

## HEADQUARTERS 120TH ENGINEER COMBAT BATTALION

APO # 45, U S Army  
9 December 1944

Engineer Operations Instructions)

Number 1)

Map: France, 1/50,000

1. a. VI Corps attacks north, breaching Siegfried line in sector, protects Army right flank along Rhine River.

b. 45th Division attacks 100700A December, seizes initial objectives, prepares to continue advance (see overlay).

c. 48th Engr C Bn (VI Corps) in direct support of 120th Engr C Bn.

2. 120th Engr Bn a. Bridges Le Falkenstein stream at Gundershoffen and, if possible, near Reichshoffen.

b. Supports attack of Division to initial objective by performance of engineer tasks.

c. Assists in breaching of the MIGNOT Line.

3. Detailed plan of operations:

a. Co A, in direct support of the 157th Inf Regt.

- (1) Open road NIEDERBRONN-LES-BAINS-JAEGERTHAL.
- (2) Provide stream crossing at JAEGERTHAL.
- (3) Open road REICHSHOFFEN-JAEGERTHAL.
- (4) Open road JAEGERTHAL-WEHILLER-LANGENSOULTZBACH-MATTSTALL-LEMBACH.
- (5) Assist 157th Infantry in reduction of forts vic. LEMBACH. Be prepared to render fortifications usable immediately after capture.

b. Co C, in direct support 180th Inf Regt.

- (1) Assist Infantry to cross stream at GUNDERSHOFFEN and REICHSHOFFEN.
- (2) Construct Class 40 crossing at GUNDERSHOFFEN. If Bailey bridge is necessary, prepare site, clear approaches, etc. Actual construction of Bailey to be done by 48th Engrs.
- (3) Open road GUNDERSHOFFEN-REICHSHOFFEN-FROESCHWILLER-BOERTH-LEMBACH.
- (4) Open road FROESCHWILLER-LANGENSOULTZBACH.
- (5) Open road BOERTH-LANGENSOULTZBACH.
- (6) Assist Infantry in reduction of fortified positions. Be prepared to render fortifications usable immediately after capture.

c. Co B in direct support of 179th Infantry:

- (1) Be prepared to assist Co's A and C on battalion order.
- (2) Prepare obstacles along left flank. Plans for each obstacle to be approved by CO 179th Inf prior to construction. All obstacles will be so sited as to be covered with fire. When demolitions are employed, an Engineer guard will be left at the site. Authority to execute demolition will be as prescribed by CO 179th Infantry.

Engr Oper Inst #1  
Hq, 120th Engrs (cont'd)

- (3) Complete clearance and maintenance of roads in division rear areas.

d. Tank Dozers:

- (1) HS Tank (Liverty) to Co C.  
(2) 191 Tank (Lester) report to Co A, available to Co B on call.

e. Rcn Section:

- (1) Maintain continuous patrol of roads in div sector. Report condition of all roads daily, and places where work is needed.  
(2) Carefully check all roads and trails leading to left flank, report all possible avenues of approach into our positions.  
(3) Location, stocks, owner of saw mills.

4. Allocation of Supplies:

- a. The supply of explosives is extremely critical. Therefore, all captured explosives will be transported to the battalion dump for storage. The use of mines and other explosive substances will be exploited to a maximum. The use of explosives will be avoided as much as possible. Shaped charges, other than those now in the battalion dump, are not available.

b. Bridge materials:

- (1) Bailey: 130 ft D/D now on wheels at 48th Engr Bn CP. Supply limited. This bridge will be used only on Div MSR unless otherwise ordered by CG 45 Div. 1st priority Co C, at GUNDERSHOFFEN.  
(2) Treadway, M2: 120 ft on Brock's available at 48th Engr CP. Where this bridge is used, permanent bridge will be commenced at once, and treadway will be recovered as soon as possible.  
(3) Culvert, 36" x 20". One section now on hand in each company. 4 sections to be made up in dump and available on call.  
(4) Culvert, 24" x 20". One section to be delivered to each company not later than 100700. None in stock at dump. More available on 48 hour notice to S-4.  
(5) Rcn boats, rubber, 8 man. 6 on order to be given to Co C not later than 091800.  
(6) Footbridge, M1938. Approx 200 lin ft on order. To be available to Co C by 091800.  
(7) Timber. Each company will keep a maximum load of lumber on hand. Immediately upon consumption of bridge lumber, requisition will be made to S-4. All timber is hauled from EPILAL. Location of lumber stocks and sawmills will be reported at once to S-2 or S-4.

