In front the enemy awaits, behind you the platoon stands ready.

You are in command, you must...

TAKE THAT HILL!

FIGHT CLUB

A MANUAL WARGAME PRIMER

FROM UK FIGHT CLUB

GAME RULES

1. Introduction. This is a short wargame primer to introduce non-wargamers to basic wargame concepts in the context of a simple dismounted platoon attack.

You command an Infantry Platoon made up of three sections and a Pl HQ. Your mission is to DESTROY an enemy section hastily dug in on the hill 500m away as quickly as possible. The ground in front of your position is open and offers no cover from view or fire. To do this you will need to fire and manoeuvre your platoon into an assault position adjacent to the hill whilst keeping the enemy suppressed.

1.1 Game Components:

- 1x Game board representing the operating area approx. 500m x 300m overlayed with a hexagonal grid system of Alpha-Numeric coordinates A-C on the vertical and 1-6 on the horizontal.
- 4x Blue Counters representing the friendly platoon elements
- 1x Red Counter representing the enemy section
- 3x Smoke Counters (advanced rules)
- 9x Mine Counter (advanced rules) force elements of friendly and enemy
- 4x Depth Counters (advanced rules)
- 4x Wire Counters (advanced rules)
- 8x Hit markers; 4x direct, 4x indirect (advanced rules)
- 1x Illumination counter (advanced rules)
- 2x Dice (Red and Blue)
- 1x Counter to mark the progress of time.
- 1x Counter to mark the number of hits on blue

1.2 Methods of Play. The wargame can be played **solo** or **head-to-head**. In solo mode the player controls the blue, or friendly side, with the red, or enemy side, being automated by a simple set of tactical choices. In head to head mode the second player controls the red side and makes all decisions therein.

1.3 Force Element (counters) and states. Counters are used to represent combat elements in the wargame. For simplicity each counter represents a group of combatants between 4-10 in number. This aggregation is simpler than representing every soldier involved. The counters used in this wargame are two-sided (a plain coloured side and coloured side with a grey stripe through it). The plain side denotes a combat element as '**Fresh**' and the grey stripe as '**Spent**'. Fresh denotes an element with the capacity to

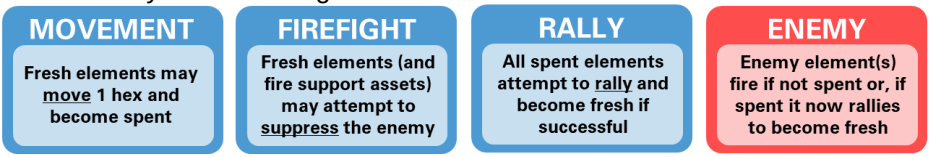
undertake an action such as move or fire. Spent denotes an element that, for whatever reason, is unable to act because it is has lost this capacity. Elements become spent after taking an action or when successfully engaged by direct, indirect fire or other weapons. There is no stacking limit to the number of counters that can be in the same hex.

1.4 The Map. The wargame uses a very simple and abstracted terrain map of 16 hexes in three rows of five, six, and five hexagons respectively. The left-hand column of hexes of wooded terrain and the extreme centre right hex is a hill. All the other hexes are open grassland. In this wargame, for simplicity's sake, the terrain does not affect the actions of the players.

1.5 Game Turns. The wargame is bounded in time by a set number of turns, segments of 'game time' in which activity on the map takes place. This is recorded on a separate track below the map numbered 0 to 16 using the turn counter (the watch). Each game turn represents between 1-3 minutes of real time combat.

A separate counter (3 bullets) records hits on friendly (blue) forces using the same track. The combined total of turn and hits is used to determine the player (blue player's) success.

2. Turn Phases. Turns are often subdivided into phases to guide player decisions and actions. Although often a turn looks very phased in time the general principle is that all actions in the same turn are occurring simultaneously. A turn has four phases that occur in sequence; three concern the actions of the friendly forces or 'Blue' player and one concerns the reactions of the enemy or 'Red' player. It is important that the phases occur in the sequence shown; if firefight occurs before movement then a player will know if the fire has been effective before moving – this removes a key aspect of uncertainty from the wargame and so should be avoided.



