Call for Fire

The Company Leader TDG 19-04
By Capt. Eric Johnson
After a long night supporting your reconnaissance troop's zone recon mission, you do a final radio check with your Fire Support NCO in his OP on hill 509. The scout platoons are settled in to their positions on the screen line, watching the valley known as the 15 tango for enemy movement. So far, the troop has encountered Skolkan alliance Special Purpose Forces in trucks, as well as wheeled recon vehicles from the enemy's Brigade Tactical Group (BTG) recon company. The troop's 120mm Mortars are sitting at 60% of their base ammunition load after suppressing those enemy Ops the night before, with 30 rounds of HE between the two tubes. The troop commander is huddled in the CP on his headset, receiving an intel update from the Squadron on the enemy's anticipated attack. The call concludes, and he looks at you. "You're going to be busy today", he says, only half-jokingly.

This is part of our Tactical Decision Game Series. There is no ONE right answer, but there are varying degrees of right and wrong. Feel free to post your answers in the comments, on Social Media, or submit to The Company Leader. For an aggregated list of TDGs click HERE. To subscribe to The Company Leader click HERE.
The Company Leader
Leadership Lessons from the Tactical Level of War
Situation

You are the Troop Fire Support Officer of B Troop, 1-91 CAV (Airborne). Your unit deployed to southern Germany to check the advance of the Skolkan alliance with our NATO allies. Two months ago, the Alliance poured out of the North through the Suwalki Gap in northern Poland, and the forward stationed units of US Army Europe have been fighting tooth and nail to halt the advance until the Armored brigades from CONUS arrive in theater. Your Brigade was inserted by airborne drop two days ago astride a key mobility corridor, denying its use to the enemy while the 3rd Armored DIV (UK) and Panzer Brigade 21 (GER) advance toward your position from the west to exploit the advantage created. The Skolkan 112th BTG (mech.) is advancing on your brigade from the west.
Call for Fire

Enemy

Friendly UAS identified the 2-112th Mech infantry BN in TAAs in company-sized elements of 3x T-80s and 6x BTR-80s. Their mission is to find the weak points in the screen, paving the way for the main body of the 112th BTG to attack and destroy US forces, re-securing a key line of communication before NATO reinforcements arrive. You expect the 2-112th to begin the attack in about six hours, (1500 Local). You expect the T-80s to lead, supported closely by dismounted infantry from the BTRs. They will avoid high speed avenues of approach, relying on the work of their recon units to identify small unimproved mobility corridors to avoid detection for as long as possible. The steep and forested hills of the region will aid them in concealing their approach.

2-112 Mech Order of Battle

ASSAULT FORCE 2 x ZSU-23-4
10 x T-80
22 x BTR-80
3 x 2S9 (120mm Mortar)
Task Org

Your mounted recon troop consists of two platoons of four HMMWVs each, with your own Knight fire support HMMWV (laser designation capable) forward with 1st platoon, and yourself positioned with the commander and 1SG at the troop CP. The troop mortars are in position 1 km to the west, with 60 rounds of HE and 25 rounds of White Phosphorous (WP) smoke on hand. The troop has 1x 155mm Field artillery target to plan for this phase. Additionally, a section of 2x AH-64s will be available to the squadron from 1500-1600. Your Scout platoons are capable of calling for indirect fire. Each platoon also has a Puma Small Unmanned Aerial System (SUAS) capable of daytime and nighttime observation, and of pulling 10-digit grid coordinates.
Call for Fire

Mission

Your troop's mission is to screen the 15 Tango valley, fixing the 112th BTG fixing force, buying time for the brigade's infantry battalions to complete defensive preparations. Your displacement criteria is contact with a company-sized element of armor.

A 101st Airborne Division Soldier pulls the lanyard on an M777A2 howitzer during a fire mission in Southwest Asia, Jan. 26, 2019. The 101st Airborne Division deployed in support of Operation Inherent Resolve, working by, with and through the ISF and Coalition partners to defeat ISIS in areas of Iraq and Syria. (U.S. Army Photo by Spc. Gyasi Thomasson)
Commander’s Guideance for Fires

To buy our infantry troops the time they need, our troop needs to destroy at least 3x T-80s and 5x BTR-80’s before breaking contact. I want our mortars to focus on neutralizing stationary wheeled vehicles and dismounts. We will do this as they make contact with our platoons, to maximize their available ammunition. We will use our FA target to destroy any platoon or company sized groups of vehicles we detect, while the Apaches will prioritize the T-80s. I also want to see a fires plan for when we break contact, preferably using our own mortars.”
Output Required

Your commander wants to discuss the fires plan with you in 30 minutes as he refines the maneuver plan. Plot Mortar and FA targets within your troop’s AO, and assign observers, triggers, and firing assets for each. Plot an alternate Mortar Firing Point (MFP) as a survivability move due to the threat of enemy IDF to your mortars. Be ready to describe to the commander how you will achieve the effects he desires.

