Selle River	48	1,463
Total	65	2,292

In addition to conducting the examination of prisoners, a large number of maps and documents were examined by the Division Intelligence Section. The topographical section prepared innumerable maps, airplane photographs were distributed and examined, and the distribution of all maps was handled by the Division Intelligence Section.

During operations, the Division Intelligence Section published a daily summary of operations, giving accounts of the activities of the division and a résumé of the data obtained by the

regimental and battalion sections of the various regiments, as well as accounts of flanking divisions and communiques from other corps and armies. A weekly appreciation was also published and distributed throughout the division.

Along with the above-mentioned duties, the Division Intelligence Section, in cooperation with the regimental and battalion sections and individual operatives, carried on counterespionage inquiries and rendered regular reports to the Director of Military Intelligence, Washington, D. C., and to General Headquarters, American Expeditionary Forces

The Intelligence Section of the division was in charge of Major William T. Starr, G-2, with Captain Auguste B. Peterson as his assistant until the termination of the Hindenburg Line battle, October 1st, when Major Starr was transferred to the Military Police. Thereafter the work was carried on by Captain Peterson. Both officers were most efficient in their duties.

A. B. PETERSON,
Major, Infantry,
Acting Intelligence Officer.

REPORT OF ACTIVITIES OF THE MEDICAL DEPARTMENT VIERSTRAAT RIDGE.—August 24, 1918, to September 3, 1918.

On August 20, 1918, while at Oudezeele, orders were received for the 2/2 East Lancashire Field Ambulance and Field Hospital Company No. 105 to proceed by marching to relieve the 17th Field Ambulance, 6th British Division, and operate the main dressing station at Remy Siding. Relief to be complete by August 21st at 2:00 P. M.

On August 20, 1918, the 2/1 East Lancashire Field Ambulance received orders to take over the forward area and the advanced dressing stations at Long Barn (right flank) and St. Dunstan (left flank). The personnel of the 2/1 East Lancashire Field Ambulance in forward area was supplemented by the bearer section of the 2/2 East Lancashire Field Ambulance and Ambulance Companies Nos. 106 and 107 of the 102d Sanitary Train to be complete on night of August 23d-24th.

A collecting station for slightly wounded was opened at Busseboom. All cases were evacuated by a one-meter rail way to main dressing station at Remy Siding.

Field Hospital Company No. 106, during period August 24th to September 3d, operated a sick collecting post at Trappiste Farm. Sick from reserve regiments and other units not in the front line were evacuated to this post. Minor cases were held; other cases evacuated to Esquelbecq (casualty clearing station).

The advanced dressing station at Long Barn was splinter-proof elephant shelters reinforced with sand bags. This post received patients by hand or wheel stretcher carry from nine regimental and battalion aid posts and evacuated by motor ambulances to main dressing station at Remy Siding, a distance of seven kilometers. The total number treated at this post was 335 Americans and 89 British, of which 253 Americans and 5 British were wounded, 47 Americans and 82 British were gassed. The remaining 65 patients were sick.

The advanced dressing station at St. Dunstan (left flank) consisted of two elephant shelters, reinforced, and one dugout, all constructed in old buildings at this point. Patients were received at this station from two battalion aid stations and were evacuated over a fourteen kilometer route to the main dressing station at Remy Siding. Two hundred and twenty-one cases were treated at this post, of which 85 Americans and 1 British were wounded, 55 Americans and 17 British gassed, and 59 Americans and 4 British sick. The low number of cases treated at this station was owing to the short front sector which was served, this station evacuating from only two battalion aid posts.

The personnel of the forward area consisted of nine officers and 168 men of Ambulance Companies Nos. 106 and 107. The wounded were efficiently and promptly evacuated to the main dressing station at Remy Siding by motor ambulances.

On August 27th the entire medical, surgical and ordnance equipment of the 2/1 and 2/2 East Lancashire Field Ambulances were ordered by the 2d British Army to be transferred to the 102d Sanitary Train. Upon completion of this transfer the 2/1 and 2/2 East Lancashire

Field Ambulances were relieved from further duty with the 27th American Division. The property of these two field ambulances was divided; Sections A and B, less motor and horse ambulances, to Field Hospital Companies Nos. 105 and 106; Section C, plus motor and horse ambulances, to Ambulance Companies Nos. 106 and 107.

The transport that had been taken over by the 102d Sanitary Train consisted of four Fords, nine Daimlers and six horse-drawn ambulances. The condition of this motor transport at the time it was received from the British was of such a character that under constant use it was unable to stand the strain, and about September 2d the cars had to be frequently sent to the shop for repairs and at times only seven or eight of the motor cars were fit to take the road. During this period only two cars were damaged by shell fire.

The 133d British Field Ambulance, which was attached to this division during this period, operated a divisional rest station at Arneke, and on September 1st they were relieved from this duty and took over the divisional rest station and advanced dysentery center at Hilhoek from the 16th British Field Ambulance of the 6th British Division.

During this period, August 24th to September 3d, the motor transport of the 102d Sanitary Train was reinforced by details of motor ambulances from the 133d British Field Ambulance.

Throughout this period the American Red Cross representatives were constantly in touch with the forward area. Captain Bobo, Division Representative of the American Red Cross, established a depot of supplies at Remy Siding and issued to all battalion aid stations a primus stove, cocoa, sugar, milk, cigarettes, tobacco and extra blankets, so that all cases requiring treatment at aid posts received the benefit of these comforts. The American Red Cross, upon the relief of this division in the forward area, established, at points immediately in the rear of the front line, stations where hot cocoa was supplied to all troops upon their relief.

