

Report Date: 23 Mar 2015
Summary Report for Crew Drill Drill Task
Drill Number: 07-4-D9339
Drill Title: Fire a Mortar
Status: Approved
Status Date: 23 Mar 2015

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD7 - This product/publication has been reviewed by the product developers in coordination with the MCoE G-2 foreign disclosure authority. This product is NOT releasable to students from foreign countries.

Drill Data

Proponent: 07 - Infantry (Collective)

Drill Type: Crew Drill

Approved:

Obsolete:

Restricted Read: No

Route To TMD Reviewer: No

TMD Concurrence:

TMD Comments:

Safety Level: Low

Conditions:

The squad is in a firing position and receives a fire mission.

Some iterations of this task should be performed in MOPP 4.

Standards:

The squad leader commands "HANG IT" and "FIRE." The mortar squad conducts the firing IAWFM 3-22.90 and the unit standard operating procedures (SOP).

Drill Statements:

DANGER
NONE
WARNING
NONE
CAUTION
NONE

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning

and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. .

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. .

Cue: The squad leader initiates drill by giving the command "HANG IT" and "FIRE."

Coaching Point: NONE

TASK STEPS

- * 1. The squad leader records and issues the fire command to the squad.
- * 2. The squad repeats the fire commands.
3. The ammunition bearer prepares the round(s) IAW the fire command.
4. The ammunition bearer prepares the round so the squad leader can inspect it before passing the round to the assistant gunner. Holding the round with both hands (palms up) near each end of the round body (not on the fuze or the charges).
Note: The ammunition bearer for a 60mm mortar will perform all functions of the assistant gunner.
5. The ammunition bearer should hold the round with the fuze pointed to his left. The assistant gunner accepts the round from the ammunition bearer, with the right hand under the round and the left hand on top of the round, by pivoting his body to the left.
6. The assistant gunner checks the round for correct charges, fuze tightness and fuze setting.
7. Once the assistant gunner has the round he will keep two hands on the round until it is fired.
8. When both the gun and the round(s) have been determined safe and ready to fire, the squad leader gives the following command to the FDC, "NUMBER (# OF MORTAR) GUN, UP."
9. The assistant gunner is the ONLY member of the mortar squad who will load and fire rounds.

WARNING

WARNING

THE BLAST ATTENUATOR (BAD) MUST BE INSTALLED ON THE 120-MM MORTAR BEFORE FIRING FROM THE CARRIER.

10. The squad leader commands, "HANG IT" and "FIRE" IAW the method of fire given by the FDC.
11. Loading is done by holding the round out in front of the muzzle at the same angle as the cannon.
12. At the command of "HANG IT," the assistant gunner guides the round into the barrel (tail end first) to a point beyond the narrow portion of the body (about three-quarters of the round) ensuring not to hit the primer, charges, or disturbing the lay of the mortar.
13. Once the round is inserted into the barrel at the proper distance, the assistant gunner shouts back "NUMBER (Number of mortar) GUN, HANGING."
14. At the command of "FIRE," the assistant gunner releases the round by pulling both his hands down alongside and away from the outside of the barrel. The assistant gunner must ensure he does not take his hands across the muzzle of the cannon as he drops the round.
15. Once the round is released by the assistant gunner, the gunner and assistant gunner each position themselves IAW the safety requirements for firing outlined in the appropriate TM.
16. The assistant gunner pivots to his left and down towards the ammunition bearer to accept the next round to be fired.
17. Subsequent rounds are fired based on the FDC fire commands.
18. The assistant gunner will ensure the round has fired safely before he attempts to load the next round.

19. The assistant gunner and gunner as well as the remainder of the mortar crew will keep their upper body below the muzzle until the round fires to avoid muzzle blast.

20. During a fire for effect (FFE), the gunner will attempt to level all bubbles between each round ensuring his upper body is away from the mortar and below the muzzle when the assistant gunner announces "Hanging" for each round fired.

21. The assistant gunner informs the squad leader when all rounds for the fire mission are expended and the squad leader informs the FDC when all of the rounds were completed. For example, "NUMBER TWO GUN, ALL ROUNDS COMPLETE."

(Asterisks indicates a leader performance step.)

TASK MEASURES

1. The squad leader recorded and issued the fire command.
 2. The squad repeated the fire commands.
 3. The ammunition bearer prepared the rounds.
 4. The ammunition bearer prepared the round and the squad leader inspected it.
 5. The ammunition bearer held the round with the fuze pointed to his left.
 6. The assistant gunner checked the round for correct charges, fuze tightness and fuze setting.
 7. Once the assistant gunner had the round, he kept two hands on the round until it is fired.
 8. The squad leader gave the following command to the FDC, "NUMBER (# OF MORTAR) GUN, UP."
 9. The assistant gunner was the ONLY member of the mortar squad who will loaded and fired the rounds.
 10. The squad leader command, "HANG IT" and "FIRE".
 11. Loading was done by holding the round out in front of the muzzle at the same angle as the cannon.
 12. At the command of "HANG IT," the assistant gunner guided the round into the barrel.
 13. The assistant gunner shouted back "NUMBER GUN, HANGING."
 14. At the command of "FIRE," the assistant gunner released the round.
 15. Once the round was released by the assistant gunner, the gunner and assistant gunner each position themselves IAW the safety requirements.
 16. The assistant gunner pivoted to his left and down towards the ammunition bearer.
 17. Subsequent rounds were fired based on the FDC fire commands.
 18. The assistant gunner ensured the round was fired safely.
 19. The assistant gunner and gunner kept their upper body below the muzzle until the round fires to avoid muzzle blast.
 20. During a fire for effect (FFE), the gunner attempted to level all bubbles between each round.
 21. The assistant gunner informed the squad leader when all rounds for the fire mission were expended.
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Talk:

a.Orientation: The objective of this squad drill is to provide the squad with the basic skills necessary to load and fire a mortar.

