

Artillerizing PIRs

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Artillery units can develop better priority intelligence requirements (PIRs) to help commanders execute their FA support plans (FASPs). As indicated by the observation of units rotating through the National Training Center (NTC) at Fort Irwin, California, the PIRs generally do not consider the impact of the threat's capabilities and his courses-of-action (COAs) on unit missions or force protection.

As Mao Tse-Tung said, "War is hard thinking." This article discusses tactics, techniques and procedures (TTP) for the FA battalion battle staff to "artillerize" PIRs, especially force-protection PIRs, and do the "hard thinking" up front.

The Problems. NTC FA Tactical Operations Center (TOC) Trainers have observed two trends in developing PIRs. First, some artillery units integrate the PIRs from their supported brigade's operations order (OPORD) without modifying or tailoring them for their units. Some PIRs are linked to the brigade's artillery unit's essential fire support tasks (EFST)—for example, "What is the location of the 168th Motorized Rifle Regiment's (MRR's) regimental artillery group (RAG)?" Such PIRs have targeting implications that are critical to the brigade and must be incorporated into the FA battalion's PIRs. However, other brigade PIRs do not apply and shouldn't be included in the FA PIRs.

FM 3-09.21 (6-20-1) TTP for the Field Artillery Battalion reminds us that "the S2 also further develops the FA battalion's PIRs and begins incorporating them into reconnaissance and surveillance (R & S) plans, the PIRs the maneuver/higher FA headquarters tasked the battalion to answer." Additionally, the battle staff must develop PIRs specifically for the FA battalion.

The second trend is that too many FA units use a standard list of PIRs for

offensive and defensive missions. Sometimes these "boiler plate" PIRs are even included in the unit's tactical standing operating procedures (TACSOP). When the unit plans for a mission, it selects PIRs from this list. *FM 34-8-2 Intelligence Officer's Handbook* cautions, "There is no set of PIRs that we can present that will be useful for all tactical situations."

Using standard PIRs predisposes units to avoid thinking through the impact of the threat's capabilities and his possible COAs. There is a tendency to try to make the listed PIRs fit the mission, even if they are unsuitable or do not apply.

Tuning In to the Threat. During battles at the NTC, the opposing force (OPFOR) employs predictable forms of contact against FA battalions that result in significant combat power losses. For the OPFOR, FA units are high-payoff targets (HPTs). OPFOR commanders will commit a sizeable force to destroy cannon and rocket units.

The OPFOR consistently destroys artillery units with anti-tank fires from air- and ground-inserted infantry during MRR attacks, even when the Blue Force (Bluefor) has anticipated the points of insertion and the objectives of the infantry. In fact, additional combat power losses have occurred as FA battalion combat and field trains move within range of anti-tank fires from the same infantry forces.

In addition, enemy reconnaissance and unconventional forces have destroyed the brigade's only Q-36 Firefinder radar, command and control centers, and critical signal nodes. The OPFOR also will employ attack helicopters, scatterable mines and chemical munitions to destroy artillery units.



Units generally have indications of these enemy movements and pending attacks, but they fail to respond to preserve their combat power. FA units must evaluate the OPFOR's capabilities and how these capabilities can affect artillery operations. Appropriate, well-thought-out PIRs can help the commander make timely decisions to avoid such losses.

Defining PIRs. Several manuals define PIRs, but the best definition with examples of "good" PIRs is in *FM 34-8-2*. It states, "PIR are intelligence requirements associated with a decision that will affect the overall success of the command's mission."

According to *FM 34-8-2*, good PIRs do the following: "Ask only one question; focus on a specific fact, event, or activity; provide the intelligence required to support a single decision; are tied to key decisions that the commander has to make; and give a latest time of information of value (LTIOV)."

Typically, PIRs for artillery units fall into two categories: those that support EFSTs, which come from the brigade fire support element (FSE), and those that are force-protection oriented. When the unit receives PIRs from the brigade, it must incorporate the applicable ones into the battalion PIRs. The unit then analyzes the threats to its force, based on the enemy's capabilities and COAs. Next, based on the friendly scheme of maneuver, the FA unit develops its PIRs to recommend to the brigade commander.

The S3 selects the PIRs from the IRs developed during mission analysis and validated as PIRs during wargaming.