On September 2d the main dressing station at Remy Siding, operated by Field Hospital Company No. 105, was taken over by a field ambulance of the 41st British Division. On September 3d the forward area, operated by Ambulance Companies Nos. 106 and 107, under the Director of Ambulance Companies, was relieved by a field ambulance of the 41st British Division.

Field Hospital Company No. 106 at Trappists Farm was relieved on September 3d by the 41st British Division, and the 133d Field Ambulance, operating the divisional rest station and advanced dysentery center at Hilhoek, was likewise relieved.

The 102d Sanitary Train and the 133d Field Ambulance upon the completion of their relief proceeded by marching to Proven, where they were entrained. HINDENBURG LINE.—September 24, 1918, to October 1, 1918.

On September 23, 1918, orders were received that the division was to enter the line during the night of September 24th—25th and take over the front occupied by the 18th and 74th British Divisions. The medical arrangements of these two divisions were adopted with very slight modifications.

The main dressing station was opened at Driencourt by Field Hospital Company No. 105. Field Hospital Company No. 106 proceeded to establish a main dressing station at Longavesnes. Here two wooden buildings were converted into operating rooms. Marquees were erected for use as wards. This was opened on September 26th, the main dressing station at Driencourt closing the same day.

Upon relief on September 26th at noon, Field Hospital Company No. 105 proceeded by marching from Driencourt to Villers Faucon, where they prepared a main dressing station. This main dressing station was opened on September 27th at noon, the main dressing station at Longavesnes closing at the same hour, and Field Hospital Company No. 108 ordered to proceed to Villers Faucon to establish and reinforce the main dressing station at that point.

Meanwhile an advanced dressing station was established in a sugar factory at St. Emilie by Ambulance Company No. 106. The Australian Corps Engineers commenced erecting three large shell-proof Nissen huts for their use as a main dressing station when the Australians took over from the 27th Division.

The forward area was covered by Ambulance Companies Nos. 106 and 107, less a detail to run the advanced dressing station, augmented by the litter bearer section of the 133d Field Ambulance and 100 men from the 108th Infantry. Motor transport consisted of three Fords and eleven Daimlers.

The facilities at first were totally inadequate at the advanced dressing station, but on September 28th the 11th Australian Field Ambulance reported at St. Emilie and ably cooperated with Captain George E. Taylor, M. C., of the Ambulance Section, 102d Sanitary Train, setting up tents, etc. Thus, with the increased personnel, the threatened congestion was relieved. The Australians redressed the necessary stretcher cases while Captain Taylor ran the walking wounded station. The walking wounded were lorried to the corps walking wounded rail post just east of Villers Faucon.

When the main attack commenced on September 29th the motor transportation of the forward area had been increased by the addition of ten Red Cross Ford ambulances, obtained through the Divisional Red Cross Representative, Captain Bobo, in cooperation with Lieutenant Colonel Walter Bell, Division Motor Transport Officer.

Upon the arrival of Colonel McGuire, A. D. M. S., of the 3d Australian Division, who was to take over the medical arrangements at 5:00 p. m., September 29th, he turned over all his available ambulances with stretcher bearers under Colonel Jolly of the 9th Australian Field Ambulance. With this additional personnel and transportation the entire forward area was efficiently and adequately covered.

It is with extreme sorrow that the death of Lieutenant D. G. K. Garrett, R. A. M. C., of the 133d Field Ambulance, from shell wounds, is recorded, besides several killed or died from wounds in our ambulance companies.

The main dressing station at Villers Faucon was assisted by an Australian Resuscitation Team of three with Major Holmes à Court in command.

As the wounded kept coming in and it was impossible to provide shelter for all, the American Red Cross was called upon for 2,000 blankets in addition to the 1,000 furnished by the Ordnance Department, thus making it possible for the wounded to lie comfortably in the open while waiting transportation to the casualty clearing station. Hot drinks and hot water bottles were furnished those cases lying in the open, and ground sheets were also used as coverings.

Motor ambulance convoy cars evacuated the main dressing station rapidly and efficiently to Tincourt and Doingt. During the night of September 29th—30th these cars were held up at the casualty clearing stations at Tincourt from one to four hours before unloading, which caused a slight congestion at the main dressing station for a few hours.

On October 2d the 102d Sanitary Train was relieved by the 3d Australian Division Field Ambulances and marched to Courcelles, a rest area.

The American Red Cross gave each wounded soldier a hot drink of cocoa, some "smokes," either at the advanced dressing station or the main dressing station; wayside drinks, chocolate and cigarettes were provided at the car posts, besides keeping the battalion aid posts supplied with food. The Resuscitation Team asked for instruments which the American Red Cross was able to furnish, such as retractors, catgut, scissors, etc.

Following is the number of cases treated:

Marr	Danagraga	Cm a mroar		WAX	a Warne	Dogm	
WAIN	Dressing	STATION		WALKIN	G WOUND	ED POST	
	Wounded	Gassed	Sick		Wounded	Gassed	Sick
Americans	1,332	320	160	Americans	413	146	126
Australians	233	32	31	Australians	219	103	58
British	248	45	44	British	127	42	32
Prisoners of War	66			Prisoners of War	6		
		-			- ·		
Total	1,879	397	236	Total	759	291	216
	759	291	216				
	-		-				
Grand Total.	2,638	688	451				

St. Souplet-Le Selle River.—October 12, 1918, to October 20, 1918.

