

CONFIDENTIAL

DEPARTMENT OF THE ARMY  
Headquarters, 198th Infantry Brigade, Americal Division  
APO San Francisco 96219

AVDF-ECC

31 October 1969

SUBJECT: Operational Report - Lessons Learned of the 198th Infantry Brigade  
for the Period Ending 31 October 1969 (U)

Commanding General  
Americal Division  
ATTN: AVDF-GCDO  
APO San Francisco 96374

1. (U) References:

- a. Americal Division Regulation, 525-15, dated 8 April 1969.
- b. Unclassified message, Americal Division, ATTN: AVDF-GCDO, subject, Operational Reports - Lessons Learned, dated 040302Z April 1969.

2. (U) Personnel: None.

3. (C) Operations:

- a. Subject: Armored cavalry operations during the monsoon season.

(1) Observations: The ability of armored cavalry units to operate effectively during the monsoon season is related to the commander's ability to employ special techniques peculiar to Southeast Asia.

(2) Evaluation: Monsoon conditions require that cavalry units adopt formations other than the file. The successive passage of tracked vehicles over the same route eventually causes a traction loss for vehicles in the rear of the file. When a file formation is necessary, units utilizing the same axis should be no larger than a platoon. The movement of armored cavalry units during the torrential downpours common throughout the monsoon season can prove quite effective due to the reduction in the enemy's ability to audibly or visually perceive the unit's movement. Mining incidents are common during the monsoon season because of the restrictions on cross-country movement. Dirt roads, river crossing sites, old tracked vehicle trails, and gaps in rice paddy dikes are likely locations of enemy mines. Caution must be exercised in these areas and every effort should be made to circumvent restricted areas and other suspect locations.

(3) Recommendations: The above techniques and procedures should be employed during the monsoon season to insure that the superior mobility, shock action, and fire power of armored cavalry units can be fully exploited.

GP 4 DOWNGRADED AT 3 YR  
INTERVALS; DECLASSIFIED AFTER 12 YRS.

CONFIDENTIAL

CONFIDENTIAL

AVDF-ECC

31 October 1969

SUBJECT: Operational Report - Lessons Learned of the 198th Infantry Brigade  
for period Ending 31 October 1969 (U)

b. Subject: NDP deception techniques.

(1) Observations: Units normally occupy their NDPs prior to darkness in order to properly prepare defensive positions and to register artillery. This permits the enemy to conduct a daylight reconnaissance of the NDP.

(2) Evaluation: Infantry units should select two (2) NDPs. The first NDP is occupied by the unit [minus one (1) squad] prior to sunset and a squad size element is sent to the second NDP. The squad leader searches the second site, selects platoon sectors, and readies the site for occupation by the entire unit. At EENT, the remainder of the unit departs the first NDP and occupies the second NDP. This deceives the enemy as to the location of the unit and/or disrupts the enemy's plans.

(3) Recommendations: Infantry units should utilize this technique to prevent casualties from ground attack or attack by indirect fire weapons during the hours of darkness.

c. Subject: Police of positions prior to abandonment.

(1) Observations: Captured enemy soldiers continue to report that they acquire the largest proportion of their American-made ammunition from abandoned NDPs.

(2) Evaluation: NDPs must be carefully checked prior to departure to insure that no ammunition has been discarded. Stay behind patrols or artillery fire (15-45 minutes after departure) can be used to discourage the enemy from entering the former NDP sites. Resupply in the field must be carefully coordinated to insure that ammunition in excess of the unit's needs is not delivered.

(3) Recommendations: Commanders must continue to insist on the thorough police of all friendly positions and the individual soldier must be made aware of the necessity for accounting for his basic load of ammunition. Also, resupply of ammunition in the field should be made in small lots, rather than by the case.

d. Subject: Employment of tactical wire.

(1) Observations: Excessively stretched concertina wire permits easy infiltration by VC sapper teams.

(2) Evaluation: When constructing wire barriers the width between vertical coils should be kept to a minimum in order to reduce gaps in the wire and to deny the enemy easy access.

(3) Recommendations: Present tactical barriers and future barriers should be examined to insure proper construction.

