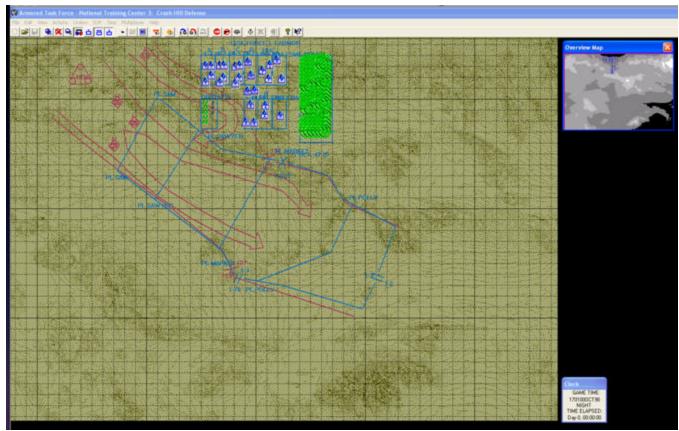
AAR - National Training Center (Mission 3): Crash Hill Defense Scenario from ARMORED TASK FORCE



written by Maj P Proctor

National Training Center (Mission 3): Crash Hill Defense

YOU ARE THE COMMANDER OF TF1-3 AR. THE FOLLOWING ARE EXCERPTS FROM AN OPERATIONS ORDER FOR 1 BCT, 23 AD, YOU'RE HIGHER HEADQUARTERS. THIS MISSION BEGINS AND ENDS IN PHASE 2, AFTER 1-23 CAV HAS PASSED THROUGH YOUR LINES.

OPORD 4-98?

1 BCT, 23AD (DESERT RAT)

1. SITUATION:

A. Enemy Forces.

The 41 MID is currently in defensive positions in the Quail mountains. Within the next 48 hours, he is expected to resume offensive operations. He is currently at 65% strength. His mission is to attack NET 170100OCT98 to destroy 1 BCT, 42AD and capture key passes in the Soda Mountains. He will likely attack with 2 MIBR's abreast, the 133 (APC) in the south and the 127 (IFV) in the north. The second echelon will consist of the 132 MIBR (APC) in the south, and the 129 TKB in the north. APC MIBR's consist of 27 T-80UM's and 70 BTR-80's. The IFV MIBR consists of 29 T-80 UM's and 69 BMP's. BRAG's consist of 1 BN each of 2S1, 2S3, and 2S19. The DAG consists of 2 BN 2S5, and 2 BN BM-21.

- 1. Most likely course of action is that the enemy brigades will attack in zone, 127 MIBR and 129 TKBR in 1-3's sector, and 133 and 132 in 1-78's sector. Most dangerous COA is that the enemy columns will converge at crash hill and both continue in 1-3's sector.
- ? 2. Expect as many as 18 sorties of SU-27 and 4 X HIND-E in our sector.

B. Friendly Forces.

The 23 AD defends in sector NLT 1701000CT98 to destroy the from grid NK0199 to NK1436 to destroy the lead divisions of the 16 Mechanized Army and block the 17th TD to facilitate the V US Corps counterattack. 1-23 CAV guards the division's sector to our front between PL HUCK (not shown) and PL SSSAWYER NLT 1618000CT98 to defeat the 16 Mech Army Recon. 2 BCT, 23 AD defends to our right as the Division supporting effort to destroy the 42 MID. 1 BDE, 47 IN, to our north, defends strongp[oint 1 NLT 160010CT98 to deny 132 MIBR (APC) access to northern AA's. 3 BCT, to our rear, acts as the division reserve and O/O counter-attacks to block the 17 TD.?

C. Weather.

Winds will be from the northwest at 6 MPH. BMNT will be at 0406, EENT will end at 1935.

2. MISSION.

1 BCT, 23AD defends in sector NLT 1701000CT98 from NK162151 to NK228268 to destroy the 41 MID (APC Heavy) and facilitate the FPOL of the 3 BCT

3. EXECUTION.

A. Commander's Intent.

The BCT must destroy the 41MID west of the Brown-Debnam Passes to set the conditions for the division counterattack. The brigade will not defend forward of PL SAWYER. I wish to defend forward of PL MARKET, to allow the enemy minimum time to react to our defensive positions. Significant to this operation is the retention of the passes in the north. Success is defined as the destruction of 41 MID and the successful FPOL of 3BCT.

1. Phase 1.

<paragraph omitted>

2. Phase 2.

This phase begins when the enemy's CRP's are destroyed and 1-23 CAV has completed the RPOL. TF1-3 and TF1-78 Mech defend in sector to destroy the first echelon MIB's of the 133 and 127 MIBR's. This phase ends when the 1st and second echelon MIB's of the 133 and 127 MIBR are destroyed.?

3. Phase 3.

Counter-attack of TF1-2 through TF1-3.