October 11, 1918, orders were received to take over the line at 0600 hours October 12, 1918, from the 30th American Division. Field Hospital Company No. 105 prepared the school rooms at Premont for the main dressing station. Field Hospital Company No. 106 opened an advanced dressing station at Busigny. These arrangements continued until the morning of the 18th of October, when the push through St. Souplet took place.

Ambulance Companies Nos. 106 and 107, the litter bearer section of the 133d Field Ambulance, with the motor and horse ambulances, evacuated the forward area. The transportation was augmented by a loan of ten Red Cross Ford ambulances obtained from the Red Cross.

At the beginning of the St. Souplet battle, the main dressing station at Premont was closed; the advanced dressing station was converted into a main dressing station and the 133d Field Ambulance opened an advanced dressing station at Escaufourt with the main car post at St. Souplet, which was later pushed across the river and railroad tracks to l'Arbre de Ouise and up to North Chimney Farm and La Roue Farm, evacuating to Escaufourt, where the stretcher cases were transferred, after being redressed, to the heavy ambulances for their trip to the main dressing station at Busigny.

The evacuation of the forward area was promptly done and completed by darkness each night, as it was possible owing to the nature of the terrain to push Ford ambulances up close to the rear of the advancing troops.

The evacuation from the main dressing station to the casualty clearing stations was very difficult, due to the distance and condition of the roads. The round-trip took eight to nine hours. At first the convoy consisted of forty cars from the 37th Motor Ambulance Convoy, but when the 30th American Division returned to the line on October 15th–16th twenty cars were transferred to them for evacuating their wounded. This was absolutely inadequate, and in five hours 160 stretcher cases were waiting for evacuation. Upon demanding additional cars from corps and army, twenty-two cars were turned over, making forty-two in all, a number just adequate for the number of casualties. The reason of the delay was the rapid advance of the Allied troops and the non-advance of railhead and hospital accommodations.

The casualties handled by the 27th Division Sanitary Units were as follows:

Wounded (stretcher cases):	27th Division	132
	30th Division	31
	British and Australians	91
	Corps Troops	1
	Total	255

—but the epidemic of influenza was beginning and 207 cases were evacuated, among which were 186 from the division.

The total number of walking wounded was 3,433 cases from American, British and Australian divisions and prisoners of war. The available transportation at detraining point consisted at first of four charabanes with a seating capacity of twenty-five men each. Two charabanes broke down on the second day and were replaced by two lorries. Owing to the lack of transportation, drivers and cars worked hard to keep the congestion down to the minimum, with successful results.

The walking wounded were loaded in either charabancs or lorries at the advanced dressing station and unloaded at Montbrehain, where Captain George McK. Hall, M. C., and a detail from Field Hospital Company No. 106 and the Division Theatrical Troupe operated an entraining post. Here the American Red Cross served hot cocoa and cigarettes to the wounded while waiting entraining on the narrow gauge railway.

Captain Matthew F. Carney, D. C., Division Dental Surgeon, with a detail from Field Hospital Company No. 105 and the Division Theatrical Troupe, detrained them at Roisel and marched them across a badly torn-up field to waiting charabancs for evacuation to the casualty clearing stations at Roisel, about one and one-half kilometers distant.

The following letter from Major General O'Ryan gives an idea of the risks and hardships the personnel of the sanitary train labored under:

HEADQUARTERS 27th DIVISION, U. S. A. AMERICAN EXPEDITIONARY FORCES, FRANCE

October 22, 1918.

From: Commanding General.

To: Division Surgeon, 27th Division, American Expeditionary Forces, France.

Subject: Commendation.

- 1. Please convey to the officers and enlisted men of the sanitary units of the division my commendation and admiration for the endurance, skill and personal courage manifested by them at all times throughout the long period of fighting from the breaking of the Hindenburg Line to the driving of the enemy beyond the Canal de la Sambre.
- 2. The fierce nature of the fighting in the Hindenburg battle called for the greatest demands upon the endurance of medical officers and the sanitary personnel assisting them. That these extraordinary conditions were met so successfully is substantial tribute to the fortitude and efficiency of the sanitary units and medical personnel. It is a pleasure to write this commendation of their service.

(Signed)

JOHN F. O'RYAN,

Major General.

During these battles and engagements the American Red Cross served from their rolling kitchens over 48,000 cups of hot cocoa. Besides looking after the division, the Red Cross was called upon by the local inhabitants, particularly at Busigny, where food, medicines, etc., were freely supplied.

The personnel of the Red Cross was entirely obtained from men unfit for combatant troops and recommended by regimental surgeons for reclassification.

WALTER C. MONTGOMERY,

Lieutenant Colonel, Medical Corps, U. S. A., Division Surgeon, 27th American Division.

December 20, 1918.

DIVISION GAS TRAINING

Much attention had been paid to gas training while this division was at Camp Wadsworth. Every man in the division had received some instruction there, and a number of officers and non-commissioned officers had been trained as gas personnel. However, this training was resumed on arrival in France, and continued whenever the division was in a training area. During July and August a complete course of gas training was carried on throughout the entire division. This consisted of a series of lectures, drills and competitions, outlined in division orders. In addition to this every man was required to wear his respirator sixteen hours a month while in the training area, including a period of four hours of consecutive wearing.