#	Priority Information Requirement	Decision	Latest Time Information of Value	NAI												
1.	Has the enemy air assaulted infantry vicinity NV490070?	Occupy alternate position areas for artillery. Reroute A and B Batteries to avoid air-inserted infantry observation and contact. Engage enemy infantry with indirect fires.	NLT 30 minutes after the enemy air assaults into his LZ.	1												
2.	Has the enemy employed special munitions along Route Adams?	Alter movement route of C Battery from Route Adams to Route Madison.	The forward detachments reaches the H-1.30 TPL, allowing C Battery at least 90 minutes to be in position ready to fire the FASCAM.	3												
3.	Is the RAG within acquisition range of the Q-36 radar and within range of 2-5 FA firing batteries?	Reposition the Q-36 from RPA 1 to RPA 2. Request Q-37 coverage from Div Arty to cover the Q-36 move. Direct 2-5 FA to reposition to the west. Refine radar zones.	MRR's first-echelon main body crosses TPL H-1.	9, 10												
4.	What is the location of the ARC-1 radar?	If the ARC-1 is located, engage with direct or indirect fire. If ARC-1 is destroyed, change survivability movement criteria from 6 volleys or every 10 minutes to 10 volleys or every 40 minutes.	Firing batteries in place ready to fire in support of the main battle area defense and identification of the enemy's point of penetration NLT when first-echelon forces reach TPL H-1.	8												
5.	Where will the enemy establish a point of penetration?	Displace firing batteries to PAA 3A, PAA 2B, and PAA 3C. Displace Q-36 to RPA 3; displace the TOC to NV575112.	Enemy penetrates PL Blue with two or more motorized rifle platoons.	2, 4, 5												
<p>Legend:</p> <table> <tr> <td>Div Arty = Division Artillery</td> <td>LZ = Landing Zone</td> <td>PL = Phase Line</td> <td>TOC = Tactical Operations Center</td> </tr> <tr> <td>FASCAM = Family of Scatterable Mines</td> <td>MRR = Motorized Rifle Regiment</td> <td>RAG = Regimental Artillery Group</td> <td>TPL = Time Phase Line</td> </tr> <tr> <td></td> <td>PAA = Position Area for Artillery</td> <td>RPA = Radar Position Area</td> <td></td> </tr> </table>					Div Arty = Division Artillery	LZ = Landing Zone	PL = Phase Line	TOC = Tactical Operations Center	FASCAM = Family of Scatterable Mines	MRR = Motorized Rifle Regiment	RAG = Regimental Artillery Group	TPL = Time Phase Line		PAA = Position Area for Artillery	RPA = Radar Position Area	
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FA Battalion Battle Staff Force-Protection PIRs

The PIRs are linked to decisions the commander must make and reflect the latest time the commander requires the information to make that decision.

At the NTC, units are generally successful at addressing PIRs related to EFSTs in the "method" portion of their essential FA tasks (EFATs)—particularly as PIRs relate to triggers for executing the EFSTs. (The EFATs are the specific FA tasks derived from the EFSTs.) Units are less successful in identifying force-protection related PIRs.

Force-Protection PIRs for Defensive Operations. The following scenario illustrates the process for determining force-protection PIRs based on the enemy's capabilities and COAs.

PIR 1. An enemy MRR will conduct a deliberate attack against a US brigade combat team (BCT). A RAG and divisional artillery group (DAG) will support the MRR attack.

During the intelligence preparation of the battlefield (IPB), the battalion S2 decided the enemy's most likely COA was to attack through the northern task force to penetrate the brigade's defense. The S2 believes the MRR would attack with its light infantry the night before the main attack to help shape the battlefield.

The next day at first light, an enemy regimental forward detachment attacked in the north to create an initial point of

penetration. Simultaneously, an envelopment detachment attacked in the south to fix the brigade forces and prevent them from repositioning to reinforce the task force in the north. At the same time, a flank security detachment attacked south of the envelopment detachment to protect the MRR's southern flank.

After these three elements made contact, the enemy fired a persistent chemical agent to further isolate the task force in the north. The enemy positioned his radar forward to support his counterbattery operations. He revealed his RAG, which he had purposely masked, to initiate fires to destroy and suppress brigade units at the point of penetration.

The forward detachment culminated its attack after creating a point of penetration. The first-echelon motorized rifle battalion (MRB) attacked to exploit the point of penetration and culminated its attack within the BCT's sector. The second-echelon MRB attacked along the same avenue as the first-echelon MRB to seize the MRR objective.

If the envelopment detachment and flank security detachment are successful, the MRBs will continue to attack toward the MRR objective to create multiple points of penetration, causing the BCT to fight in multiple directions. This would prevent the BCT from massing its combat power.

The FA battalion S2 templated the enemy infantry that would be air assaulted into the vicinity of NV490070 and estimated the infantry would take approximately 30 minutes to consolidate forces on the landing zone before moving to the objective.

The S3 noted that if the enemy inserts into that location, A and B Batteries would be within enemy observation and anti-tank weapons range. The S2 and the S3 developed PIR 1 listed in the figure. The PIR is based on the enemy's COA to air-insert infantry. (The figure is a modification of the "Enemy Critical Events Matrix," Figure 4-5 on an Event Template found in FM 3-09, Page 4-33.)

PIR 2. During the mission analysis process, the battalion fire direction officer (FDO) identified one of the EFATs is to emplace a family of scatterable mines (FASCAM) minefield in the vicinity of NV345165 in Brown Pass. The task and purpose of the FASCAM is to delay the first-echelon MRB west of Brown Pass for 15 minutes to isolate the regimental forward detachment east of the pass. The brigade fire support officer (FSO) established a trigger for firing FASCAM as the forward detachment is identified east of Brown Pass.