5. M.P. Issues:

- a. The maps listed below are not available at this headquarters for all divisional and attached units. Where issue is made of special overprinted maps and diagrams of forts, care must be taken to preserve these, because there is only a limited quantity available.

b. Maps for distribution

1:25000

FRANCE: 37-13 1 & 2; 3 & 4; 5 & 6; 7 & 8.  
 38-13 1 & 2; 3 & 4; 5 & 6; 7 & 8.  
 38-14 1 & 2; 3 & 4; 5 & 6; 7 & 8.  
 39-13 1 & 2; 5 & 6.

GERMANY: Co's 6811, 6812, 6813, 6814.

DEFENSE OVERSIGHT

1:25000

FRANCE: 38-13 1 & 2; 3 & 4; 5 & 6; 7 & 8.  
 39-13 1 & 2; 5 & 6.

GERMANY: Co's: 6811, 6812

1:50000

FRANCE: 38-13; 38-14; 39-13

1:100000

FRANCE: V2 Vec2 W2

ROAD MAP

#87

PHOTO MOSAICS MAGNET FORTS

Co's: 36, 37, 40, 41, 47, 48

DEFENSE FORT PRINTS

Fields of Fire maps for following forts:

- E. B. CH.
- F. B. CH.
- G. B. CH.
- H. B. CH.

erial photo coverage for Engineer companies in their zone of action

By order of Lt Col MONNIER:

JOSLYN W. LOPE, JR.  
 Major, CE  
 Executive Officer

OFFICIAL:

BENJAMIN I. WILLIAMS  
 Major, CE  
 S-3

DISTRIBUTION:

- |                      |              |                 |                |
|----------------------|--------------|-----------------|----------------|
| Co A, 120th Engrs    | G-3 45th Div | S-1 (10 copies) | Engr VI Corps  |
| Co B, 120th Engrs    | G-4 45th Div | S-2             | CG 45th Div    |
| Co C, 120th Engrs    | 157th Inf    | S-3             | Ass't Div Cmdr |
| MAS Co 120th Engrs   | 179th Inf    | S-4             |                |
| Res Sect 120th Engrs | 180th Inf    | ADM             |                |
| G-2, 45th Div        | Div arty     | 45th Engrs      |                |

HEADQUARTERS 120TH ENGINEER COMBAT BATTALION

AFG # 45, U S Army  
14 December 1944

ENGINEER INTELLIGENCE BULLETIN)

NUMBER

4)

I. Use of the new pressure release device E244 was discovered in the 180th Infantry sector on 13 December. The following description of the device is extracted from OCE, ETOUSA, document no. 15-46C.

PRESSURE RELEASE DEVICE E.2.44  
GERMAN DESIGNATION: "ENTLASTUNGZUNDE 44"

1. General.

The Pressure Release Device E.2.44 has been found in considerable quantities in France in captured German engineer depots. It supersedes the Improvised Wooden Tellermine Anti-lifting Assembly previously described, and is primarily intended for the booby-trapping of Tellermines. Any attempt at removing the Tellermine permits a plunger to rise, which in turn sets off an 8-ounce charge of T.N.T./P.E.T.N. which is contained in the device.

The device appears excellently suited for booby-trapping and is believed to have been already encountered in this function. A weight of 10 lbs. is sufficient to hold the device in the armed position and a built-in clock work time delay protects the person setting the device against premature detonation.

2. Description.

The device is housed in the steel body (1) which is crimped to the base (2). The operating mechanism (3) takes up one half of the container and two quarter pound blocks of T.N.T./P.E.T.N. (4), fill the remaining space. The operating mechanism consists of three main parts:

- a. The Pressure Release Assembly includes the plunger (5), the top of which protrudes through the top of the body, the plunger spring (6) and the striker retaining arm (7).
- b. The Clockwork mechanism consists of the winding post (8) which protrudes through the body, a rubber washer (9) clockwork spring (10), rotor wheel (11) and the governor (12).
- c. The Firing Assembly is composed of the striker (13), striker shoulder (14), striker spring (15), percussion cap (16), detonator holder (17) and detonator (18). The external safety bar (19) passes thru the plunger and engages the rotor wheel (11). The internal safety pin (20) engages the striker (13). A rubber waterproofing cap (21) fits on the plunger.

3. Operation.

The clockwork mechanism, which acts as a safety device in arming, is first fully wound by a special key at the winding post (8).