2.1 Movement. This phase allows blue elements to move from one hex to another. Each fresh element may 'move' to any adjacent hex and become spent (flipped to its grey stripe side). Alternatively, a fresh element may remain in its current hex and stay fresh. Spent elements cannot move in this phase.

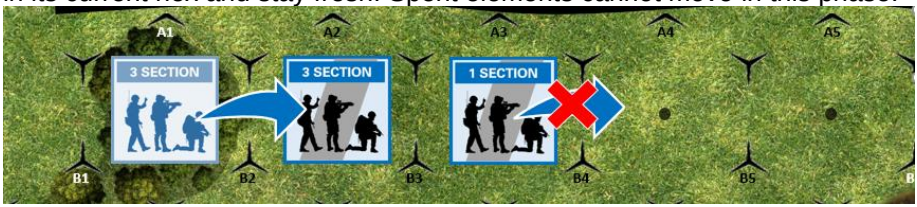


Figure 1: 3 Section moves from A1 to A2 and becomes spent. 1 Section started the movement phase spent and so cannot move.

2.2 Firefight. This phase allows blue elements (and fire support assets in the advanced rules) to fire on the enemy to attempt to suppress it. Each fresh section (not the Pl HQ) may fire to suppress the enemy if desired, and is then flipped to its spent side. A section that starts the phase spent may not fire. To fire roll a dice, if the number exceeds the range in hexes from the firers to the hill the enemy section is hit and is flipped to its spent side. If the roll is equal to or less than the range the fire is ineffective.

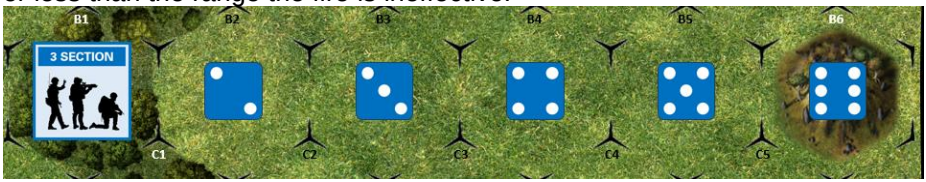


Figure 2: 3 Section's required 'roll to hit' shown over a range of 5 hexes.

Fire is blocked if there is a friendly element in the same row between the firing element and the target.

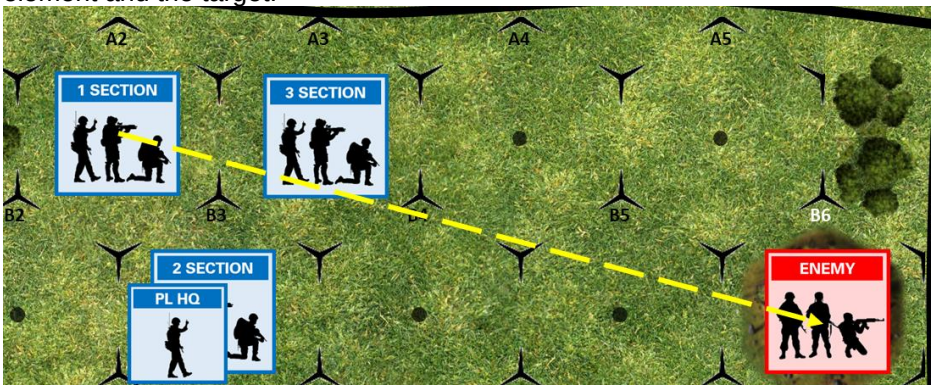


Figure 3: 1 Section cannot fire on the enemy from A2 because 3 Section is blocking its line of fire in A3.

2.3 Rally. This phase allows spent blue elements to become fresh, ready for the next turn. The Pl HQ automatically rallies from spent to fresh as do any sections that are in the same hex. Any other spent sections must roll a dice to 'rally'. A section must roll 3-6 to rally itself. If adjacent to the Platoon HQ the section rallies on 2-6. An unsuccessful roll results in the section remaining spent. Spent sections adjacent to the enemy hex, if the enemy section is not spent, can only rally if the Pl HQ is collocated in the same hex as them.

Figure 4: 2 Section automatically rallies as it is co-located with the Pl HQ. 1 and 3 Section must roll the required number shown on the die in order to rally.