In order to have gas personnel properly trained vacancies were assigned for officers and non-commissioned officers at British and American corps gas schools. In June, July and August these vacancies were in British schools, and during the succeeding months in American gas schools. The following table shows the number of officers and men trained at these schools:

	Officers	Non-commissioned Officers
June	. 84	84
July	. 26	85
August		120
September		14
October		60
November		60
Total	138	423

The sixty non-commissioned officers trained in October attended a four-day gas school, established and controlled by the Division Gas Officer.

The number of trained gas personnel, as given above, is several times in excess of the number required by General Headquarters orders. The extra personnel were required by

promotions, transfers and casualties of gas officers and gas non-commissioned officers. It is believed that these extra officers and non-commissioned officers were of material assistance in the gas training and in keeping down the number of casualties.

Investigation has shown that the most of the replacements had had a good foundation in gas defense prior to joining the division.

GAS DEFENSE SUPPLIES

At the port of disembarkation all personnel were provided with British respirators and briefly instructed in their use. From this time on the respirators were obtained for the units through the Division Ordnance Officer. He requisitioned the respirators for the division and kept the reserve at the division ordnance dump in charge of several gas non-commissioned officers. British orders required that 1,000 respirators be held in reserve at the division dump, and that each battalion have a reserve of seventeen respirators and nine canisters. Division orders later required that each platoon carry an extra reserve of two respirators. The Division Gas Officer tried to maintain a slightly larger reserve than required, but this was generally impracticable due to the shortage of transportation. On several occasions the reserve masks were unexpectedly exhausted, but this was always remedied before the troops went into the line. The regimental and separate unit gas officers cooperated with their Supply Officers so that units were always properly equipped with respirators.

Anti-gas cloth was carried by the engineers, and gas-proofing material was requisitioned from them, or a detail of engineers did the work. This gas-proofing of shelters and dugouts was extensively carried on by all units in the line.

Gas alarms were in some cases carried by the companies, although they were generally improvised locally from shell casings.

INTELLIGENCE

Under the supervision of the Division Gas Officer information was obtained from German prisoners showing the effect of our gas, used by the supporting artillery, on the enemy.

A great many enemy ammunition dumps were examined, and frequently new shells and gas defense devices were discovered. On all such occasions a complete report was forwarded to the Corps Gas Officer, who notified the British Technical Service in order that proper records might be made.

PERSONNEL

Captain H. W. Terry was Division Gas Officer from June 12th to October 27th, on which date he was evacuated to a base hospital; and since then Lieutenant Hooker has been Acting Division Gas Officer. Much credit is due to Captain Terry for the high standard of gas training and discipline maintained in the division. A number of junior officers were assigned to the division from time to time to assist in the gas instruction. These officers were sent to separate units to assist the permanent gas officers. Some of these officers were assigned to the division and are now the gas officers of their organizations. However, most of them have since been transferred out of the division.

Regimental and separate unit gas officers and non-commissioned officers deserve much credit for the high standards they maintained within their units. It was not only necessary for them to overcome the former tendency of the soldiers to ridicule gas, but it was necessary that they require the men to undergo what was considered an unreasonable hardship—wearing the mask for prolonged periods in training areas. Through all of this they persisted, and they are now properly respected for their efforts and results. More than seventy-five per cent. of the division gas personnel were casualties.

OFFICE OPERATION

Briefly, the Division Gas Officer supervised the gas training of the division and the distribution of the gas defense material. At first he was considerably handicapped by lack of transportation; this, however, was later remedied. He kept in touch with the units of the division, assisting, instructing, and advising when necessary. Several of his men were stationed at the ordnance dump to look after supplies; several others visited the different units, making

temporary mask repairs. When the division was in the line, his men were located at dressing and clearing stations to get data from and relative to gas casualties. In addition to this he got full reports on gas shelling from the gas personnel of the units and wired this information daily to corps and army gas officers. At the end of each activity in the line a complete summary of it relative to gas was prepared.

GAS CASUALTIES

A complete report on all gas casualties which the division has had was prepared and forwarded to the Commanding General on November 7th. A copy of this report is attached.

ENEMY'S DEFENSIVE USE OF GAS

Two different reports were prepared by Captain Terry on the "Enemy's Defensive Use of Gas." These were prepared on October 5th and October 27th, and were forwarded to the Chief of Chemical Warfare Service. Copies of these reports are herewith attached.

A. H. HOOKER, Jr., First Lieutenant, C. W. S.

27th DIVISION OFFICE OF THE GAS OFFICER AMERICAN EXPEDITIONARY FORCES

November 7, 1918.

From: Division Gas Officer.
To: Commanding General.

Subject: Gas Casualties.

The records of the Division Gas Office show that the following gas casualties have occurred since the division first went into the line in July:

FRANCE

ORGANIZATION	Belgium July 25th-Sept. 3d	Offensive of Sept. 24th–Oct. 3d	Offensive of Oct. 10th–20th	TOTAL		
105th Infantry	66	163	78	307		
106th Infantry	148	119	83	350		
105th Machine Gun Battalion		16	7	56		
107th Infantry	30	52	106	188		
108th Infantry	6	70	199	275		
106th Machine Gun Battalion	2	3	10	15		
102d Engineers	13	63	47	123		
102d Field Signal Battalion	4	2	29	35		
Total	302	488	559	1,349		

The following units have had one casualty each: Military Police, 105th Field Hospital, 106th Ambulance, 107th Ambulance, and the 106th T. M. B. The 102d Sanitary Train and the 104th Machine Gun Battalion each had two casualties.

Total number of casualties, 1,358.