CONFIDENTIAL

**CONFIDENTIAL**

AVDF-BCC

SUBJECT: Operational Report - Lessons Learned of the 198th Infantry Brigade  
for the Period Ending 31 October 1969 (U)

31 October 1969

8. (U) The attached letter (Annex A - Light Mortar Section) examines, in detail, the techniques, organization, and procedures that one unit has found beneficial in the employment of their organic 81mm mortars. This organization reduces the personnel required, insures increased proficiency, and provides more flexibility in the use of available personnel and equipment.

9. (U) Administrative: This report represents a consolidation of OR-LLs submitted to this Headquarters for the period 01 August - 31 October 1969.

FOR THE COMMANDER:

*Thomas F. Mammel*  
THOMAS F. MAMMEL  
1LT, IN  
Assistant Adjutant

Annex

A - Light Mortar Section

**CONFIDENTIAL**



FOR OFFICIAL USE ONLY

Annex A (Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

DEPARTMENT OF THE ARMY  
Headquarters, 5th Battalion, 46th Infantry  
198th Infantry Brigade  
APO San Francisco 96219

AVDF-ECZ

16 July 1969

SUBJECT: 5-46 Inf MTOE (Light Mortar Section, Mortar Platoon, Co E, 5th Battalion, 46th Infantry)

SEE DISTRIBUTION

1. MISSION: To provide light mortar indirect fire support for 5th Battalion, 46th Infantry.

2. CAPABILITIES:

a. To provide 4 fire direction centers and 4x81mm mortar squads (2 mortars each) for indirect fire support of the battalion command post and four rifle companies, (Appendix 1).

b. Manuever in all types of terrain and climatic conditions.

c. Perform organizational maintenance on organic equipment.

d. Participate in airmobile operations as required.

e. Conduct continual training of personnel to obtain optimum firepower from organic weapons.

f. This unit is dependent upon headquarters and headquarters company for the provision of mess facilities and ammunition resupply.

g. This unit is dependent upon higher headquarters for mobility and combat service support.

3. PERSONNEL AND EQUIPMENT: Allocation of personnel and equipment for this unit will be made by redistribution of battalion assets.

a. Personnel:

(1) S1 will have personnel with MOS 11C in rifle companies attached to Company E to meet the manning level authorization indicated in Appendix 2.

FOR OFFICIAL USE ONLY

# FOR OFFICIAL USE ONLY

AVDF-BCC

SUBJECT: 5-46 Inf MTOE (Light Mortar Section Mortar Platoon, Co E, 5th Battalion, 46th Infantry)

(2) Personnel will be interviewed by CO, Company E, and approved for assignment, prior to attachment.

b. Equipment:

(1) S4 will have the equipment listed in Appendix 3 laterally transferred from rifle companies to the property book of Company E.

(2) All mortars and directly related equipment shown with an asterisk in Appendix 3 will be transferred from the rifle companies to Company E. The authorization level shown is that which the Light Mortar Section needs to conduct operations. Quantities in excess of this will be maintained by the light Mortar Section.

4. IMPLEMENTATION:

a. S1, in conjunction with CO, Company E will make arrangements to attach personnel to Company E not later than 20 July 1969.

b. S4, in conjunction with units will take necessary action to transfer property in support of this MTOE at the earliest practicable date, but not later than 20 July 1969.

5. Requests for changes and/or additions to this MTOE will be submitted to CO, 5th Battalion, 46th Infantry, ATTN: S3.

FOR THE COMMANDER:

/s/Stuart J. Shelk, Jr.  
/t/STUART J. SHELK, JR.  
1LT, IN  
Adjutant

Appendix

- 1 - Organization Chart
- 2 - MTOE Personnel Authorization
- 3 - Equipment Authorization (TOE/MTOE 7-177T)