<paragraph omitted>

4. Phase 4.

<paragraph omitted>

B. Fires.

Throughout this operation, FA POF is to TF1-3, the brigade main effort. HPT's are enemy engineer and ADA assets.

1. Phase 1.

<paragraph omitted>

2. Phase 2.

During this phase, 1-3 and 1-78 are allotted 1 FASCAM each to delay the second echelon. TF1-3 is also allotted 2 A-10 CAS sorties to delay the 2nd echelon.?

3. Phase 3.

<paragraph omitted>

4. Phase 4.

<paragraph omitted>

- C. Tasks to subordinate units.
 - 1. TF 1-3 AR.
 - A. Defend in sector between PL SAWYER and MARKET to destroy the 127 MIBR.?
 - B. Prevent penetration of PL POLLY (the Brown-Debnam Passes) by more than 2 MIP's.?

<paragraph omitted>

2. TF 1-78 MECH

<paragraph omitted>

3. TF 1-2 AR.

<paragraph omitted>

- D. Coordinating Instructions.
 - 1. No recon assets will be placed farther forward than 500m past PL SAM.?
 - 2. No obstacles will be placed in the Brown-Debnam Passes.
- 4. SERVICE SUPPORT.

<paragraph omitted>

- 5. COMMAND AND CONTROL.
 - A. Succession of command is per SOP.? B. Current SOI is in effect.

Synchronizing Fire and Maneuver National Training Center 3: Crash Hill Defense

The key to winning any battle, offensive or defensive, is having the most combat power at the decisive point. Combat power is not just tanks and Bradleys, though. Combat power is also fire support (artillery and mortars), mobility (engineers), and all of the other components of the battlefield operating system (BOS).

Fire support is perhaps the most complicated component to synchronize into the combined arms fight, for a number of reasons. First, the flexibility of the weapon systems (numerous ammunition types, great range, engagement options) can make it hard to figure out how and where to place your fires. Also, movement, positioning, and ammunition management require careful planning and prioritization.

How it's done in the force.

When a real armored task force first receives its mission, the staff quickly analyzes it and briefs the task force commander on his mission and assets available. It is here that the commander issues his guidance to his staff, on how he wishes to accomplish the mission. A key element of this guidance is the Commander's Guidance for Fires. It describes how he wants to use fire support (artillery, mortars, close air support, and any other available assets) to help accomplish his mission.

The battalion fire support officer, a field artillery captain who is a member of the armor or infantry battalion staff, translates this guidance in to a fire support plan. The two most important components of this plan are *Essential Fire Support Tasks* and the *High Payoff Target List*. These components allow the unit to make decisions on who, what, where, when, and why to fire during the fight.

It works like this. Essential Fire Support Tasks (EFSTs) are the tasks that *must be accomplished*, or the task force course of action will have to be altered during the fight (almost always disastrous). When one or more of these tasks is triggered, they supersede all other fires. No matter what targets are being shoot, they are canceled when it is time to fire an EFST.

The high payoff target list (HPTL) is next in priority. If it is not time to fire an EFST, the next target in priority is an HPT. These are targets that you have identified which, if destroyed, will make it easier for your task force to accomplish its objective. They may or may not be HVTs (high value targets) to the enemy, things that, if destroyed, will cause him to alter *his* course of action.

Finally, if there are no EFSTs to be fired, and no HPTs have been spotted, fires go to the unit with priority of fire. That is, the unit with priority of fire can call targets of opportunity that he has identified and wants to engage. These fires will immediately

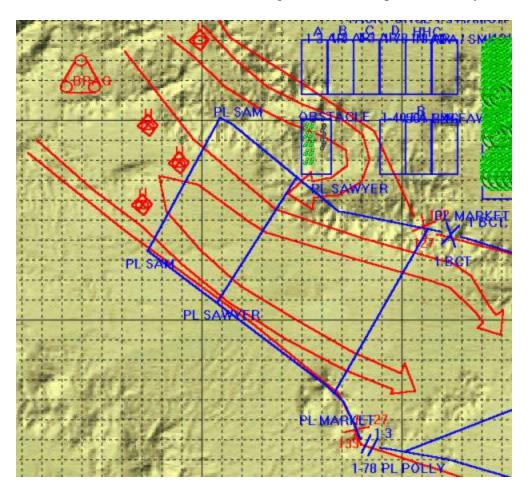
stop, however, if an HPT is identified or an EFST is triggered. (Priority of fires is not simulated in **Armored Task Force**, so we ignore it in this example.) The task force staff begins planning the fight and the battalion fire support officer is there. He continues to refine and synchronize his fire support plan with the maneuver plan, until he has a plan which is both synchronized with maneuver and meets the task force commander's guidance.

A document that is produced as part of the *brigade* fire support plan is the AGM (attack guidance matrix). This helps executors, battalion and company fire support officers, decide what targets to attack with what assets. It also provides TSS (target selection standards) that tell executors what targets *not* to shoot at. This will be important later in this discussion.

How it looks.