GAS CASUALTIES IN BELGIUM

On August 5th, 12 men from Company C, 102d Engineers, passed through a trench, noticed a foul odor and later reported as gas casualties.

On August 14th, 21 men of the 107th Infantry walked into gas and were evacuated. Seventeen of these men returned to their units after a short rest.

One man from Company M, 107th Infantry, on August 17th, was "gassed before awakened by alarm."

On August 16th, 2 men from Company K, 108th Infantry, neglected to adjust their masks before they were gassed. British soldiers told them it was H. E. fumes.

On August 28th, 43 men from Company A, 106th Infantry, were gassed. At least 18 cases were due to premature removal of the mask, most of the other cases were body burns apparently due to the inability of the men to leave the gassed area.

On August 28th, 24 men from Company L, 106th Infantry, were mustard gas casualties, due to premature removal of their masks.

On August 28th, 9 men from the 105th Infantry and 7 men from the 107th Infantry were casualties due to their failure to adjust their masks before the gas had taken effect.

On August 31st, 7 men from the 105th and 6 men from the 107th Infantry were gassed drinking water from shell holes.

On September 1st and 2d the 106th Infantry had 41 gas casualties and the 105th Infantry had 48. Most of these were due to Green Cross gas; men failed to adjust respirators at the first indication of gas.

On September 3d, 25 men of the 105th Machine Gun Battalion were gassed. After passing through an area which had been heavily shelled with mustard gas they slept in a closed space. The next day all were gas casualties, probably due to their contaminated clothing.

The other casualties during this period were isolated cases, the causes of which are similar to those above, are unknown, or were unavoidable.

The gas casualties were, for the most part, slight, no fatalities were reported, and frequently men returned to their units soon after being evacuated.

GAS CASUALTIES IN FIRST OFFENSIVE, SEPTEMBER 24TH TO OCTOBER 3D

On September 25th, 24 men from Company E, 105th Infantry, were gas casualties. The Company Commander reported that they were taken by surprise, the shells lighting in or near the trenches. Before the men could adjust their masks, 24 were gassed. All alarms were given and masks were immediately adjusted. Reports from all sources agree that these casualties were unavoidable.

On September 25th, 3 men from the 1st Battalion, 105th Infantry, were reported gassed and this explanation was offered: "These men were too busy dodging shells to adjust masks." On that same day 3 men from Company B "failed to adjust mask in time and were casualties." Again, on that day, 2 men of Company G were mustard gas casualties "due to failure to recognize gas." Every line company of the 105th Infantry suffered some gas casualties in the first few days of this period. Company H had 31 casualties, Company G 15, Headquarters Company 15, Sanitary Detachment 9, Machine Gun Company 9, and so on down to Company D with 1 casualty. Except as given above, it has not been possible to get an explanation of these casualties.

Of the 119 casualties in the 106th Infantry, Company M had 32, Company K 16, Company H 11, Company B 9, and so on down to 1 casualty for Company G. The report on these casualties states that a large number of them occurred "during the night of September 26th-27th, when they were shelled on the road during an advance of about 600 yards from the reserve to the advance positions. The casualties developed quickly after putting on and taking off the mask a number of times."

No explanation is available as to how the 52 men in the 107th Infantry were gassed. However, 8 of these, from Companies I and M, were eye cases due to wearing only half of mask, the mouthpiece and nose clip only being adjusted.

No explanation is available as to the causes of the 16 casualties in the 105th Machine Gun Battalion or of the 70 casualties in the 108th Infantry.

Of the 63 casualties in the 102d Engineers, 47 were in Company C. All of these casualties were reported as slight and in many cases appear to have been unavoidable. Most of the casualties occurred on September 29th. There were no casualties in Companies A or B. The 1st Battalion gas non-commissioned officer attributes the cause of the casualties to "the failure of the men to adjust their respirators in time." This generally means that men do not wear their respirators until the effects of the gas are felt. This is particularly true with mustard gas, due to its delayed effects.

GAS CASUALTIES IN SECOND OFFENSIVE, OCTOBER 10th TO 21st

A man from Company H, 108th Infantry, passed through advanced dressing station on October 15th. He stated that on the previous night there had been so many gas alarms that they put on and took off their masks many times during the night. He was not sure on which of these occasions he was gassed. Sixty-nine casualties from this company passed through the advanced dressing station as gas casualties on October 14th and 15th.

A number of men who were eye casualties frankly admitted that they had only worn half of their respirators.

Several of the Headquarters Detachment, 108th Infantry, who were mustard gas casualties stated that they had worn their masks for ten or fifteen minutes before removing them.

Members of the 102d Field Signal Battalion stated that they were casualties due to sleeping in a cellar where there was some gas.

Lieutenant Ivan Fenty, Company E, 106th Infantry, gassed October 17th, stated that he was unable to advance wearing respirator.

Forty-seven of the 78 casualties in the 105th Infantry occurred on October 18th. Of the total casualties the Headquarters had 16; Company L, 13; Company M, 11; and the rest were evenly divided.

In the 106th Infantry 72 of the 84 casualties occurred on October 18th. Of the total casualties, Headquarters had 17, Machine Gun Company, 10, and Company F, 9. The rest were fairly evenly divided.

The 107th Infantry had 84 gas casualties; 13 on October 12th, 43 on October 15th and 28 on October 18th. The following table shows the distribution of the majority of these casualties: Headquarters, 24; Company D, 16; Company B, 13. The rest were evenly divided among the other companies.