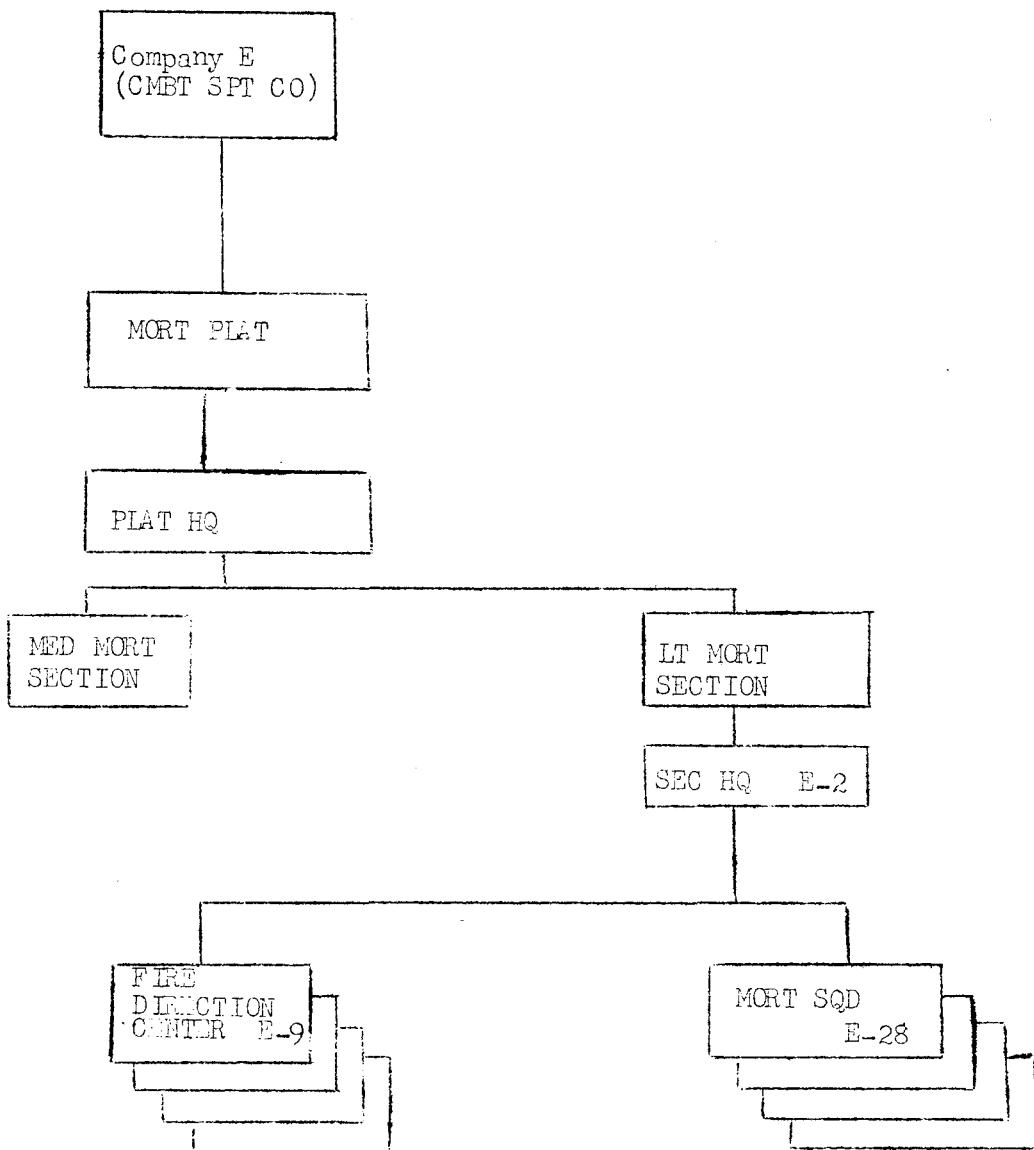
# FOR OFFICIAL USE ONLY



FOR OFFICIAL USE ONLY

Appendix 1 (Organization Chart) to Annex A (Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

MTOE (Light Mortar Section, Mortar Platoon, Company E, 5th Battalion, 46th Infantry)



A - 1 - 1

FOR OFFICIAL USE ONLY



# FOR OFFICIAL USE ONLY

Appendix 2 (MTOE Personnel Authorization) to Annex 1 Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