Our mission is to defend between PL SAWYER and MARKET against an MIBr (Mechanized Infantry Brigade) and prevent him from penetrating PL POLLY. He has three times more maneuver, three times more artillery, three times more CAS (close air support) and a company of HIND-Ds. This should be fun.

First, I take a look at how the S-2 (intelligence officer) expect the enemy to attack.



Looking at my graphics, when superimposed on the enemy's, I see that I am missing a graphic control measure. I really need another phase line (PL) about three to six kilometers northwest of PL SAM. This is the area where I will first spot the enemy maneuver coming out of the mountains. Since I do not have a phase line here, I will, henceforth, refer to this choke point as "NAI 1" (NAI stands for "named area of interest", an area that my recon looks at, that triggers a decision from the commander).

I will also divide the area between PL SAM and PL SAWYER into the "security zone" and the "engagement area". Technically speaking, the security zone should be a little further out. But I have very little battle space between PL SAM and my main battle area, so I really should have another phase line about half way between SAM and SAWYER to indicate where my security zone ends and my engagement areas start.

Phase	<u>Activity</u>	<u>Begin</u>	End	Approximate Elapsed Time
Ι	Enemy reconnaissance and CRP's (combat recon patrols)	Game start	First Echelon MIBs at NAI 1	H + 0
II	First echelon MIBs in the security zone	First Echelon MIBs in NAI 1	Second echelon MIB in NAI 1	H + 15
III	First echelon in the engagement area, second echelon in the security zone	Second Echelon MIB in NAI 1	Second echelon MIB enters the engagement area	H + 30
IV	Second echelon in the engagement area	Second echelon MIB enters the engagement area	All enemy destroyed in the engagement area	H + 45

In the defense, the enemy drives the phasing of the operation. These are the phases in which I will conduct the operation.

Since I am my own commander (at least here) I will establish my own guidance for fires. I must consider the full range of assets at my disposal (CAS, artillery, and mortars). I must also consider the enemy's capabilities (T-80UMs that can see through smoke and at night, three heavy artillery battalions).

I talk a bit more about this at the end of this article, but I am not going to try only to mass my fire support at the decisive point (the enemy breach point). I will use my CAS (close air support), PGMs (precision guided munitions), and mortars in the main battle area, but my artillery will be used to prevent the enemy from massing *his* combat power at the decisive point (neutralizing his artillery) and to *facilitate* my massing at the decisive point (destroy ADA).

Here is my guidance for fires.

- I want to use aggressive counter-reconnaissance and artillery fires to destroy all dismounted recon teams, so that I do not take effective indirect fire prior to direct fire contact with the enemy.
- ✓ I want to use artillery to destroy enemy air defense in zone to give me complete freedom of movement in my airspace.
- ✓ I want to use close air support to attrit the enemy first and second echelon, both during his approach and when he is set in the engagement area.
- I want to use my mortars to suppress the enemy's light-skinned AT systems in the engagement area.

Since I am also the Battalion FSO (Fire Support Officer), I am going to write my own EFSTs (Essential Fire Support Tasks). Note that real EFST's would have planned target numbers. I am not going to go to this level of detail, but everything else is doctrinally correct.

EFST 1:	
<u>Task</u> .	Destroy enemy dismount recon teams in sector.
Purpose.	Prevent enemy from placing indirect fires on my high value targets.
Method.	1-82 FA fires a battalion 1 round (18 total rounds) of DPICM on enemy dismount recon teams when identified, prior to first echelon MIBs crossing PL SAM.
Effects.	TF 1-3 AR looses no high value targets due to enemy indirect fire. 3 DRTs (division recon teams) and 2 IRTs (independent recon teams, armed with SA-19s) destroyed

EFST 2:	
<u>Task</u> .	Destroy enemy air defense systems in sector.
Purpose.	Prevent enemy from destroying friendly aircraft during main battle area fight.
Method.	1-82 FA fires a battalion 1 round (18 total rounds) of DPICM on stationary 2S6s, SA-9s, and SA-19s in sector when identified.
Effects.	TF 1-3 AR looses no aircraft to air defense artillery. 2 SA6s, 2 SA-9s, and 2 SA-19 teams destroyed

EFST 3:	
Task.	Disrupt first echelon MIBs when they enter the engagement area.
Purpose.	Allow TF 1-3 AR to complete the destruction of first echelon MIBs with direct fire.
Method.	1, 1-ship sortie of A-10 Thunderbolt leaves for the IP (initial point) when first echelon MIBs arrive at NAI 1. Aircraft leaves the IP when first echelon MIBs enter the engagement area.
Effects.	TF 1-3 AR completes the destruction of first echelon MIBs with direct fire. 6 T-80UMs and 3 BMP-2s destroyed.