A report from the 108th Infantry, dated November 5th, gives their gas casualties for this period as 238. The records of this office show only 199 of these. This report states that all of these casualties were slight but unavoidable due to prolonged exposure in a dangerous concentration. The distribution of the majority of the 199 casualties recorded in this office is as follows:

Companies	October	14	15	16	17	18
Headquarters		2	5	12	3	1
B			8			1
G		3	33	1		1
H		31	38	1	1	
K		12	5		1	2
M		8	1		2	

The other companies had 6 casualties or less each; four companies had no casualties. The 1st Battalion had a total of 13 gas casualties.

Dr. Coogan, Medical Officer, 2d Battalion, 107th Infantry, questioned some of the gas casualties from the 1st Battalion Headquarters who passed through his aid post. Several of these men stated that Lieutenant Lumley, the Battalion Adjutant, had directed them while passing through mustard gas to wear the mouthpiece and nose clip only. This officer and the men with him were evacuated as eye cases.

During the early morning of October 17th the 3d Battalion, 107th Infantry, marched from Busigny to St. Souplet and wore their respirators for two hours. This was night marching under very adverse conditions. When the alarm was first given, the officer commanding stopped until all respirators were adjusted. Someone suggested wearing part of the mask, but he required that the whole respirator be worn. There were, of course, no casualties. This example of excellent gas discipline was reported by one of the Military Police.

A detachment of the Signal Battalion, on September 28th, under Captain Ireland, passed into a gassed area while riding in a truck. The gas alarm was given and all masks were adjusted. When the lorry stopped the men got out to repair some lines. The Captain ordered, "Take those damned things off." The gas non-commissioned officer who reported this states that there was gas there and casualties resulted. He further states that the necessary work could have been done while wearing the respirator.

Of the 47 gas casualties in the 102d Engineers the regimental gas non-commissioned officer states that practically all of these occurred in bridging Le Selle River. The valley was flooded with gas all during their work. Many were gassed removing debris saturated with mustard gas. All of the casualties were slight and in most cases unavoidable due to the urgency of the work.

Instances are reported in the 102d Engineers where gas personnel have recommended that masks be worn and company commanders have disregarded this advice, and casualties resulted.

The regimental gas non-commissioned officer of the 105th Infantry states that he has warned certain men to wear their masks; others, not to sleep in dugouts with gas in them, and has frequently found men wearing their respirators improperly. They did not heed his warning and in all cases there were casualties.

It was reported that two men of the 107th Infantry Headquarters died from gas poisoning. One other fatality was reported near Ronssoy on September 29th from gas.

The Military Police gas non-commissioned officer states that the gas discipline in his organization is excellent, and that he gets every assistance from his officers. This organization has had one unavoidable gas casualty.

The 106th Machine Gun Battalion has devoted much attention to gas training. Special classes have been held for officers and non-commissioned officers and the gas personnel are given every assistance by their officers. Their total of avoidable gas casualties shows the result.

CONCLUSION

Of all the casualties none have been reported as due to failure of the respirator to afford protection. Gas casualties from premature removal of the mask have seldom worn the respirator more than two hours; no one has been reported as gassed due to the necessity of removing the respirator after wearing it to the full extent of his endurance. In most cases the responsibility rests with the individual, who "took a chance." In some instances officers were directly responsible.

The gas training of the division has been good, and the number of casualties is not unusual. It is estimated that 96,700 gas shells have been used against this division; this is 1 gas casualty to 70 gas shells.

In every instance where the required gas personnel has been maintained and given proper support, gas casualties have been almost nil.

It has been reported that men were evacuated as gas casualties suffering from colds, exposure, exhaustion, influenza and from "cold feet." Many medical officers have stated that they have great difficulty in diagnosing a gas casualty and always evacuate a man on his word. It is therefore suggested that medical officers be given special instructions in diagnosing gas casualties, and that a separate building or shelter at the advanced dressing station be assigned for gas casualties. Those who are not true gas casualties can be rested here, and returned to their unit, and the others evacuated.

Undoubtedly the foregoing offers occasion for the application of considerable disciplinary action. Specific cases for such action can only be taken after more detailed investigation.

A. H. HOOKER, Jr., Second Lieutenant, C. W. S.

HEADQUARTERS, 27th DIVISION OFFICE OF THE GAS OFFICER AMERICAN EXPEDITIONARY FORCES

October 27, 1918.

From: Division Gas Officer.

To: Chief of Chemical Warfare Service, American Expeditionary Forces.

Subject: Enemy's Defensive Use of Gas.

- 1. Attached hereto is report of gas shelling to which this division was subjected during the month of October.
- 2. During the entire period that the division was in the line, gas was used by the enemy in all bombardments. All towns and roads were regularly shelled with gas, H. E. and shrapnel. All kinds of gas were used, but, as usual, yellow cross predominated. The weather during

this period was generally cool and on this account the effect of the yellow cross was considerably lessened. The greatest number of casualties occurred in two companies of the 108th Infantry, these companies being located on a sunken road in a concealed position which it was impracticable to evacuate.

- 3. Brigade and Regimental Headquarters were located in the towns of Escaufourt and St. Souplet. These posts were immediately gas proofed, but in spite of the fact a large number of casualties occurred.
- 4. An enemy dump of gas shells was captured and report made to the Corps Gas Officer on the captured material. Separate report to the Chief of Chemical Warfare Service will be made if desired.

HARRY W. TERRY,

Captain, Division Gas Officer,

27th Division, A. E. F.