Light Mortar Section, Mortar Platoon, Co E, 5th Bn, 46th Inf

## Lt Mortar Sect Hq

Plat Sgt	11C40	NC	1	E7
Sect Ldr	11C40	NC	1	E6
Ammo NCO	11C40	NC	1	E5
Sr Fire Dir Cmpt	11C40		4	E5
Fire Dir Cmpt RTO	11C10		<u>4</u>	E4
			11	

4-81mm Mortar Squads (2 Mort per Sq)

Squad Ldr	11C40	NC	4	E5
Gunner	11C20		8	E4
Asst Gunner	11C20		8	E3
Ammo Bearer	11C10		<u>8</u>	E3
			28	

TOTAL 32

A - 2 - 1

# FOR OFFICIAL USE ONLY



# OUR OFFICIAL USE ONLY

Appendix 3 (Equipment Authorized (TOE/MTOE 7-177T) to Annex A (Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

<u>NOTE</u>	<u>LINE ITEM</u>	<u>DESCRIPTION</u>	<u>EQP LEVEL</u>
(1)	A53932	Amplifier Radio Frequency: AM-4306/PRC 25	4
(1)	B49272	Bayonet knife: w/scabbard	39
(1)	R94977	Rifle, 5.56 w/bipod	23
(1)	N964741	Pistol, auto, cal .45	8
(1)	L44575	Launcher, grenade, 40mm	8
(1)	M68008	Mortar, 81mm on mount	8*
(1)	E63728	Compass, unmtd, magnetic - mil grad	8
(1,3)	T46004	Sight unit for 81mm Mortar	8*
(1)	Q37005	Radio Set AN PRC/25	8
(2,3)	603250	Antenna Group RC-292	4
(1)	A22496	Aiming Circle	4*
(1)	B67218	Binocular, 7x50 with military reticle	6
(1)	E68993	Cable, telephone WD-1/TT 2 cond fld wire	4
(4,5)	H55706	Fire direction set, artillery	4
(1)	K23746	Headset microphone H-161/U	4
(1)	L37650	Lantern, elec stl. 2 min screw base lamp one 6V battery, 2 plas lens	8
(1)	L84098	Loudspeaker, permanent magnet LS-454/U	8
(1)	N55650	Panel Marker, aerial liaison type	4
(5)	N82364	Periscope, battery command	4
(1)	R07900	Plotting board, indirect fire, azimuth	7*
(4,5)	P09818	Plotting Set, Artillery fire control	4
(1,3)	Q03468	Quadrant fire control: Gunners	4*
(1)	R59160	Reeling machine, cable, hand: Ptbl laying recov $\frac{1}{4}$ Mi fld wire	
(1)	T5593	Sight, bore, mortar	4*
(1)	U43229	Stopwatch: type B timer Elgin, 16 size, 7 jewel	4
(1)	V31211	Telephone set TA 312/PT	5
(1)	V35477	Telescope, straight, military	4
(5)	R12989	Rangefinder, fire control	4
(1)	H7366	Flashlight; plas Rt angle & 2 cell min FGE lamps	18
(1)	P38588	Power supply PP-2953/U	4
(1)	S35741	Saw chain; gas driver, 18 in	1
(1)	S49475	Scale Plot: train 12" lng, Yds - meters 1-25,000, 1-50,000, 1-62,500	4
(3,5)	N04593	Night Vision Sight, crew served weapons	8

NOTE: (1) Auth by MTOE 7-175T  
 (2) Auth by MTOE 7-176T  
 (3) Auth by MTOE 7-177T  
 (4) Auth by MTOE 7-178T  
 (5) Auth by TOE 7-178G

\* Equipment on hand/excess to this MTOE will be retained by Lt Mort Section

A - 3 - 1

# FOR OFFICIAL USE ONLY

**CONFIDENTIAL**

DEPARTMENT OF THE ARMY  
Headquarters, 198th Infantry Brigade, Americal Division  
APO San Francisco 96219

AVDF-ECC

31 October 1969

SUBJECT: Operational Report - Lessons Learned of the 198th Infantry Brigade  
for the Period Ending 31 October 1969 (U)

Commanding General  
Americal Division  
ATTN: AVDF-GCDO  
APO San Francisco 96374

1. (U) References:

- a. Americal Division Regulation, 525-15, dated 8 April 1969.
- b. Unclassified message, Americal Division, ATTN: AVDF-GCDO, subject, Operational Reports - Lessons Learned, dated 040302Z April 1969.