A weight of 10 pounds or more is then placed on the plunger (5) which moves downward and allows the external safety bar (19) to ride free in the slot of the plunger. The safety bar can now be withdrawn freeing the rotor wheel (11) and permitting the clockwork mechanism to function. As the coils of the clockwork spring (10) expand, they push against the head of the internal safety pin (20) thus disengaging it from the striker (13). The clockwork spring runs for 1-1/2 minutes with a loud buzzing sound until it withdraws the internal safety pin. The device is now armed.

The external weight exerts its weight through the plunger (5), to the striker retaining arm (7), the lower portion of which bears against the striker shoulder (14) holding the striker (13) in the armed position. When the weight is removed, the striker retaining arm is free to move upwards about its pivot under the pressure of the striker spring (15). This releases the spring-loaded striker, which fires the percussion cap, thus exploding the charge.

#### 4. Neutralization.

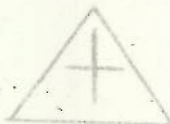
ONCE THIS DEVICE IS ARMED IT CANNOT BE NEUTRALIZED

If located it should be marked and destroyed in place.

NOTE: In exceptional or extreme cases attempts might be made to insert a long thin steel scribe or similar instrument thru the holes provided for the external safety bars. This would prevent the plunger from rising and firing the device.

#### 5. Minefield Signs and Symbols.

According to a captured German document mines laid with the E.Z.44 must be marked in minefield charts as follows:

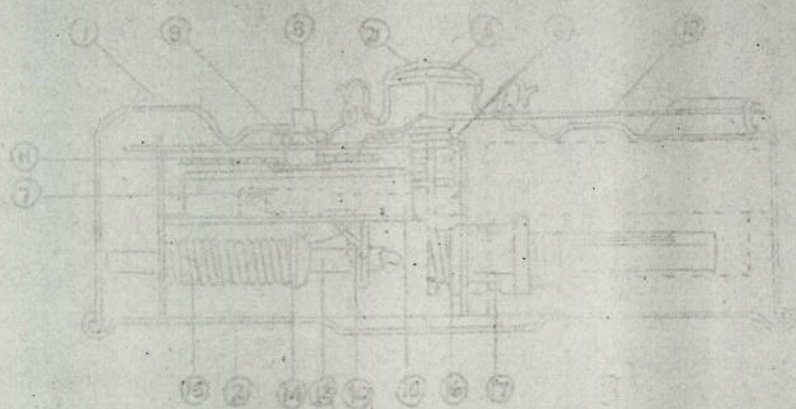


In minefields containing E.Z.44's minefield marker sticks must bear the following sign:

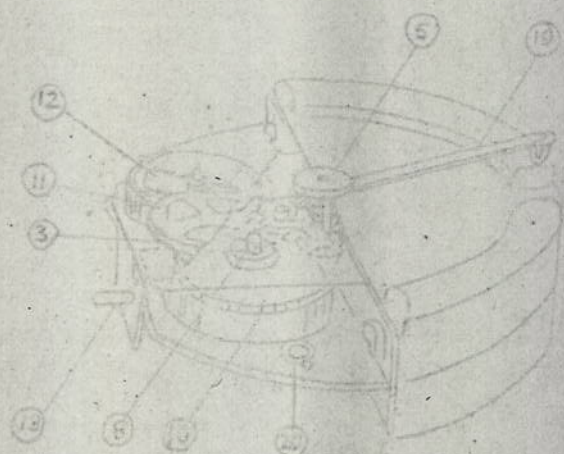


For the Division Engineer:

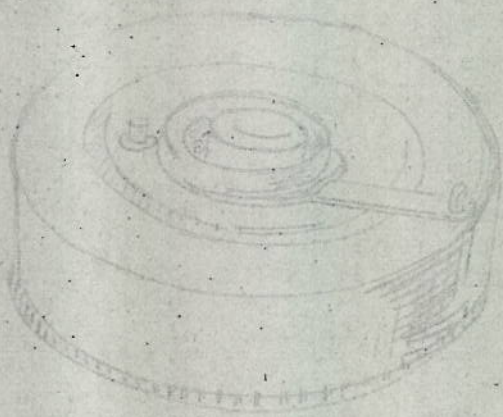
*Hugh T. McCullough, Jr.*  
HUGH T. MCCULLOUGH, JR.  
Capt., CE



Cross-Section of E.Z. 44



Cut-Away View with steel body removed.