MAP REFERENCE S. 57 B.—S. E.

GAS SHELLING—OCTOBER 11 TO OCTOBER 19, 1918

Data	Time a	Tanation	Wind	Number	Caliban	Casual-	
Date Time		Location	Kind	Number	Caliber	ties	
	+						
11	22:00	V.29.a	Blue	100	5.9	Nil	
11	22:00	W.19.d	Blue	100	4.2	1/11	
12	16:00/18:00	V.19.a.b	Blue	100	5.9	F	
12	16:00/18:00	W.7.c	Blue	50	5.9	10	
12	16:30/17:00	Q.26	Green	100	4.2	18	
12	22:00/24:00	V.4	Blue	100	5.9		
13	10:00/10:15	Q.33	Mustard	50	4.2		
13	16:00	V.24.c.d	Mustard		77 mm.	=	
10	10.00/17.00	0.22	Mustard	100	77 mm.	8	
13	16:00/17:00	Q.33	Blue		4.2		
13	22:00/24:00	Q.26-27	Green	100	4.2		
14	4:45/ 5:00	Q.34.a	Blue	30	4.2		
14	3:30/ 5:00	Q.31	Yellow	400	77 mm.		
4.4	1.90 / 1.00	(Blue	200	4.2		
14	1:30/ 4:00	W.8.central	Yellow		77 mm.		
14	2:00	Le Pond Pt	Blue	200	4.2		
14	7:00/ 9:00	V.1.d	Blue		5.9		
14	11:00/12:00	W.7	Blue		5.9		
14	13:00	Q.31	Yellow	50	77 mm.		
14	22:00	R.a.W.3.a.4.7	Yellow	50	77 mm.	77	
4 =	4.77 . 7 . 7 . 7	f P.36.c.8.1	37 11	20	77		
15	All night	B.6.b.2.8	Yellow	20	77 mm.	1	
15	3:30	V.6.c.8.5	Yellow	10	77 mm.		
15	8:00/ 8:20	Q.31	Yellow		77 mm.		
15	16:10	Q.31	Yellow	400	77 mm.		
15	16:10	R.RQ.22-34			4.2		
15	23:00	W.7.and 9		400	4.2		
15	23:00	W.13.b	Blue, Yellow	400	4.2	-	
15	All night	Edges of woods, Le	1	1 1	,		
		Ermitage Proyart V.					
		19		700	4.2	150	
16	3:30	Q.31.c.6.1	Blue, Green and				
			Yellow		4.2		
16	5:00	St. Souplet Valley			77 mm.	47	
16	5:30	Q.34-21	Yellow		77 mm.		

		* · · · · · · · · · · · · · · · · · · ·				Casual-
Date	Time	Location	Kind	Number	Caliber	ties
17	22:00/03:00	Escaufort		100	4.2	
17	22:00/03:00	St. Souplet	Blue, Yellow	150	4.2	
17	22:00/01:00	Road V.11.c.9.8. to V.				
		11.b.10.8	Mustard	75	77 mm.	47
17	22:00/01:00	Road V.11.c.2.7. to V.		*		
		12.b.5.8	Mustard	75	77 mm.	
17	10:00/14:00	St. Souplet	Mustard	150	77 mm.	
18	22:00/03:00	St. Souplet and R.R.			,	
		Q.18.a.3.0. to Q.34.c.				
		3.0., also Q.28, Q.29,		-		
		Q.34 and Q.36. Blue,	Green,			
		*	Yellow	3,000		
18	20:00/03:00	Arbre Guernon	Blue Mustard	200	4.2	200
	,				77 mm.	
19	20:00/04:00	R.31.d.central to R.20.				
	,	a.6.0. to R.14.a.3.0	Mustard, Blue			
			and Green	100	4.2	
19	16:00/17:30	Line R.8.d.8.3, R.15.c.	,			10
	,	2.5, R.21.c.1.2. to			Ì	18
		R.27.c.8.4		150	77 mm.	
19	17:00/19:00	Road R.14.a.8.8. to R.	for any or an arrangement of the second			
		20.d.1.5	The same of the sa	50	77 mm.	
		Totals		10,100		565

HEADQUARTERS, 27TH DIVISION

OFFICE OF THE GAS OFFICER

AMERICAN EXPEDITIONARY FORCES

October 5, 1918.

From:

Division Gas Officer, 27th Division

To:

Chief of Chemical Warfare Service, A. E. F.

(Through Military Channels)

Subject: Enemy's Defensive Use of Gas

EXTRACT

- 2. On the night of September 26th-27th the brigade in the line was subjected to a heavy artillery barrage. The aim seems to have been not so much to neutralize strong points as to hinder the expected attack by using gas together with H. E. and shrapnel over the entire area. The gases employed were blue cross, green cross and mustard, mustard gas being used in shells containing H. E. The number of gas shells fired during this bombardment was in the neighborhood of 10,000 and caused 235 casualties.
- Completed reports on the casualties are not yet available. Most of the cases were slight and only a small number were gassed by mustard gas. A considerable number of casualties were caused by gas shells bursting within a few feet of the men in the trenches and in a few cases men were wounded by flying shell fragments. Many cases showed no symptoms

except nausea and vomiting, caused by slight concentration of green cross. The fear of delayed after effects caused some men to report themselves gassed when medical treatment would not have been necessary.