2. (U) Personnel: None.

3. (C) Operations:

- a. Subject: Armored cavalry operations during the monsoon season.

(1) Observations: The ability of armored cavalry units to operate effectively during the monsoon season is related to the commander's ability to employ special techniques peculiar to Southeast Asia.

(2) Evaluation: Monsoon conditions require that cavalry units adopt formations other than the file. The successive passage of tracked vehicles over the same route eventually causes a traction loss for vehicles in the rear of the file. When a file formation is necessary, units utilizing the same axis should be no larger than a platoon. The movement of armored cavalry units during the torrential downpours common throughout the monsoon season can prove quite effective due to the reduction in the enemy's ability to audibly or visually perceive the unit's movement. Mining incidents are common during the monsoon season because of the restrictions on cross-country movement. Dirt roads, river crossing sites, old tracked vehicle trails, and gaps in rice paddy dikes are likely locations of enemy mines. Caution must be exercised in these areas and every effort should be made to circumvent restricted areas and other suspect locations.

(3) Recommendations: The above techniques and procedures should be employed during the monsoon season to insure that the superior mobility, shock action, and fire power of armored cavalry units can be fully exploited.

GP 4 DOWNGRADED AT 3 YR  
INTERVALS; DECLASSIFIED AFTER 12 YRS.

**CONFIDENTIAL**

*File J.*

**CONFIDENTIAL**

AVDF-BCC

31 October 1969

SUBJECT: Operational Report - Lessons Learned of the 198th Infantry Brigade  
for period Ending 31 October 1969 (U)

b. Subject: NDP deception techniques.

(1) Observations: Units normally occupy their NDPs prior to darkness in order to properly prepare defensive positions and to register artillery. This permits the enemy to conduct a daylight reconnaissance of the NDP.

(2) Evaluation: Infantry units should select two (2) NDPs. The first NDP is occupied by the unit [minus one (1) squad] prior to sunset and a squad size element is sent to the second NDP. The squad leader searches the second site, selects platoon sectors, and readies the site for occupation by the entire unit. At EENT, the remainder of the unit departs the first NDP and occupies the second NDP. This deceives the enemy as to the location of the unit and/or disrupts the enemy's plans.

(3) Recommendations: Infantry units should utilize this technique to prevent casualties from ground attack or attack by indirect fire weapons during the hours of darkness.

c. Subject: Police of positions prior to abandonment.

(1) Observations: Captured enemy soldiers continue to report that they acquire the largest proportion of their American-made ammunition from abandoned NDPs.

(2) Evaluation: NDPs must be carefully checked prior to departure to insure that no ammunition has been discarded. Stay behind patrols or artillery fire (15-45 minutes after departure) can be used to discourage the enemy from entering the former NDP sites. Resupply in the field must be carefully coordinated to insure that ammunition in excess of the unit's needs is not delivered.

(3) Recommendations: Commanders must continue to insist on the thorough police of all friendly positions and the individual soldier must be made aware of the necessity for accounting for his basic load of ammunition. Also, resupply of ammunition in the field should be made in small lots, rather than by the case.

d. Subject: Employment of tactical wire.

(1) Observations: Excessively stretched concertina wire permits easy infiltration by VC sapper teams.

(2) Evaluation: When constructing wire barriers the width between vertical coils should be kept to a minimum in order to reduce gaps in the wire and to deny the enemy easy access.

(3) Recommendations: Present tactical barriers and future barriers should be examined to insure proper construction.