b.Safety: Squad members must use both hands when handling mortar rounds. During 120-mm firing, the blast attenuator (BAD) must be installed before firing from the carrier. All squad members must will keep their upper body below the muzzle until the round fires to avoid muzzle blast.

c.Demonstration: If another squad has successfully performed this drill, have that squad demonstrate it. During the demonstration, explain what is being done and why, using the performance measures as a guide. After the demonstration, summarize the actions performed by the demonstrating squad.

d.Explanation: (1)Refer to the performance measures and explain what the squad leader, ammunition bearer, gunner, and assistant gunner is required to do upon the fire command.

(2) Ensure that the squad leader and members know their duties and responsibilities pertaining to each portion of the drill.

(3) Ask if there are any questions pertaining to the drill. If so, ensure that all questions are correctly answered before beginning to train the drill.

e.Unit Instructions: a. Resources. Mortar carrier, mortar, ammunition, and all other required Table(s) of organization and equipment (TOE) assigned personnel and equipment.

b. Training Site: A mortar firing range or training area with sufficient mask and overhead clearance.

c. Unit Instructions. The unit is in a firing position and the squad leader gives the command "HANG IT" and "FIRE."

Walk:

1. Refer to the performance measures and have each squad member perform his part slowly at first as the leader talks him through.
 2. NONE
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Run:

a.Run-Through Instructions: The soldiers should practice this drill until they can perform it according to standard, without using notes. The initial run-through exercise should be conducted slowly. The soldiers should change positions in order to learn all steps and standards.

b.Coaching Point: NONE

c.Performance Instructions: When the soldiers can perform this drill according to the standard, they should be evaluated by the platoon leader or sergeant.

Equipment (LIN)

Step ID	LIN	Nomenclature	Qty
No equipment specified			

Materiel Items (NSN)

Step ID	NSN	LIN	Title	Qty
	1230-01-503-7784	F83625	Fire Control System, Mortar: M95	1
	1220-01-521-1611	M32043	Computer, Ballistics, Hand-Held: Mortar Ballistic Computer (LHMBC), M32	1

Support Personnel

Personnel Type	Description	School	Qty	Remarks
No support personnel specified				

TADSS

Step ID	TADSS ID	Title	Product Type	Qty
	06-111/A	Call For Fire Trainer (CFFT) 1:4 Configuration	SIM	1
	07-13B	Pneumatic Mortar Trainer/ M32A1	DVC	1
	07-13A	Mortar, Pneumatic/ M32	DVC	1

Supporting Individual Tasks

Step ID	Task ID	Status	Task Title
	071-074-0044	Approved	Supervise a Mortar Squad
	071-11C-1000	Approved	Fire a Mortar
	071-11C-1001	Approved	Engage Targets with a 60-mm, 81-mm, or 120-mm Mortar Using Direct Lay
	071-11C-1208	Approved	Control the Expenditure of Mortar Ammunition
	071-11C-1300	Approved	Supervise a Mortar Platoon

Prerequisite Individual Tasks

Step ID	Task ID	Status	Task Title
No prerequisite individual tasks specified			

Supporting Collective Tasks

Step ID	Task ID	Status	Title
	07-3-3018	Approved	Fire Mortars by Direct Alignment (Section-Platoon)
	07-3-3027	Approved	Fire a Mortar Final Protective Fire Mission (Section-Platoon)
	07-3-3054	Approved	Fire a Mortar Adjust Fire Mission (Section-Platoon)
	07-3-3072	Approved	Fire a Mortar Fire for Effect Mission (Section-Platoon)
	07-3-3081	Approved	Fire a Mortar Illumination Mission (Section-Platoon)
	07-3-3099	Approved	Fire a Mortar Priority Target Mission (Section-Platoon)
	07-3-3108	Approved	Fire a Mortar Quick Smoke Mission (Section-Platoon)
	07-3-3117	Approved	Conduct Simultaneous Mortar Fire Missions (Section-Platoon)

Prerequisite Collective Tasks

Step ID	Task ID	Status	Title
No prerequisite collective tasks specified			

Supporting Drill Tasks

Step ID	Drill ID	Status	Drill Title
	07-4-D9219	Approved	Place 60-mm Mortar into Action
	07-4-D9267	Approved	Place 81-mm Mortar into Action

OPFOR

Task Number	Title	Status
71-0-0014	Disruption	Approved

REFERENCES

Step Number	Reference ID	Reference Name	Required	Primary
	ATTP 3-21.90	Tactical Employment of Mortars	Yes	No
	FM 3-22.90	Mortars	Yes	Yes

Training Setup

A mortar firing range or training area with sufficient mask and overhead clearance.

Training Facilities

Facility ID	Facility Name	Facility Type
No Training Facilities		

DODIC

DODIC	Name	Qty
No DODIC		

Associated Documents

Media ID	Media Type	Title	Subtitle
No Associated Documents			

GLOSSARY TERMS

Glossary Term	Definition
No glossary terms specified	

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
No acronyms/abbreviations specified	