EFST 4:	
Task.	Disrupt second echelon MIBs when they enter the engagement area.
Purpose.	Allow TF 1-3 AR to complete the destruction of second echelon MIB
	with direct fire.
Method.	1, 2-ship sortie of A-10 Thunderbolts leaves for the IP (initial point) when second echelon MIBs arrive at NAI 1. Aircraft leaves the IP when second
	echelon MIB enters the engagement area.
Effects.	TF 1-3 AR completes the destruction of second echelon MIBs with direct
	fire. 12 T-80UMs and 6 BMP-2s destroyed.

EFST 5:	
<u>Task</u> .	Disrupt enemy BRDM-2 ATGMs in the engagement area.
Purpose.	Allow TF 1-3 AR to complete the destruction of enemy without taking AT fires.
Method.	Mortar platoon fires a platoon 2 (12 total rounds) HE on BRDM-2 ATGMs in the engagement area when identified after first echelon MIBs enter the engagement area.
Effects.	TF 1-3 AR completes the destruction of MIBs without taking AT fires. 3 BRDM-2 ATGMs destroyed.

EFST 6*:		
Task.	Destroy enemy engineer vehicles in the engagement area.	
Purpose.	Prevent the enemy from breaching TF 1-3 AR main obstacle belt to allow	
	TF 1-3 AR to complete the destruction of enemy with direct fire.	
Method.	1-82 FA fires 6 total rounds of Copperhead at each engineer company in	
	the engagement area when they are spotted moving to the breach site.	
Effects.	Enemy does not breach main obstacle belt. 18 enemy M9 ACEs	
	destroyed.	
* This last EFST is just something I want to try. It is of dubious tactical soundness,		
and I don't even mention it in my commander's guidance.		

I am not going to build an AGM (attack guidance matrix) here, as that is beyond the scope of the battalion fire support plan. But I would like to spend a minute talking about target selection standards.

In the attack, we are fighting a dug-in enemy, who sits in one spot, and usually does not displace when taking incoming. In the attack, the enemy will try to keep moving to avoid artillery fire. If he does take fire, he will conduct a survivability move to try to avoid additional volleys. This requires that we adjust our artillery tactics in the defense.

Firing DPICM, a tank in the open takes around 54 rounds to destroy. That's three volleys from an artillery battalion. The tank will never sit around for that long. For that reason, artillery is ineffective against attacking tanks, even if they are stationary. Similarly, we will not fire more than 1 volley at a target, as they will move before the next one lands. The only possible exception is enemy vehicles in an obstacle. But hopefully the enemy will not get that close.

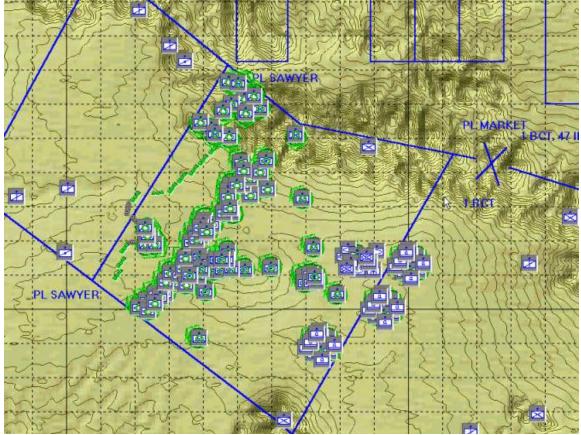
Similarly, it is almost impossible to hit a moving target (in **ATF** or reality), unless we are using PGMs. We predict that the second echelon MIB will enter the engagement area in 45 minutes. Firing 1-volley missions (which take about 2.5 minutes to process), we are only going to get to fire about 18 targets prior to the second echelon entering the engagement area. We don't want to waste them on targets we probably won't hit.

So, our target selection standards will prohibit firing on tanks and prohibit firing at moving targets, except with PGMs or in the breach. Similarly, our attack guidance matrix would dictate that only 1 volley per target be fired (again, except in obstacles).

We will cover HPTs during each phase. Again, we will not really talk about priority of fires during this discussion, as it is difficult to simulate in **ATF**.

Setup for the fight.

We build our defense much as is described in "Building an Engagement Area" in chapter 6 of the *Armored Task Force User's Guide*.



It is difficult to see here, but I have several fire teams and two scout vehicles posted in my rear area in an effort to find enemy dismount recon teams and IRT's (independent recon teams, equipped with SA-19's). I also have a good deal of reconnaissance forward to watch NAI 1 (not shown here).

Finally, I have positioned my COLT's (combat observation & lasing teams) closer to the main obstacle belt, so they can lase for PGMs (precision guided munitions) when engineers emerge to breach the obstacle belt.

I have an infantry strongpoint on the northeast corner of the defense, and an infantry AT ambush near the center of my defense. My tanks are forward, within a kilometer or two of the obstacle belt. My Bradleys are further back, in positions on the west side of Crash Hill, in positions where they can observe the entire defensive line. I have formed a reserve with a platoon of four plow tanks, my Volcanoes and MOPM teams, and two smoke generators. The mortar platoon is dug in directly behind Crash Hill, and the three firing batteries are dug in along PL MARKET.