**CONFIDENTIAL**

**CONFIDENTIAL**

AVDF-BCC

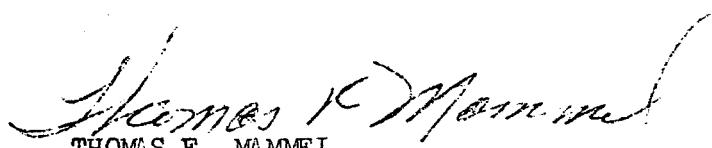
31 October 1969

SUBJECT: Operational Report - Lessons Learned of the 198th Infantry Brigade  
for the Period Ending 31 October 1969 (U)

8. (U) The attached letter (Annex A - Light Mortar Section) examines, in detail, the techniques, organization, and procedures that one unit has found beneficial in the employment of their organic 81mm mortars. This organization reduces the personnel required, insures increased proficiency, and provides more flexibility in the use of available personnel and equipment.

9. (U) Administrative: This report represents a consolidation of CR-LLs submitted to this Headquarters for the period 01 August - 31 October 1969.

FOR THE COMMANDER:



THOMAS F. MAMMEL  
1LT, IN  
Assistant Adjutant

Annex

A - Light Mortar Section

**CONFIDENTIAL**

# FOR OFFICIAL USE ONLY

Annex A (Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

DEPARTMENT OF THE ARMY  
Headquarters, 5th Battalion, 46th Infantry  
198th Infantry Brigade  
APO San Francisco 96219

AVDF-BC2

16 July 1969

SUBJECT: 5-46 Inf MTOE (Light Mortar Section, Mortar Platoon, Co E, 5th Battalion, 46th Infantry)

## SEE DISTRIBUTION

1. MISSION: To provide light mortar indirect fire support for 5th Battalion, 46th Infantry.

### 2. CAPABILITIES:

a. To provide 4 fire direction centers and 4x81mm mortar squads (2 mortars each) for indirect fire support of the battalion command post and four rifle companies. (Appendix 1).

b. Manuever in all types of terrain and climatic conditions.

c. Perform organizational maintenance on organic equipment.

d. Participate in airmobile operations as required.

e. Conduct continual training of personnel to obtain optimum firepower from organic weapons.

f. This unit is dependent upon headquarters and headquarters company for the provision of mess facilities and ammunition resupply.

g. This unit is dependent upon higher headquarters for mobility and combat service support.

3. PERSONNEL AND EQUIPMENT: Allocation of personnel and equipment for this unit will be made by redistribution of battalion assets.

#### a. Personnel:

(1) S1 will have personnel with MOS 11C in rifle companies attached to Company E to meet the manning level authorization indicated in Appendix 2.

# FOR OFFICIAL USE ONLY

# FOR OFFICIAL USE ONLY

AVDF-BCC

SUBJECT: 5-46 Inf MTOE (Light Mortar Section Mortar Platoon, Co E, 5th Battalion, 46th Infantry)

(2) Personnel will be interviewed by CO, Company E, and approved for assignment, prior to attachment.

b. Equipment:

(1) S4 will have the equipment listed in Appendix 3 laterally transferred from rifle companies to the property book of Company E.

(2) All mortars and directly related equipment shown with an asterisk in Appendix 3 will be transferred from the rifle companies to Company E. The authorization level shown is that which the Light Mortar Section needs to conduct operations. Quantities in excess of this will be maintained by the light Mortar Section.

4. IMPLEMENTATION:

a. S1, in conjunction with CO, Company E will make arrangements to attach personnel to Company E not later than 20 July 1969.

b. S4, in conjunction with units will take necessary action to transfer property in support of this MTOE at the earliest practicable date, but not later than 20 July 1969.