- 4. During the night of the 26th-27th the enemy lines were shelled with mustard gas by the Allied batteries; accompanying map shows the areas saturated with this gas. Statements of German prisoners are conflicting as to the effect of this shelling. A German artillery lieutenant examined at Brigade Headquarters stated that the effect of the gas was negligible. Assuming his statement to be true, it gives no indication of the real effect of the attack, as his position was in an observation post, well in advance of the areas shelled. A German machine gunner stated that at his position the concentration was so great that the gas came through the masks and he himself came over to the Allied lines to escape its effects. We have no record of any enemy gas cases attended to in our aid stations. Nevertheless, from noon September 27th the enemy artillery fire lessened considerably, and for a period of twelve hours starting at 4 P. M. September 27th there was practically no enemy artillery fire.
- 5. On the night of September 27th–28th the brigade in the line was relieved by the brigade in support. On the morning of September 29th the attack to obtain the green line objective was commenced by the brigade in the line with certain units of the brigade in support acting as a second wave. During the day of the 28th the enemy resumed artillery fire, using gas, H. E., and shrapnel. This shelling continued during the night of the 28th–29th, day of the 29th and night of the 29th–30th, during which time in the neighborhood of 30,000 gas shells were used. The gases used were blue cross, green cross and mustard gas; it is also reported mercaptans were used. Casualties caused during this entire period numbered 255. The effect of the gas was to slow up the advance of our brigade, the men advancing with gas masks adjusted. Some of the shelling was directed upon roads and villages in the rear, which resulted in some instances in slight confusion of the units. The village of Basse Boulogne was heavily shelled with mustard gas, but as Military Police were posted outside of this village and warned all troops approaching, no casualties were caused. The weather during this entire period was rainy and windy, which assisted very materially in preventing the success of the enemy's use of gas.
- 7. Though a portion of the Hindenburg Line between A21 and A27 was investigated for gas appliances, no protected dugouts, no alarms or other devices were discovered. Considering the rapidity of attack and the advance made by the division troops, the number of gas casualties was very low, and it would appear from the information now available that the gas discipline was excellent.

HARRY W. TERRY,
Captain Division Gas Officer,
27th Division, A. E. F.

REPORT OF OPERATIONS

DIVISION VETERINARIAN

The first animal casualties in the division were when the headquarters were at Beauval. During an air raid, which took place at 2:40 A. M. on the morning of June 30th, four bombs were dropped on the corral of the 1st Battalion of the 105th Infantry. Two horses were killed instantly. The Division Veterinarian was notified and examined the rest of the animals, and ordered the destruction of 11 horses on account of the seriousness of their injuries. Nine other horses were evacuated to the hospital and 1 horse slightly injured was kept on the picket line and treated by the Unit Veterinarian.

On leaving the rest area at St. Nazaire, the Mobile Veterinary Section attached to the 27th Division was ordered to the American sector on detached service. The section rejoined the division at Oudezeele on August 7, 1918. In the meantime evacuations were made to

British veterinary stations. Upon the recommendation of the Division Veterinarian, the section was attached to Mobile Veterinary Section No. 6, British Expeditionary Forces, for training and equipment. The section functioned as a unit from August 19, 1918, and to date 368 animals have been evacuated to the section, of which 69 were cured and returned to the various units of the division, 9 were destroyed by order of the Commanding Officer and the remaining 290 evacuated to the various veterinary evacuating stations. In addition to divisional units, the Veterinary Corps of the 27th Division rendered veterinary service to Australian and British units as well as to horses belonging to civilians. In all actions the veterinarians were with the transport of the units to which they were assigned and one veterinary officer was commended by the Commanding General for his courage.

During the period August 24 to September 3, 1918, the section was located on the Abeele road near Abeele, and while in this area 35 animals were passed through the section. Statistics in the office of the Division Veterinarian show that during this engagement 16 animals were killed by shell fire, 1 killed by gas and 32 wounded by shell and shrapnel fire.

During the period September 24 to October 1, 1918, the section was located at Longavesnes and 33 animals passed through the section while in this town. Statistics show that 11 animals were killed by shell fire and 12 animals wounded by shell and shrapnel.

During the period October 12th to October 20th the section was first located at Joncourt and while there 51 animals were sent to the section for treatment or evacuation. While in Joncourt the section established an advanced collecting station at Brancourt. As our troops advanced, it became necessary to relay the animals back to railhead at Roisel, where the 2d Corps Mobile Veterinary Hospital was located. In accordance with orders of the Acting Corps Veterinarian, an advanced collecting post, composed of three men from Mobile Veterinary Section 105 and three men from Mobile Veterinary Section 108, 30th Division, was established at Becquigny. Mobile Veterinary Section 108 was ordered to Brancourt to act as relay and Mobile Veterinary Section 105 was directed to proceed to Bellicourt to act as a staging post for evacuations to the Corps Hospital at Roisel. While acting in the capacity of staging post, Mobile Veterinary Section 105 received and evacuated 40 animals. Statistics of animal casualties during this advance show 57 animals killed by shell fire and 46 animals wounded by shell or shrapnel.

During the period June 1 to October 20, 1918, the records of the Division Veterinarian show that 1,106 animals were treated for disease or injury, 14 animals died of disease and 39 animals were destroyed, 24 as the result of injuries, 10 as the result of disease, 4 as the result of fracture and 1 as the result of gas poisoning. The foregoing figures do not apply to divisional units only, but inlude all the various outside organizations that were rendered veterinary attendance by officers of the Veterinary Corps, 27th Division.

R. P. KUNNECKE,

Captain V. C.

Division Veterinarian.