The FDO determined that C Battery will be the primary FASCAM shooter and B Battery the alternate shooter. To

range the pass, C Battery will move from one position area to another along Route Adams, the fastest route over even terrain. The battle captain determined it would take C Battery 40 minutes to move during limited visibility.

During the wargame, the S2 templated two possible persistent chemical strikes within a three-kilometer diameter. One chemical strike was templated at NV4614 near Route Adams with the purpose of isolating the northern task force, thus facilitating the penetration of first-echelon forces. The other templated chemical strike was at NV5110, which is over the BCT's tank company reserve.

If the enemy emplaced the persistent chemical in the vicinity of NV4614, it would affect both B and C Batteries. The S3's reaction to this possibility was to establish an alternate route for C Battery, Route Madison, which traverses rough and broken terrain. The battle captain determined C Battery would need 90 minutes for this more difficult move. Based on this wargame, the S2 and S3 established PIR 2 listed in the figure.

PIR 3. As the wargame progressed, the S2 asserted the enemy will support his maneuver plan with indirect fires by positioning his RAG near target areas of interests (TAIs) 9 and 10. Additionally, the division artillery established a common sensor boundary to the west of TAIs 9 and 10.

During the wargame, one of the enemy's regimental reconnaissance teams called for indirect fire against B Battery, destroying two howitzers and one ammunition resupply vehicle. Neither the Q-36 nor the Q-37 Firefinder radar acquired the enemy artillery. The S3 conducted an analysis and determined that the TAIs and artillery were outside the Q-36's range of 24 kilometers and short of division artillery's common sensory boundary.

Based on this assessment, the S3 decided to reposition the Q-36 farther to the west to acquire the RAG. He also determined the latest time he would need to know if the RAG can acquire the Q-36 and artillery firing units occurs when the MRR's first-echelon main body crosses Time Phase Line (TPL) H-1. This would trigger the repositioning of the friendly radar and artillery to the west. Based on this interaction, the staff compiled PIR 3 listed in the figure.

PIR 4. As the wargame continued, the S2 positioned the enemy's ARC-1 counterbattery radar to acquire both the

direct support and reinforcing battalions. As Bluefor artillery supported the BCT commander's scheme of maneuver with fires, the ARC-1 acquired Bluefor artillery and returned counterfire, destroying two howitzers and several wheeled vehicles. Based on this enemy action, the battalion S3 would counter by changing the survivability movement criteria for his firing batteries and directing battery commanders to increase dispersion between howitzer sections.

The S2 glanced at the BCT's HPT list. He identified the ARC-1 as a HPT when the RAG is set and ready to support the MRR's commitment of the first echelon into the BCT's main defensive area.

Examining the BCT's scheme of fires, the S3 noted one of the BCT's EFSTs is to mass indirect fires when the enemy enters task force engagement areas, the decisive point of the battle. During this phase of the battle, the battalion will execute its highest volume of fire and will be more susceptible to enemy acquisitions and counterfire.

The S2 and S3 agreed the location of the ARC-1 needed to be determined before this decisive point. Based on this discussion, the battle staff produced PIR 4 listed in the figure.

PIR 5. The staff continued wargaming and determined it is possible the enemy could penetrate the brigade's defense. The S2's assessment was that if the enemy penetrated the brigade's defense, it would be in the northern task force sector initially, followed by further penetrations in the south as the defense collapsed.

If penetrations occurred, the FA battalion would have to reposition its firing batteries, Q-36 radar and TOC to avoid contact with enemy armored formations. The staff developed PIR 5 listed in the figure to address this enemy action.

The previous discussion details possible PIRs for a BCT defensive mission and, by no means, are all-inclusive.

Force-Protection PIRs for Offensive Operations. Here are some possible force-protection PIRs for an offensive mission. If one of the enemy's COAs is to employ a raiding detachment, the staff can establish a PIR with a decision point to reposition batteries, the Q-36 radar, logistics sites and command, control and communications nodes away from the enemy's avenue of approach.

Another enemy option may be to employ an artillery raid. In this instance, the battle staff can produce a PIR with a decision point to reposition the Q-36 and a firing battery to deliver counterfire. If the enemy has enough time to prepare a detailed obstacle plan, the staff can develop a PIR related to identifying minefields and obstacles tied to a decision point to travel along alternate routes.

One of the most intellectually challenging aspects of the military decision-making process is wargaming. As part of wargaming, the battle staff produces several products, including a decision support template (DST) that details PIRs to support key commander and staff decision points. These PIRs help the commander by filling in intelligence gaps and allowing him to make timely decisions.

As Mao would echo, the creation of a detailed DST and associated PIRs requires "hard thinking." The difference between thinking hard up front or waiting until after the battle begins could be the success of the unit and the lives of its soldiers.



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