Oblique View

S E C R E T

\*\*\*\*\*  
\*Secret  
\*Auth: CG 45th Div  
\*Initials: [Signature]  
\*Date: 22 Dec 1944  
\*\*\*\*\*

HEADQUARTERS 120TH ENGINEER C BATTALION

APO # 45, US Army  
22 December 1944

OPERATIONS INSTRUCTIONS)

NUMBER

2)

Map - FRANCE 1/50,000

1. a. 15th Inf Div defends on present position and relieves 103rd Inf Div in sector.

b. 120th Engr Bn supports Div, by construction of defensive works.

2. Co A:

a. Supports 157th Inf.

b. Prepare blocks on all roads and trails leading into Division left flank between Nieder Schlettenbach and Dambach. Careful coordination with 157th Infantry units will be obtained to insure that blocks are in best tactical localities, and that they are covered by a maximum intensity of fire.

c. Prepare fill in AT ditch at 071540 for demolition. Charge will be in excess of calculated quantity to insure an impassable crater. To be blown on order of CO 157th Inf, after clearance obtained CO 180th Inf.

d. Prepare abatis along road Nothweiler to AT ditch at 071540. Use TOPF mines for tree charges as far as possible. Priority will be given to sites which will be covered with fire. Execution will be on order CO 157th Infantry, after OK'd by CO 180th Inf.

e. Prepare culvert at 059533 for demolition. Post bridge guard. To be executed on order CO 157th Infantry.

f. Prepare abatis on road between 047526 and 055533. Use TOPF mines where expedient as tree felling charge. To be executed on order CO 157th Inf.

g. Prepare culvert at 045517 for demolition. Post Guard. To be executed on order CO 157th Infantry.

h. Prepare to block trail leading from bridge at 018481 to Mirschthal. To be executed on order 157th Infantry.

i. Prepare bridge at 018481 for demolition. Post bridge guard. To be executed on order of CO 157th Infantry.

j. Establish supplemental road blocks along road 000477 to 026474. Use prepared abatis where feasible. To be executed on order CO 157th Infantry.

S E C R E T

S E C R E T

k. Prepare bridge at 036474 for demolition. Post bridge guard. To be executed on order CO 187th Inf.

l. Assist infantry in organization of ground by laying AT and AP minefields, and by furnishing supervision to wire parties for wiring in positions.

m. Be prepared to construct obstacles and firing positions complete with wire and dug in AT gun emplacements along the road Lindstein-Neunhoffen (917453).

3. Co B. - Direct support 179th Infantry.

a. Assist infantry organize defensive positions by laying AT and AP mines, and by furnishing of supervision to wire laying parties.

b. Prepare abatis or other suitable obstacles along all roads forward of Lauter River. Where abatis are prepared, TOPF mines or other suitable enemy explosive charges will be used to fullest possible extent. Roads will be actually blocked only on order of CO 179th Infantry.

c. Prepare all crossings of Lauter River for demolition in sector. Demolition to be executed on order of CO 179th Infantry.

d. Place security guard on all crossings of Lauter River.

e. Demolish all enemy pillboxes left in sector.

4. Co C:

a. Complete demolition of enemy pillboxes left in sector.

b. Maintain road Lt. Wingen-Bobenthal.

c. Maintain road Climbach cemetery (087467) to 106496.

d. Maintain road Bobenthal-Wissenbourg until relieved by 540th Engrs.

e. Assist Infantry by laying of AT and AP mines, and by furnishing supervision and technical aid to 180th Infantry wire laying parties.

5. Recon. Section:

a. Make continuous reconnaissance along present front line for suitable locations for obstacles.

b. Keep road condition information up to date over division sector.

c. Check all Maginot forts for possibility of rehabilitation. Present armament, location, nature and extent of existing wire, abatis and other obstacles will be reported.

6. Tank Dozers.

a. Tank Dozer No 1 will report to Co B upon return from Ordnance.

S E C R E T



S E C R E T

b. Tank Dozer No 2 remain with Co A

c. 6638 Engr MC Co Tank (Lt Fenstermacher) remain with Co C

7. Anti-personnel mines will be laid only on order of, and only on sites approved by CO's of the infantry regiments. Extreme caution will be exercised by all companies to insure that complete, accurate records are kept of all mines laid, and copies forwarded to S-2 immediately

8. Sandbags are scarce. Therefore, maximum use will be made of other revetting materials, such as poles, small logs, timber, etc., in the construction of shelters and gunpits.