Phase I: Enemy reconnaissance and CRP's (combat recon patrols)

The scenario begins with enemy the LD (crossing of the line of departure) of the enemy CRP's. The results of the counter-reconnaissance fight from the previous 24 hours are simulated by the positioning of enemy dismount recon teams and IRTs in our rear area.

During this phase, the only enemies that are likely to be spotted are enemy dismount recon teams, IRTs, and enemy CRPs (combat recon patrols, a mix of BMPs and T-80s, three vehicles total, that recon routes into our sector). The CRPs will be moving, so they are not good targets to try to engage with fire support.

DRTs (division recon teams) and IRTs, on the other hand, are prime targets for engagement, if we can find them. In fact, this is the point of the two EFSTs in effect, EFST 1 (Destroy enemy dismount recon teams) and EFST 2 (Destroy enemy air defense). Our HPTL reflects this.

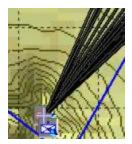
HPTL for Phase I:

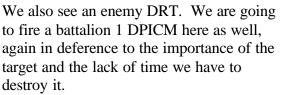
- 1. Dismount recon teams that can see our HVTs (high value targets)
- 2. Dismount recon teams that can see our main battle area
- 3. IRTs (SA-19 equipped) in sector
- 4. Artillery FDCs
- 5. Artillery systems

Next comes the all-important first clock start to "see what we can see". I am going to start the clock and then immediately stop it. Here's what I see.



In the northern portion of our sector, we spot an IRT. We are going to engage it with a battalion 1 round (18 total rounds) of DPICM. This might seem like overkill, but it is very important that we kill the target quickly, as the CRP is crossing the LD right now, meaning the first echelon MIBs are only 15 minutes behind.

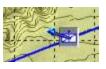




We fire these targets and they are quickly destroyed. I know there are more recon teams out there, but I have not spotted them, so I start repositioning the fire teams and scouts in my rear area in order to find and engage them

We fire these targets and they are quickly destroyed. I know there are more recon teams out there, but I have not spotted them, so I start repositioning the fire teams and scouts in my rear area in order to find and engage them.





In the meantime, I move to the next available target in my HPTL. I have spotted some stationary artillery systems, so I target them with a battalion 1 round (18 rounds total) DPICM each.



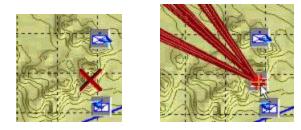




Meanwhile, a CRP has entered the engagement area and we are destroying it with direct fire. There is another CRP trying to test the southern portion of our sector. This is a good indication that the first echelon MIBs are passing through our NAI 1, so I return there and, sure enough, find significant movement through this NAI.



Meanwhile, we have spotted another dismount team in our sector. We engage it with a battalion 1 of DPICM.



Phase II: First echelon MIBs in the security zone

EFST 3 (destroy enemy air defense) becomes active during this phase. Our HPTL reflects this.

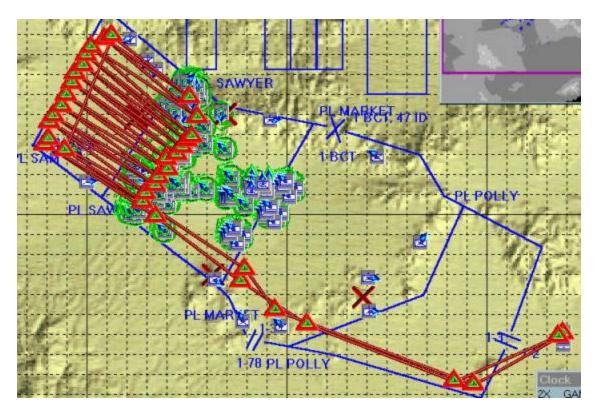
HPTL for Phase II:

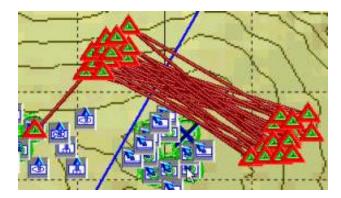
- 1. Stationary 2S6s and SA-9s that can range the engagement area
- 2. IRTs (SA-19 equipped) in sector
- 3. Dismount recon teams that can see our HVTs (high value targets)
- 4. Dismount recon teams that can see our main battle area
- 5. Artillery FDCs
- 6. Artillery systems

The first echelon MIBs at NAI 1 begin Phase II. This also is the trigger for EFST 3.

"...1, 1-ship sortie of A-10 Thunderbolt leaves for the IP (initial point) when first echelon MIBs arrive at NAI 1."

So we detach one aircraft from its platoon and start it moving toward the engagement area (it will take 15 minutes for it to start moving, simulating the trip to the IP).