2.4 Enemy Action. If the enemy section starts this phase spent (having been successfully engaged by suppressive fire by the platoon) it now becomes fresh and the phase ends. If it starts the phase fresh then it fires on the closest section (prioritising fresh over spent) and any additional sections in that hex. The enemy will also target the next closest section if it is in an adjacent hex, thereby giving it a beaten zone of fire no more than two hexes in total. Roll a die for each targeted section. The enemy hits if the roll is equal to or greater than the range in hexes. A hit flips the target section to its spent side if it was fresh and the hits counter is moved one space along the tracker. Spent sections are not flipped but are recorded as hits. If the roll is less than the range to the target the fire is ineffective. The Pl HQ is not specifically targeted and does not count as an additional hit if the section they are with is successfully engaged. The enemy section always finishes the turn fresh (unless using advanced morale rules).

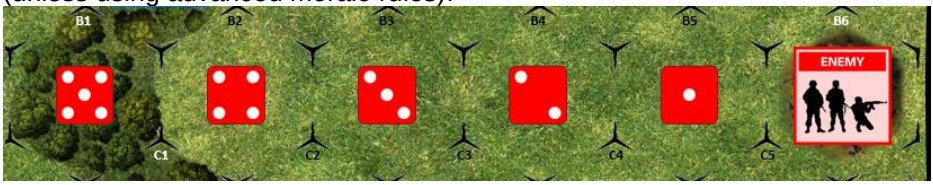


Figure 5: The enemy section's 'roll to hit' number for a range of 5 hexes. Note the enemy only has to roll equal to, and not over as blue must, in order to hit.

2.5 End of Turn. Once all four phases have been completed move the turn counter along one space on the game track and then repeat the phases again, in order.

3. Set Up. Place the enemy counter on the B6 hex on the side. Place the blue platoon counters in any of extreme left hexes (A1, B1, C1) on their fresh side. Place the turn counter (watch) on the '1' space and the hits counter on the '0' space of the game track.

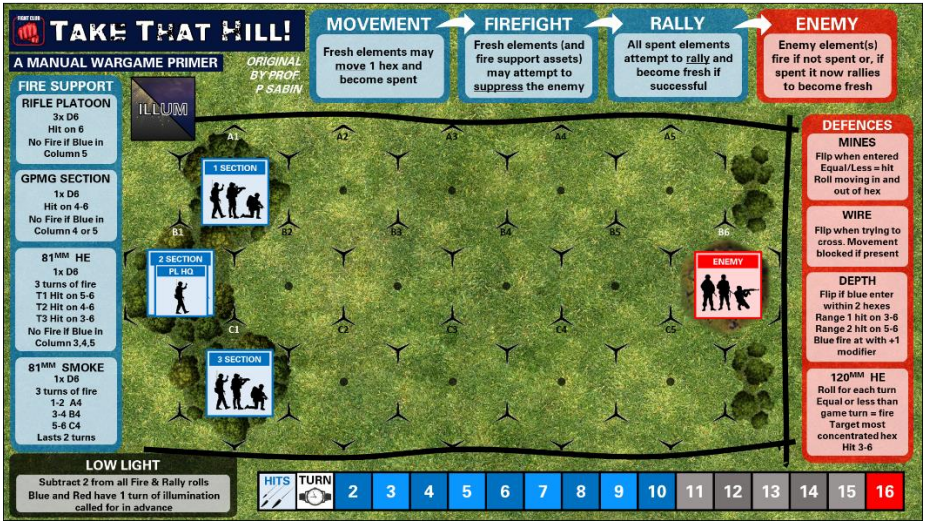


Figure 6: Example set up for the base game. Blue sections do not need to be placed as shown and could all start in the same hex.

4. Victory Conditions. Each time a turn elapses move the 'turn' counter one space on the numbered track. Each time a section is hit move the 'hits' counter along the track on space. If the combined total (hits plus turns) reaches **16 the Blue player lose the game**. If a blue section moves into the hill hex and the total is **10 or less blue win**, if it is between **11 and 15 the game is declared a draw**.