9. In each case of a prepared demolition, a guard of at least four (4) men will be left to execute the demolition, and to maintain and prevent tampering with charges. Careful check must be made to make sure that the guard knows exactly, and under what conditions, his particular task will be executed. Exact plans for each demolition mission will be submitted to S-3 as soon as plans are laid.

KONNIER  
cmdg

BILLUPS  
S-3

S E C R E T

S E C R E T

S E C R E T  
:By auth: CG 45 Inf Liv  
:Initials  
:Date 28 December 1944

HEAD QUARTERS 180TH ENGINEER COMBAT BATTALION

APO # 45, U S Army  
28 December 1944

OPERATIONS INSTRUCTIONS)

NUMBER 3)

1. 45 Liv defends in present positions, prepares positions along MLR, prepares plans for withdrawal from present OPLR to MLR.
2. 540 Engr Regt (Corps) prepares MLR, rehabilitating fortifications along Maginot Line, prepares barrier line immediately in front of MLR, opens routes of communication to rear of MLR.
  3. Co C:
    - a. Make ren of areas between OPLR and MLR in sector for demolition sites, road blocks, defensive positions and routes of withdrawal.
    - b. Support 180th Inf in present position with 1 platoon
    - c. Determine from 180 Inf: routes of withdrawal. Begin work blocking all other routes. Particular attention will be paid to crossings of LAUTER river in sector.
    - d. Mine minor blocks and trails when it is definitely established that such roads and trails will be no longer used.
    - e. Destroy fill over AT ditch at 071540 on order.
    - f. Maintain roads designated as withdrawal routes in order that withdrawal may be accomplished smoothly.
  3. Prepare all suitable sites on withdrawal routes for demolition. Post guard of at least 4 men on all charges. Make arrangements so that each guard has positive instructions as to when demolition will be accomplished.
4. Co B:
  - a. Support 179th Infantry in present positions with 1 platoon.
  - b. Make immediate ren of area between OPLR and MLR in sector, to locate demolition sites, road blocks, defensive positions and routes of withdrawal.
  - c. Determine from Infantry planned routes of withdrawal. Prepare road blocks, demolitions and mines on all roads and trails not planned for use.


S E C R E T

S E C R E T

OPERATIONS INSTRUCTIONS NO. 3  
120th Engr C Bn, 28 Dec 44 cont'd

- d. Prepare all crossings of LAUTER R for demolition at once. Post guards (at least 4 per bridge). Complete and coordinate plan to insure that bridges will be blown as scheduled.
5. Co A:
  - a. Continue present mission. Open roads as required by Infantry. Assist Infantry to wire in OPLR; lay mines as required in front of OPLR
  - b. Make ren for roads and trails leading SE from SMOCK in sector. If route is found suitable for withdrawal route, it will be developed.
  - c. Block all roads and trails in sector fwd of MLR, which Infantry does not plan to use.
6. All mines laid behind OPLR will be completely wired in with 2 strand fence, and warning signs posted.
7. Only the minimum amount of work necessary to enable Infantry to hold will be done on OPLR.
8. Demolitions will be complete and thorough. Where possible, not only the bridges, but also abutments will be destroyed. Possible bypass sites will be cratered, or otherwise made unusable. Mines must not be depended upon for this purpose.
9. Cos B and C may be called upon to assist Co A, when OPLR is secured.
10. All equipment now in the hands of the companies not needed for immediate operations will be sent to the rear to the Bn rear dump. Location of Bn rear dump to be designated by S-4
11. Explosives will be conserved as much as possible. However, all demolitions will be adequate to secure maximum delay.
12. All companies will submit overlay daily, with morning report, 1/25,000, showing work accomplished during preceeding day.