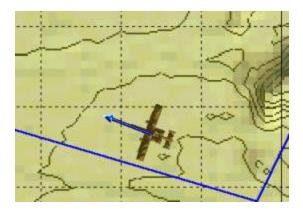




Unfortunately, we have apparently missed one dismount recon team. C Battery, 1-82 FA takes indirect fire and I lose a howitzer. I immediately dispatch a scout to the area to try to spot the observer. I also move a smoke generator to the battery to try to build a smoke screen to conceal the battery.

But, after the loss of two more howitzers, it is obvious that this is not doing any good, so I displace the battery to more covered terrain south of its current location, continuing to screen the move with the smoke generator, and continuing to search for the observer. (I never do find him, but, after losing one of my plow tanks in the reserve, he causes no more casualties.)

Spot Report	Log	X
0, 00:28:12 0, 00:28:16 0, 00:28:20 0, 00:28:31 0, 00:28:35	2 / COLT / 1 BRT has detected an an enemy 2S3 152mm SP Howitzer. 2 / COLT / 1 BRT has detected an an enemy 2S3 152mm SP Howitzer. 2 / COLT / 1 BRT has detected an an enemy 2S3 152mm SP Howitzer. AT / 1B / 3 / / D / 1-78 IN has destroyed an enemy BMP-2 IFV with Javelin A 3 / C / 1-40 FA is being suppressed incoming artillery.	
0, 00:28:42 0, 00:28:47	1 / 2 / C / 1-40 FA was destroyed by incoming artillery. 2 / COLT / 1 BRT has detected an an enemy 2S3 152mm SP Howitzer.	E E



Our first aircraft has left the IP and is inbound to the engagement area. Unfortunately, we have spotted a couple stationary 2S6s.



First, I divert the aircraft to a holding area well southeast of the engagement area. With my aircraft safe, I fire a battalion 1 round (18 total rounds) of DPICM on the targets and destroy them.

My force has also spotted two SA-9s in sector. One stops near our dismount strongpoint, is targeted with artillery, and destroyed. The other is destroyed by direct fire.

Phase III: Second echelon MIB in the security zone, first echelon MIBs in the engagement area

The fire support plan is not going so well. I expected to be destroying tanks in the engagement area with my first, 1-ship sortie of A-10s (EFST 3) by now, but I am still taking down air defense artillery. I had anticipated my HPTL to be...

Anticipated HPTL for Phase III:

- 1. Enemy engineer vehicles in the engagement area
- 2. Artillery FDCs
- 3. 2B11 120mm mortar trucks
- 4. Artillery systems
- 5. BRDM-2 ATGMs in the engagement area

Instead, because there are still ADA systems preventing me from using CAS, my HPTL is...

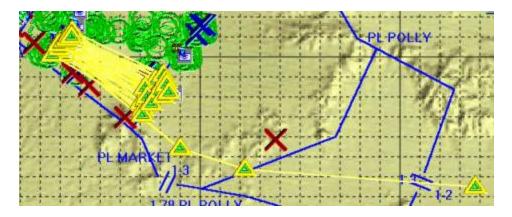
Actual HPTL for Phase III:

- 1. Stationary 2S6s and SA-9s that can range the engagement area
- 2. Enemy engineer vehicles in the engagement area
- 3. Artillery FDCs
- 4. 2B11 120mm mortar trucks
- 5. Artillery systems

The first echelon MIBs at NAI 1 begin Phase III. they also trigger EFST 4.

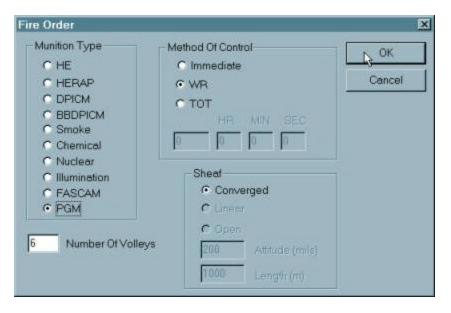
1, 2-ship sortie of A-10 Thunderbolts leaves for the IP (initial point) when second echelon MIBs arrive at NAI 1.





Finally, I destroy all of the air defense artillery. I begin moving my first aircraft toward the engagement area, to engage the first echelon, setting firing lines.

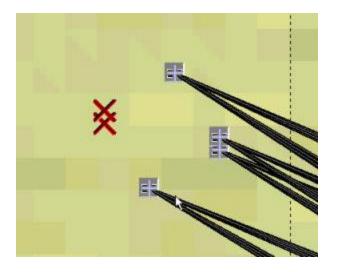
I have identified engineers in the engagement area. Since I have a COLT (combat observation and lasing team) within 3 kilometers of the engineers, I am going to try to execute the "Copperhead ambush" (this is also EFST 6, destroy enemy engineers in the engagement area).





This attack only requires three guns. This leaves 12 of my 15 remaining guns available for other targets. I also have identified 6 FDCs for one artillery battalion, near NAI 1, so I am also going to engage this target (an HPT).