Accumulated Total	Winner
10 or less	BLUE
11-15	DRAW
16 or greater	RED

5. Advanced Rules. The wargame has a number of optional, advanced rules that can be used once players are familiar with the base rules and general mechanics. These concern Blue Fire Support, Low Light, Red Defences and Advanced Morale. It is advised that these be added sequentially in the order shown in the diagram on the right. Playing the wargame with all 5 levels of rules will take much longer and should only be attempted when familiar with the advanced mechanics.

5.1 Blue Fire Support. This set of rules add up to four different forms of fire support to the blue side. All blue fire support is applied before blue organic fire has been calculated:

5.1.1 Rifle Platoon – Representing another rifle platoon in the company firing from the flank at 500m**.** In the Blue Firefight Phase roll 3xD6 scoring hits on a 6 only. This fire support lasts up to the point blue sections have moved into column 5 hexes.

5.1.2 GPMG Section – Representing three medium machine guns firing at a range of 800m. In the Blue Firefight Phase roll 1x D6. If the result is 4-6 then the enemy section is hit. This fire support lasts for until blue sections have moved into column 4 or 5 hexes.

5.1.3 81mm High Explosive – Representing a pre-planned fire mission from supporting mortar section targeting the hill. In the Blue Firefight Phase roll 1x D6 simulating a mortar barrage. On turn 1 the barrage hits on a 5-6; on turn 2 it hits on a 4-6; on turn 3 it hits on a 3-6. This fire lasts for three sequential turns but can no longer occur if blue sections are in column 3, 4 or 5 hexes.

5.1.4 81mm Smoke – Representing a barrage of mortar delivered smoke to obscure the enemy's view of the battlefield. Starting on turn 1, continuing until turn 3, the player rolls a D6 for a mortar smoke barrage at the start of their firefight phase (before any other firing occurs). On a 1-2 place a smoke counter in hex A4, 3-4 in B4 and 5-6 in C4. Smoke counters have two sides with a number 2 or 1 respectively. Smoke is placed with the 2 uppermost and flipped on the next turn at the start of the firefight phase. Smoke is removed on the second flip. Smoke can land in the same hex multiple times, if this happens refresh the smoke counter to its 2 facing side. Smoke blocks the line of sight and fire of both sections and the enemy.

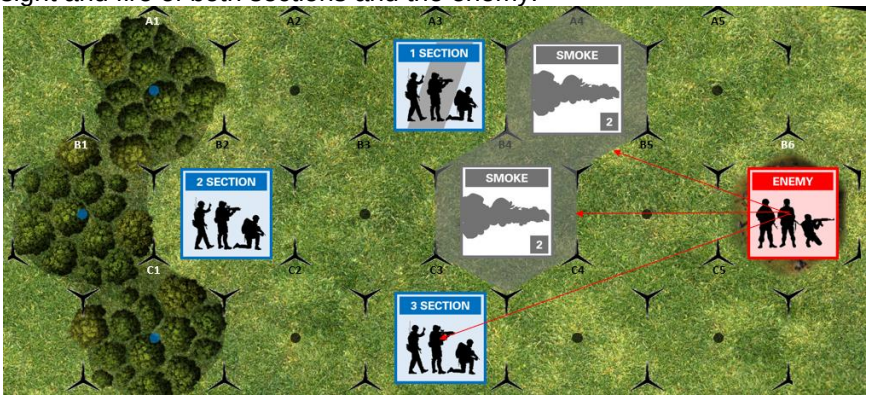


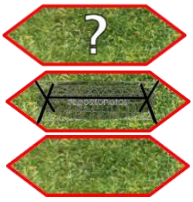
Figure 7: The smoke in A4 and B4 prevents the enemy firing on 1 and 2 Sections but 3 Section is still exposed.

5.2 Low Light Night Attack. Simulating an attack in the predawn darkness with associated firepower and command and control issues. Proceed with the rules as normal but subtract 2 from all fire and rally die rolls unless blue or red is using illumination. The blue side must request their illumination for a set turn in advance of the start of the game (keep this secret from red player, write it down on a piece of paper). Red requests illumination at the start of the enemy phase and it arrives the next turn. If playing solo red calls for illumination the first time it fires at blue and misses. A double sided 'illumination counter' is used to keep track of the current light conditions. Illumination restrictions affect both sides equally.