MONNIER  
cmdg

  
BILLUPS  
S-3

DISTRIBUTION:

Co A 120th Engrs	Ren Sect 120 Engrs	ADE
Co B 120th Engrs	G-2 45 Div	CO 540 Engrs
Co C 120th Engrs	G-3 45 Div	CO 2nd Bn 540 Engrs
H&S Co 120th Engrs	G-4 45 Div	Engr VI Corps
157 Inf	45th Div arty	CG 45 Div
179 Inf	S-1 (9 copies)	Asst Div Cmdr
180 Inf	S-2	Chief of Staff
	S-3	
	S-4	

ENGINE COMPANY 187 ENGINEER C BATTALION

2 Jan 1945

Table of water distributed by this unit for month of December 1944.  
(All figures in gallons)

WP # 76 BLUMWILLER	WP # 77 HOCHFELDEN	WP # 79 ETTENDORF	WP # 80 PERFENROTH	WP # 81 INGWILLER	WP # 82 ZINSWILLER	WP # 83	WP # 84	TOTALS
17995	13190	6010						37195
16545	6325	7510						30380
22525	19515	3320	7685	2610				52820
16525			7075	7280				30880
16055			725	4260				52640
16400			12660	15150	6220			55280
16290			17580		2275	2300		46505
4955			5440		4960	9800	450	45695
37290			62165		2950	3245	7370	21545
WP # 85 HORNWILLER	WP # 86 HEINSDORFEN	WP # 87 NIEDERWILDEN	WP # 88	WP # 89				
4520					8920	15495	7820	18740
6440	350	12685	WP # 88		3605			18125
5210	4260	11100	LANGENSOHN BACH	WP # 89	12070			32195
1250	4215	10360	7400	LEMBACH	10640			31210
17470	2100	8915	12570	9980	105220			27105
	1620	6300	10450	11350	WP # 90 ROBERTHAIN			33365
	12555	5450	11165	10950	375	WP # 91		29730
		650	4045	12230	725	HOTENWILLER		21940
		55460	9770	18500	790	275		27700
			10310	17580	915	1450	WP # 92	29335
			10835	16670	1065	2265	WEILER	30255
			1025	17980	2370	1645	2225	30835
			84570	15980	3065	5635	2170	25245
				19070	2400			21215
				15535	1500		2730	24200
				18245	2000		4260	21295
				16065	2325		4690	24935
				17125	1400		4230	22620
				11645	1860		3425	21950
				12595	1050		3700	17205
				13400	21890		2975	16620
							3280	16680
				254900			33685	661940

Total water distributed in month of December

Daily average (31 days)

861940

27805

Total previously issued since landing in France

(15 August - 30 November)

2,351,840

Total for French and German Campaigns to date

(15 August - 31 December)

3,213,780

Daily Average (124 Days)

25918

590 BATTALION

Table of water distributed by this unit for month of December 1944  
(All figures in gallons)

WP # 76	WP # 77	WP # 78	WP # 79	WP # 80	WP # 81	WP # 82	WP # 83	WP # 84	Total
BLISSWILLER	HOCHFELDEN	ETTENDORF	WILHELMEN	WILHELMEN	WILHELMEN	WILHELMEN			
17595	13190	6910							37705
16545	6325	7510							30380
22525	18515	13520	7685	2610					52850
6525			7075	7280					30880
16055			11725	4260					32640
16400			12650	14150	6220				35280
16290			17280		10275	2360			46505
4955			5440		14960	9890	450		45695
37290			62165		10980	3245	7370		21540
WP # 85 WILHELMEN	WP # 86 WILHELMEN	WP # 87 WILHELMEN			18990	15495	7820		18990
4520					13605				18125
16480	350	12685	WP # 88		12670				32195
5210	4260	11100	WILHELMEN	WP # 89	10640				31210
1250	4215	10360	4400	LEMBACH	6880				27105
17470	2100	8915	12570	9980	105220				33365
	1630	6300	10450	11350	WP # 90 WILHELMEN				24730
	12555	5450	11185	10950	375	WP # 91			27945
		650	4045	12230	725	WILHELMEN			27700
		35460	9770	18500	790	275			29335
			10310	17580	915	1450	WP # 92		30255
			10835	16670	1065	2265	WEILER		30835
			1025	17980	2370	1645	2225		25295
			84570	15980	3065	5635	2170		21215
				19070	2400		2730		28200
				15535	1500		4260		21295
				18245	2000		4690		24935
				16965	2325		4230		22620
				17125	1400		3425		21950
				11645	1860		3700		17205
				12595	1050		2975		16620
				13400	21890		3280		16680
				254900			33685		361940

Total water distributed in month of December  
 Daily average (31 days) 861,940  
 27,805

Total previously issued since landing in France  
 (15 August - 30 November) 2,351,840

Total for French and German Campaigns to date  
 (15 August - 31 December) 5,213,780  
 Daily Average (129 Days) 25,918

From the collection of:

[The 45th Infantry Division in World War II: An Unofficial Guide to Resources](#)

Researched by:

[The 45th Infantry Division Museum](#)