A Few Leader Questions to Consider:

1. Can you achieve all the desired effects with the assets you have? If not, what assets would you request from Squadron and/or Brigade?
2. How will you use non-standard observers? (SUAS/AH-64)
3. What are your triggers for the targets?
4. At what point will you request ammo resupply for your mortars?
5. How can you merge your plan with the direct fire plan to achieve the desired effects?
Helpful References

### Planning Defensive Fires Triggers

- **Technical Trigger**: Fire AE1020
- **Tactical Trigger**: At My Command Fire AE1020

<table>
<thead>
<tr>
<th>TOF (20s)</th>
<th>MSN Proc. (180s)</th>
<th>5 m/s</th>
<th>PL RED</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE1005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE1020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE1010</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Time Distance Table

<table>
<thead>
<tr>
<th>Speed (miles/h)</th>
<th>Rate of March (miles/h) in the Hour</th>
<th>Minutes to Travel 1 Kilometer</th>
<th>Minutes to Travel 1 Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 mph/16 kmph</td>
<td>8 mph/12 kmph</td>
<td>5</td>
<td>7.5</td>
</tr>
<tr>
<td>15 mph/24 kmph</td>
<td>12 mph/20 kmph</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>20 mph/32 kmph</td>
<td>16 mph/25 kmph</td>
<td>2.4</td>
<td>3.75</td>
</tr>
<tr>
<td>25 mph/40 kmph</td>
<td>20 mph/32 kmph</td>
<td>1.84</td>
<td>3</td>
</tr>
<tr>
<td>30 mph/48 kmph</td>
<td>24 mph/40 kmph</td>
<td>1.5</td>
<td>2.4</td>
</tr>
<tr>
<td>35 mph/56 kmph</td>
<td>30 mph/46 kmph</td>
<td>1.3</td>
<td>2.2</td>
</tr>
<tr>
<td>40 mph/65 kmph</td>
<td>33 mph/53 kmph</td>
<td>1.13</td>
<td>1.8</td>
</tr>
</tbody>
</table>

This table provides the time required to travel 1 kilometer or 1 mile while using specified march speeds. The travel times are calculated based upon rates of march (miles/hour) and includes time for scheduled short halts and time lost due to road and traffic conditions. The time for long halts must be added to the total travel time. Multiply the total distance to be traveled (miles or kilometers) by the travel time factor for 1 mile or 1 kilometer for the designated speed.

### Distance Formula

Distance = Rate x Time (DRT)

Point at which speed and direction are determined

Predicted Intercept Point

Point at which speed and direction are determined

Trigger Point

Predicted Intercept Point

Distance to the Trigger Point = (Transmission Time + Time of Flight) x Target Speed (5 seconds + 20 seconds) x 5 meters per second = 125 meters
Target Control Measures

Reference: ATP 3-09.30
NOTE: ALWAYS use superfine markers when drawing targets

A point target is a target that is less than or equal to 200 meters in width and length. Each segment of the target should be 500 meters.

A linear target is a target that is greater than 200 meters in length and less than or equal to 200 meters in width.

A rectangular target is a target that is greater than 200 meters in length and width.

A circular target is a target that is in a circular pattern or is vague as to exact composition and has a radius greater than 100 meters.

Final Protective Fire (FPF). Include the target number, FPF, and optionally, the unit to fire and caliber (120-mm, 155-mm) or type of weapon (mortar, artillery).

A target reference point is an easily recognizable point on the ground (either natural or man-made) used to initiate, distribute, and control fires (ADRP 1-02).

A group of targets consists of two or more targets on which fire is desired simultaneously. A group of targets is designated by a letter/number combination.

A series of targets is a number of targets and/or group(s) of targets planned to be fired in a predetermined sequence to support a maneuver operation.
The Company Leader is an online professional forum dedicated to furthering the profession of arms through discussion, writing, and practical tools.

To learn more, go to http://companyleader.themilitaryleader.com

Subscribe through the website or at https://tinyurl.com/y8gphyz6 and receive the free resource: A Deeper Look at the Army Leader Requirements Model

Follow The Company Leader on Twitter, Facebook, and Instagram @thecompanyldr

This TDG was created and submitted by Capt. Eric Johnson. He is currently the Grizzly 27, FSO Trainer at JMRC. Eric has previously served as a Platoon Leader, Battery XO, Assistant Operations Officer, BN FSO, BN FDO, and Battery Commander in Armored and Stryker BCTs. Check out his contribution to #BranchSeries HERE.