5. Requests for changes and/or additions to this MTOE will be submitted to CO, 5th Battalion, 46th Infantry, ATTN: S3.

FOR THE COMMANDER:

/s/Stuart J. Shelk, Jr.  
/t/STUART J. SHELK, JR.  
1LT, IN  
Adjutant

Appendix

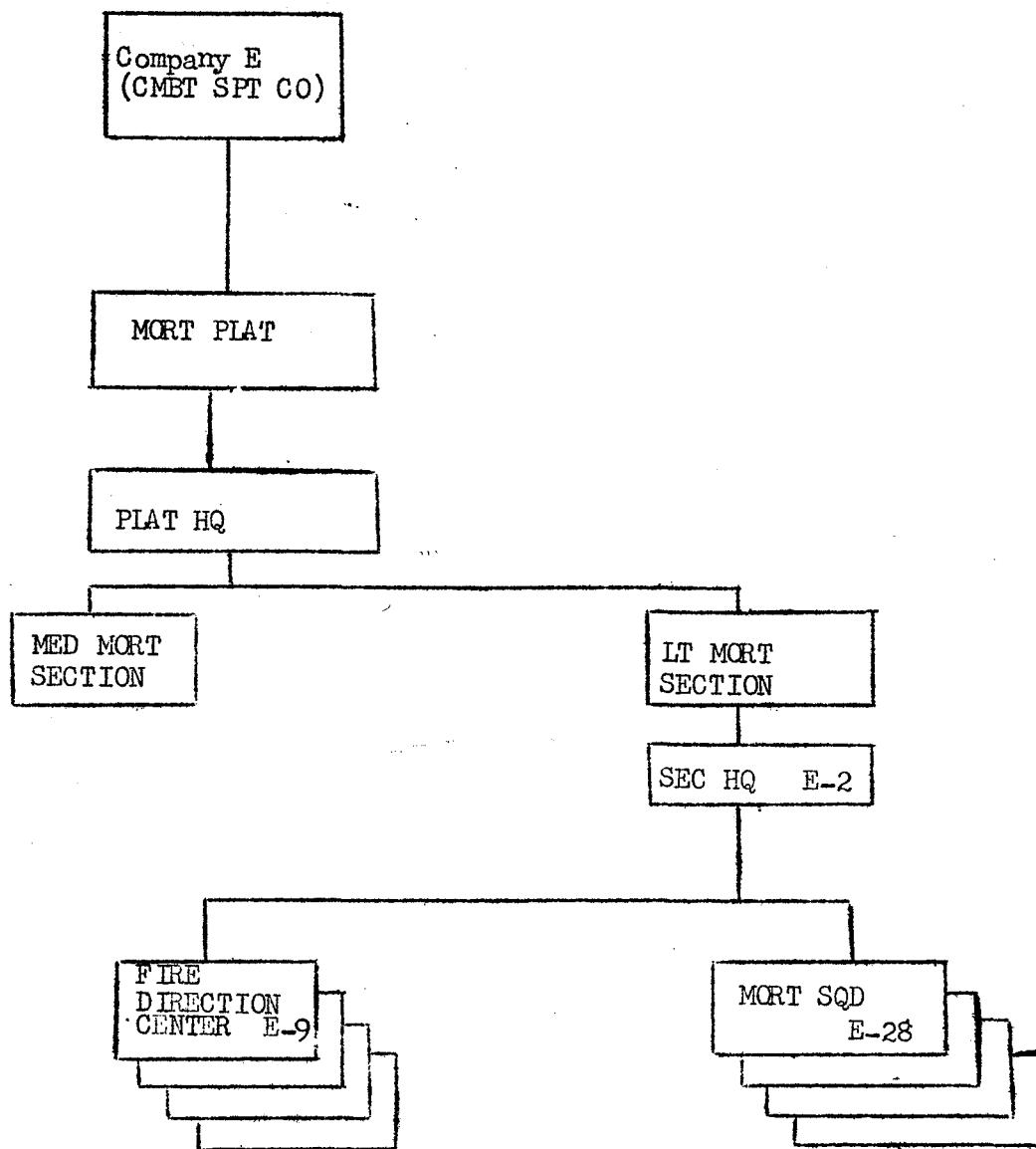
- 1 - Organization Chart
- 2 - MTOE Personnel Authorization
- 3 - Equipment Authorization (TOE/MTOE 7-177T)

# FOR OFFICIAL USE ONLY

# FOR OFFICIAL USE ONLY

Appendix 1 (Organization Chart) to Annex A (Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

MTOE (Light Mortar Section, Mortar Platoon, Company E, 5th Battalion, 46th Infantry)