Meanwhile, I am now in direct fire contact with the lead echelon MIBs in the engagement area.





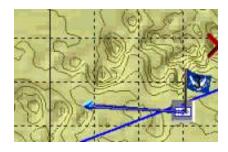
Phase IV: Second echelon MIB in the engagement area

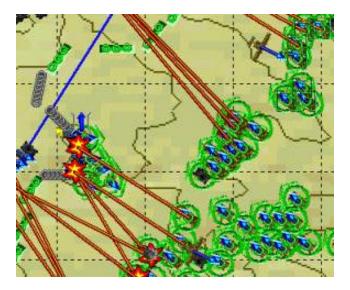
The fire support plan is now back "on track". I have one aircraft engaging vehicles in the engagement area, and two more arriving at the IP (initial point).

HPTL for Phase IV:

- 1. Enemy engineer vehicles in the engagement area
- 2. Artillery FDCs
- 3. 2B11 120mm mortar trucks
- 4. Artillery systems
- 5. BRDM-2 ATGMs in the engagement area

The trigger to begin this phase (the second echelon MIB entering the engagement area) is also the trigger for the second sortie of aircraft to leave the IP. Right on cue, they enter sector. A company of engineers is mounting a breach operation near my anti-armor ambush position, in the southern portion of my sector, so I divert my aircraft to stop the breaching operation.

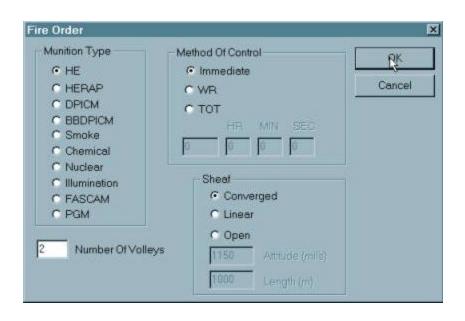


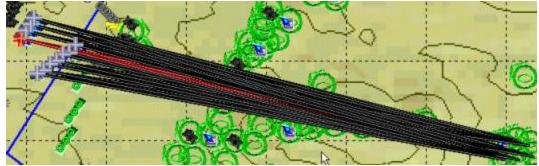




Meanwhile, I have identified another set of 6 artillery FDCs near NAI 1, so I will again target them with artillery (FDCs are HPTs).

A BRDM-2 ATGM battery has set a firing line in front of my southern-most armor company and is having some success in destroying my vehicles at stand-off range. Stationary BRDM-2s trigger EFST 5, so I will use my mortars to suppress this threat

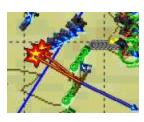


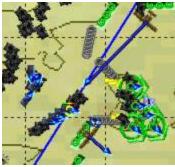


As the fight continues, the tide is turning. The enemy's artillery is being neutralized by the destruction of FDCs, and we have been effective in destroying the enemy's engineers with a combination of PGMs, close air support, and direct fire. The enemy is now a "sitting duck".

Our aircraft have run out of mavericks, so I are moving them closer to employ their 30mm anti-tank gattling guns.

	Thunderbolt		Status
eed: 1	20 m/s		AGL Altitude: 150 m
NU-8A Ave	Weapons 1000	- b - I	
GM-65D Me	i 0		
	ana. ee		×







Finally, I am out of cannon ammo as well. I delete the routes for both aircraft and they "return to base" (to the location where they started the scenario).

The enemy attack is stalled, and I am basically waiting for time to expire. I am still taking artillery fire though. There is about a company's-worth of enemy combat power remaining in the engagement area, so removing the enemy's "eyes" on my battle positions is not an option. The best way to silence the artillery is to destroy the remaining enemy FDCs. The only problem is that I can't see them. I try to move my scout to spot them. Finally, I have to leave my sector. The order says...

1. No recon assets will be placed farther forward than 500m past PL SAM.



Using this guidance, I cross PL SAM and get a scout in a spot where iy can see the enemy FDCs. I start engaging them with BBDPICM (Base Burn Dual Purpose Improved Conventionaly Munitions, and extended range DPICM).

I end up destroying all but one of them, which sneaks off into a hide position. I reposition several times, but cannot spot him prior to the completion of the mission.

Attentio	n	<u>.</u>	
?	The mission is over. All mission objectives successfully completed. Do you wish to continue?		
	Yes	No	

The enemy is "saved by the bell" and I choose to let that last brave FDC section live to fight another day.

Here are the results for the scenario:

All mission objectives completed.

Way to hold your ground! You completely blunted the enemy assault. Just hold on for a few more minutes. 3 BCT is rolling up fast to take the fight. Green Knight 6, out!

Mission Objectives:

1. Achieve mission objectives no later than 170325OCT98.

2. Prevent penetration of PL POLLY by 9 or more enemy vehicles or teams.

Results:

- 1. Mission objectives were maintained beyond 170325OCT98.
- 2. The enemy has penetrated PL POLLY with no vehicles or teams.