5.3 Red Defences. This set of rules add four types of defence to the red side. Unlike blue fire support assets several of red's capabilities are 'hidden' in the sense that they are revealed by flipping a counter. This is one way to create uncertainty and the 'fog of war' in wargaming.

5.3.1 Minefields. Dummy, nuisance or medium density anti-personnel mines placed around the likely assault routes onto the hill. If playing solo, pick 3 mine counters at random from the pile of 9 and place them face down (with the '?' showing) in the column 5 hexes. If playing two player then red picks 3 mine counters, look at them and then choose where to place them. Mines are flipped if a blue section moves into the same hex. If the mine counter is marked as 'dummy' then take no further action. However, if the mine has a printed number the blue player must roll a D6 to determine if there has been a mine strike. If the roll is **equal or less** than the number printed on the mine then the blue section suffers a hit. All movement into and out of a minefield hex requires the same roll – this means a movement between two minefield hexes will require a roll to leave and a roll to enter the new hex. Triggering a mine **does not** stop movement.

5.3.2 Wire. Low wire entanglements and razor wire that prevent a rapid assault onto the position. If playing solo, pick 3 wire counters at random and place them face down (with the '?' showing) on the hex sides of B6 (facing toward the column 5 hexes). If playing two player then red picks 3 wired counters, looks at them, then places them as before. When a blue section attempts to move over the hex side flip the wire counter. If there is wire printed on the reverse side then the blue section is blocked from moving. There are only ever a maximum of two 'real' wire counters on the map so there is always a path onto the hill for a close assault.



5.3.3 Depth. Small fighting positions on the flanks of the main defence that provide support and disrupt assaulting troops. If playing solo, pick 2 depth counters at random and place them face down (with the '?' showing) in the foliage either side of the B6 hex (in depth support). If playing two player then red picks 2 depth counters, looks at them and then places them. If a blue section ends its movement 2 hexes away from the depth counter it is flipped in the enemy phase. Depth counters fire on the closest blue sections (regardless of spent/fresh) in the enemy fire phase. If there are two options then they will target the section in their respective row. At range 2 they hit on 5-6 and at range 1 they hit on 3-6. They may only target 1 hex. Depth positions can be suppressed by blue fire in the normal manner, blue have a +1 modifier when firing at depth targets.

5.3.4. Mortars. Heavy 120mm mortars firing in support of the enemy outpost, provided they can raise them over the radio. At the end of the enemy phase of each turn, if they started the phase fresh, they will attempt to call for mortar fire by rolling a D6, If the roll is equal to or lower to the game turn then red mortars are available and fire on the most concentrated blue target hex (regardless of spent/fresh) anywhere on the map except column 5 hexes. Red mortars score a hit on 3-6. Mortar fire occurs after the enemy small arms fire and must be checked each turn up to turn 7 when it is considered automatic.

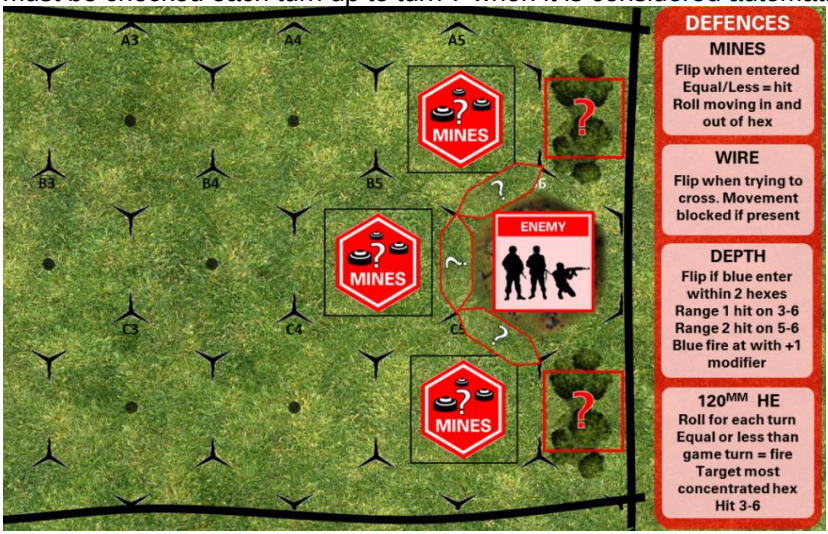


Figure 8: Full set of Red defences set up. Note the '?' side is showing to prevent the blue player knowing if the mines, wire and depth are real or fictional.