A - 1 - 1

# FOR OFFICIAL USE ONLY

# FOR OFFICIAL USE ONLY

Appendix 2 (MTOE Personnel Authorization) to Annex A (Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

Light Mortar Section, Mortar Platoon, Co E, 5th Bn, 46th Inf

## Lt Mortar Sect Hq

Plat Sgt	11C40	NC	1	E7
Sect Ldr	11C40	NC	1	E6
Ammo NCO	11C40	NC	1	E5
Sr Fire Dir Cmpt	11C40		4	E5
Fire Dir Cmpt RTO	11C10		<u>4</u>	E4
			<u>11</u>	

## 4-81mm Mortar Squads (2 Mort per Sq)

Squad Ldr	11C40	NC	4	E5
Gunner	11C20		8	E4
Asst Gunner	11C20		8	E3
Ammo Bearer	11C10		<u>8</u>	E3
			<u>28</u>	

TOTAL 39

A - 2 - 1

# FOR OFFICIAL USE ONLY

# FOR OFFICIAL USE ONLY

Appendix 3 (Equipment Authorized (TOE/MTOE 7-177T) to Annex A (Light Mortar Section) to Operational Report - Lessons Learned of the 198th Infantry Brigade for the Period Ending 31 October 1969

<u>NOTE</u>	<u>LINE ITEM</u>	<u>DESCRIPTION</u>	<u>EQP LEVEL</u>
(1)	A53932	Amplifier Radio Frequency: AM-4306/PRC 25	4
(1)	B49272	Bayonet knife: w/scabbard	39
(1)	R94977	Rifle, 5.56 w/bipod	23
(1)	N964741	Pistol, auto, cal .45	8
(1)	L44575	Launcher, grenade, 40mm	8
(1)	M68008	Mortar, 81mm on mount	8*
(1)	E63728	Compass, unmtd, magnetic - mil grad	8
(1,3)	T46004	Sight unit for 81mm Mortar	8*
(1)	Q37005	Radio Set AN PRC/25	8
(2,3)	603250	Antenna Group RC-292	4
(1)	A22496	Aiming Circle	4*
(1)	B67218	Binocular, 7x50 with military reticle	6
(1)	E68993	Cable, telephone WD-1/TT 2 cond fld wire	4
(4,5)	H55706	Fire direction set, artillery	4
(1)	K23746	Headset microphone H-161/U	4
(1)	L37650	Lantern, elec stl. 2 min screw base lamp one 6V battery, 2 plas lens	8
(1)	L84098	Loudspeaker, permanent magnet LS-454/U	8
(1)	N55650	Panel Marker, aerial liaison type	4
(5)	N82364	Periscope, battery command	4
(1)	R07900	Plotting board, indirect fire, azimuth	7*
(4,5)	P09818	Plotting Set, Artillery fire control	4
(1,3)	Q03468	Quadrant fire control: Gunners	4*
(1)	R59160	Reeling machine, cable, hand: Ptbl laying recov $\frac{1}{4}$ Mi fld wire	
(1)	T5593	Sight, bore, mortar	4*
(1)	U43229	Stopwatch: type B timer Elgin, 16 size, 7 jewel	4
(1)	V31211	Telephone set TA 312/PT	5
(1)	V35477	Telescope, straight, military	4
(5)	R12989	Rangefinder, fire control	4
(1)	H7366	Flashlight; plas Rt angle & 2 cell min FGE lamps	18
(1)	P38588	Power supply PP-2953/U	4
(1)	S35741	Saw chain; gas driver, 18 in	1
(1)	S49475	Scale Plot: train 12" lng, Yds - meters 1-25,000. 1-50,000, 1-62,500	4
(3,5)	N04593	Night Vision Sight, crew served weapons	8

NOTE: (1) Auth by MTOE 7-175T  
 (2) Auth by MTOE 7-176T  
 (3) Auth by MTOE 7-177T  
 (4) Auth by MTOE 7-178T  
 (5) Auth by TOE 7-178G

\* Equipment on hand/excess to this MTOE will be retained by Lt Mort Section

A - 3 - 1

# FOR OFFICIAL USE ONLY