Enemy Starting and Ending Combat Power:

Vehicle Type	Starting	Ending
BMP-2 IFV	90	8
T-80B MBT	3	0
BRDM-2 with ATGM	27	4
2B11 120 mm Mortar	18	12
2S19 152 mm SP Howitzer	18	18
ACRV (MT-LBu 1V13)	30	13
Enemy M9 ACE	18	0
Mi-24 HIND-E Attack Helicopter	4	0
Enemy M728 CEV	3	0
BM-21 122mm MRL	18	18
2S1 122mm SP Howitzer	24	24
2S5 Giatsint-S 152mm SP How.	18	15
2S3 152mm SP Howitzer	18	18
T-80U MBT	24	0
T-80U MBT with Plow	12	0
2S6M Tunguska	2	0
SA-9 Gaskin	4	2
Su-25BM Frogfoot	4	0
SA-19 Team	2	0
DRT Team	3	2

Friendly Starting and Ending Combat Power:

Vehicle Type	Starting	Ending
M1025 Scout HMMWV	6	4
M1A2 MBT	33	23
M1A2 MBT with Mine Plow	9	8
M2A2 Bradley IFV	14	14
Javelin Team	12	10
Fire Team	15	14
M109A6 Paladin 155 mm SP How.	18	14
M1068 Fire Direction Center	6	5
M981 FIST-V	4	3
M992 FAASV	18	18
M1059A3 Smoke Generator	2	2
A-10 Thunderbolt	3	3
M139 Volcano on M985 HEMTT	2	2
M1064A3 120mm Mortar Carrier	6	6
M6 Bradley Linebacker	4	3
M113A3 APC	2	2
M131 MOPMS Team	1	1
COLT Team	2	2

Allied Starting and Ending Combat Power:

No allied vehicles in this scenario.

Fire Support in the defense.

It is worth noting two things about this example. First, commander's guidance for fires is seldom as detailed as we see here. Second, the way artillery is used in this example is not, necessarily, the "textbook solution", the way in which most units would use fires in the defense.

Here are some more standard uses for fire support in the defense, along with some reasons that they are often not effective.

Tactic	<u>Conventional</u> Wisdom	<u>Pitfalls</u>
FASCAM to separate echelons	If we delay the second echelon, it gives us enough time to destroy the first echelon before the second arrives.	It takes 30-45 minutes for one battery to fire smoke. Echelons are only separated by 15 minutes. If we use a whole battalion, we may get the FASCAM there in time, but the whole artillery battalion will be tied up while the first echelon MIBs are entering the engagement area.
FASCAM to delay one of the two lead MIBs	We will be able to destroy the lead MIBs sequentially with direct fire, since one will be delayed.	Besides tying up the artillery battalion for 15-20 minutes while the MIBs are in the security zone, we are only delaying the inevitable. Instead of facing two MIBs in the lead echelon, we will just be facing 2 MIBs in the second echelon. You don't gain a lot.
CAS against the second echelon.	If we destroy the second echelon with CAS, there will be no MIB to exploit the first echelon's breach.	You have to fly your aircraft through the first echelon, which, if high-altitude is denied by the air defense threat (as in this scenario), creates a danger from ground fire. In addition, in the real, non- ATF world, you must deconflict aircraft from artillery fire. This will prevent us from firing on our artillery on enemy artillery.
FASCAM plus massed artillery against an MIB.	If we can catch an MIB in FASCAM and mass fires on it, he will be vulnerable to indirect fire.	You need to a) catch the enemy in a choke point 800m wide and, b) get twenty minutes advanced warning before he arrives at this point in order to start shooting the FASCAM. Otherwise, either a) the enemy will go around the FASCAM, or b) you will not get the FASCAM finished before he is through it, or c) both. Seldom is terrain this cooperative.

Massing on the enemy passing through the breach	Catch the enemy in the breach and pound him with artillery.	The breach is being passed through because it is <i>open</i> . The enemy does not slow down much to go through it. True, the enemy can only pass through one vehicle at a time, but he is going to go through the breach in a bumper-to-bumper fashion. An MIB, compressed to column formation with 5 meters spacing between vehicles, is only about 600 meters long. Even if the column is slowed to 20 mph (9 m/s), the battalion will only be in the breach for about 60 seconds. It takes about 2.5 minutes to <i>shoot</i> the first round of a fire mission. Add another 30 seconds or so for time of flight, and you are going to miss the target. The breach is a direct fire fight.
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I choose, instead, to do what the enemy does to you when you attack: try to destroy my opponents HVTs. When you are attacking (as in *Death Valley: Task Force Attack*), the enemy targets your FDCs, artillery, and FIST-Vs in order to try to prevent you from suppressing or obscuring him. He targets your engineers to try to prevent you from breaching. Then, while you flounder on the far side of the obstacle, he hammers you with direct fire.

If he does everything right, you never get to the breach.

This is exactly the way I execute fires in this scenario.