5.4 Advanced Morale. This rule expands the basic morale rule with additional complexity covering the impact of firepower, flanking and expanded command and control. Some of these changes are a result of the book, 'War Games' by Leo Murray, which analyses tactical psychology in combat situations.

The key changes to note are:

5.4.1 Blue Rally. Sections will rally on a 3 or greater even when further than 2 hexes away from the Pl HQ. When adjacent to the Pl HQ they rally on a 2 or greater and when co-located they rally automatically.

5.4.2 Firepower effect on rallying. Each direct fire (yellow) or indirect fire (orange) hit reduces a rally roll by 1. When both indirect and direct fire markers are on the same element the effects are doubled (i.e. 2 becomes 4). Hits on blue are removed at the end of the next rally phase. Hits on red are removed at the end of the enemy phase. Mines count as indirect fire for the purposes of being different to direct fire.

5.4.3 Enemy Rally. The enemy section and depth must now roll to rally. The enemy must roll over the total number of hits **and** the number of fresh blue sections adjacent to it in order to rally. If it is not possible for Red to rally due to the number of hits and the proximity of blue sections then consider Red to have surrendered. Red depth rallies in the same manner but suffers all hits and blue section proximity modifiers are doubled when calculating the roll due to the lack of cohesion in such a small team.

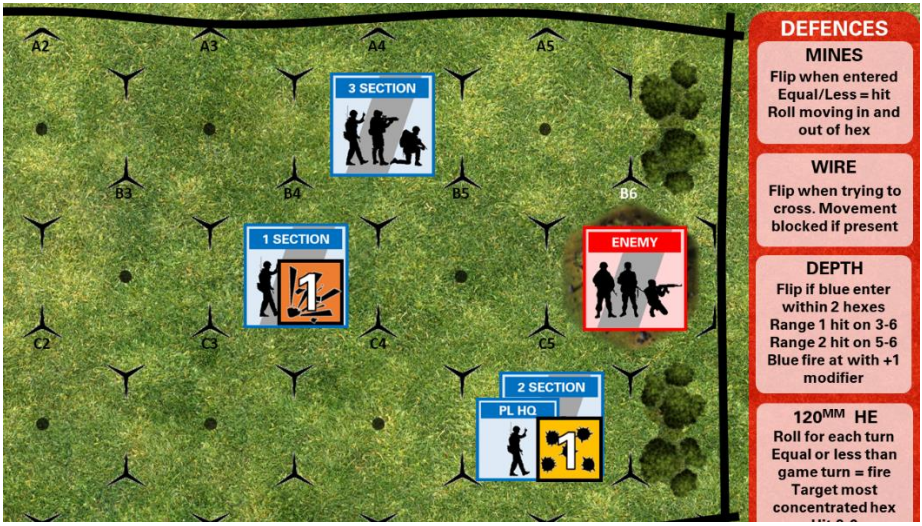


Figure 9: In the Blue Rally phase 3 Section will rally on a 3 or greater. 1 Section must roll a 4 or greater due to the indirect fire hit. 2 Section would normally automatically rally but the direct fire hit means that must roll anything but a 1.

6. Introduction. Take That Hill can be used in a classroom setting as a vehicle to encourage discussion and prompt the level of knowledge around fire and movement, fire support coordination and, command and control (C2). This wargame does a number of things well. It highlights the binary nature of fire and movement (one precludes the other but also requires the other) and the difficulties of sequencing this in reality vs in planning. It encourages an adaptive mindset rather than a rigid adherence to a plan; switching sections around to maximise their fire or movement potential based on a turn by turn appreciation of the situation. It acutely demonstrates the whims of chance in combat – you can't be certain that your fire will suppress the enemy and in turn that you may be lucky and not get hit doing a risky move. It also enables a debate on the positioning and relationship of the Pl HQ to the sections in maintaining momentum (though perhaps some would disagree with how this is precisely modelled).

