

FASCAM

An "UNconventional" Munition?

An enemy 82-mm mortar has been engaging our forces with great success for the last hour. The Q-36 radar has tracked the mortar and all fire support assets available have counterfired the general position three times, including as a priority target on the last known position, to no avail. No air or ground forces are available to vector to this position. So, how do we destroy this mobile mortar?

Although the fire supporter must attack the enemy using any available means to meet the commander's intent, he also must consider munitions abilities and residual effects in and around the ground that friendly forces or innocent civilians may move through or occupy. The services felt the effects of using high dud-producing munitions during the Gulf War. The Air Force CBU-87 and multiple-launch rocket system (MLRS) submunitions caused some injuries to allied forces as they moved to their objectives.

Lightfighters are especially concerned with dud-producing munitions. During a recent training exercise with the 10th Mountain Division, we discussed using dud-producing munitions. The result: the FA was unable to service the objective. The issue was the risks the duds pose to friendlies versus the desired effects on the enemy positions.

FASCAM Advantages. We contacted the Army's experts on munitions at the Armament and Chemical Acquisition and Logistics Activity (ACALA), Rock Island Arsenal, Illinois, who informed us of the unclassified dud rates shown in the figure.

This information was shocking, to say the least. Dud rates for the 105-mm armor-piercing improved conventional munition (APICM) range from 18 percent up to 50 percent; the dud rate for the 155-mm APICM is about five percent. The dual-purpose improved conventional munition (DPICM) round is much better with dud rates of 1.5 percent for the 155-mm and 0.2 percent for the new 105-mm round that begins fielding in 1998. Even with the improved dud rates of DPICM, commanders may be unwilling to accept the risk.

Family of scatterable mine (FASCAM) rounds have a comparably lower dud rate (classified), self-destruct mechanisms and a computed safety box. However, we must plan FASCAM minefields in excruciating detail and receive release authority to use them. Is it any wonder we don't use FASCAM more frequently? FASCAM may provide some "unconventional" answers to the perplexing dud problem.

Unconventional Employment. Well planned, placed and timed FASCAM minefields have devastating effects on enemy mechanized and armor formations at the Combat Training Centers (CTCs). But FASCAM also can be employed effectively against known enemy positions. If accurately fired, FASCAM can deter or stop all enemy defensive position improvements. The enemy's engineers have to reorient to either clear FASCAM from the position or cease work. The enemy can't resupply or even evacuate the "FASCAMed" position.

The enemy has four hours with a short duration FASCAM minefield or 48 hours

with long duration to react to this "time bomb," and react he must. FASCAM buys the friendly commander at least four hours to maneuver his forces to the objective and the artillery commander four hours to reposition the unit after firing FASCAM. If the enemy stays in position, he must clear the minefield to regain his position's tenability. If he leaves, he must start over again in a new location with less time and, hopefully, fewer assets. Time-on-targets (TOTs) may be fired in conjunction with FASCAM detonation to further incapacitate the enemy and signal the attack.

Other employment options are to shoot FASCAM on known infiltration routes and landing zones to shut them down for specific times. FASCAM even can be incorporated into the last volleys of counterfire missions on enemy artillery units.

There's no specific number of rounds required to employ FASCAM in these unconventional ways. Our FMs and safety diagrams fail to give information to compute anything less than a 400 x 400 aerial denial artillery munition (ADAM) minefield with a large safety box surrounding it. Realistically, we could shoot FASCAM at a point target (a single aim point) with as many rounds as we deem necessary. We then can use the appropriate single aim point safety box for FASCAM missions to report the minefield to friendly units.

So, how do we destroy that mobile 82-mm mortar? First, both the S2 and S3 sections battle track friendly forces and keep a detailed log on enemy actions. The mortar crew fired three times with a 400-meter radius within 45 minutes. Our radar tracked the firing each time, yet our counterfire efforts were unsuccessful. We used all organic assets, several different shell and fuze combinations, naval gunfire and priority targeting, but the resilient mortar persisted six times.

We fired a 400 x 400 medium-density ADAM minefield and received no more incoming from that area. The next morning (well after the four-hour mark), we sent a small maneuver force to confirm or deny our success. The force discovered one all-terrain vehicle (ATV) damaged and three enemy personnel killed in action. The 82-mm mortar tube had been recovered by another enemy element but was not used for lack of personnel to man it.

Engineer and artillery communities need to develop more flexible minefield employment options for the maneuver commander to consider. No, FASCAM isn't the end-all munition, but it's one answer right there in our unit basic load.

CPT William B. Hight, Former Assistant S3
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Weapon	Nomenclature	DODIC	Submunition Dud Rate	Notes
105-mm Howitzer	M444 APICM	C462	>18%	Phasing Out
	XM915 DPICM	Unassigned	<0.2%	Field in 1998
155-mm Howitzer	M449A1 APICM	D562	≈5%	Phasing Out
	M483A1/864 DPICM	D563/D864	<1.5%	
	M718/741 RAAMS	D514/D515	Classified	
	M692/731 ADAM	D501/D502	Classified	Comparable to DPICM

Legend:

APICM = Armor-Piercing Improved Conventional Munition

ADAM = Aerial Denial Artillery Munitions

DODIC = Department of Defense Identification Code

DPICM = Dual-Purpose Improved Conventional Munition

RAAMS = Remote Anti-Armor Mine System

Dud Rates for Various Artillery-Delivered Munitions