6.1 Tactics. Traditional tactical doctrine advocates using a section as 'fire support' generally speaking in a static location; a section to 'assault' by moving up to the enemy, usually on a flank; and a section in 'reserve', usually accompanying the assaulting section to replace them or deal with any interference along the way. Doctrine would also state that a platoon is capable of dealing with an enemy section but this is the upper limit of the sort of challenge a platoon can realistically deal with.

If a blue player sticks rigidly to doctrine, they are likely to have an early defeat for two reasons. Firstly, fire support from a single section is largely ineffective at anything greater than 3 hexes and secondly leaving a section so far from the Pl HQ risks it failing to rally and thereby cancelling the fire support effort. Is the model broken? No. Rather it succinctly displays the problems of conducting an isolated platoon attack over open terrain (by day) without covering fire from another platoon or from other direct/indirect assets (machine guns and mortars/artillery). If the wargame is run with the blue player deploying in column 2, 300m or three hexes away from the hill then it is possible to win on turn 4 with no hits without much difficulty (this is exposed in run 3).

6.2 Set Up. In your allocated instructional space set up multiple iterations of the wargame, one between 2-4 is optimum (this will give a good variation of player experiences). Set up a master version at the front of the class with either an enlarged manual version or using powerpoint projection. You will need at least two hours of time to run the sufficient number of wargames.

6.3 Recommended use. Rather than playing the same wargame multiple times it is recommended to spend some time talking non wargamers through the basic design principles first and then running the wargame with sequential scenario variations.

6.4 Prelims. Talk through the mechanics of the wargame as a primer for wargaming explaining the following aspects:

- Hexes and hex terrain – how to impose an artificial overlay onto a piece of terrain, explain other methods but show why hexes are considered a good starting point vs squares or artificially defined areas.
- Counters and capabilities – aggregation of soldiers into a single element that can do a number of things
- Turns and sub phases – dividing time into segments and controlling activity in the game through phases that are deliberately sequenced.
- Using dice – what the dice represent; uncertainty, chance/risk. Explain charts/tables and modifiers.
- Victory Conditions – how these drive the player's actions in wargames, they do not need to be known to all or the same as each other.
- How realistic do you think this wargame is (1 – 5 rating)?

This should confirm the level of familiarity and understanding in the players before continuing and, hopefully, expose any preconceived bias about wargaming. It is also a good opportunity to clarify any rules and reinforce the principle of abstraction and aggregation when realism is discussed. Calibrating the players at this point will help provide better answers later

6.5 Execute. Run the wargame 7 times with a set purpose for each run. At the end of each run ask for class feedback on the set questions below.

Set Questions – After each run ask the following questions:

1. What was your plan?
2. Did it work?
3. Why did it work/not work?
4. What did you learn about the simulation that you did not know before?
5. How realistic do you think the wargame is (1 – 5 rating)?

Run 1 – **run the wargame with base rules.** As this is first run through the aim here is to confirm any additional learning that was achieved by physically playing the wargame as opposed to talking about it. Players may begin to articulate where the challenge in the scenario lies or argue that aspects are unrealistic now they have been exposed to a full run through.

Run 2 – run the wargame with base rules, second attempt. The second run through should highlight where knowledge gained in the first run is being applied for better results. Failure the second time round may expose other aspects of the simulation that were not fully considered in run 1.

Run 3 – run the wargame with base rules but blue deploy in column 3 hexes. It is important with this run to explain how this is the typical distance a platoon conducts an organic attack over. Hopefully, the experience will bear out the effectiveness of the platoon's weapons at this range and force those who thought the system was 'broken' to re-evaluate it.

Run 4 - run the wargame with the addition of the flanking platoon in fire support. By now players should appreciate the difficulty in achieving the mission with the resources to hand but will be familiar with the game mechanics. Examine how different the plans are now that the flanking platoon's fire is added to the player's own forces.

Run 5 – run the wargame with the addition of a flanking machine gun section. This run should build on the last one but hopefully the players are thinking long and hard about how they are going to use their fire support and whether to insure against it failing to suppress.

Run 6 – run the wargame with the addition of a mortar fire mission. This final fire support run articulates the advantage of mortars but might encourage the players to wait until they have found their range.

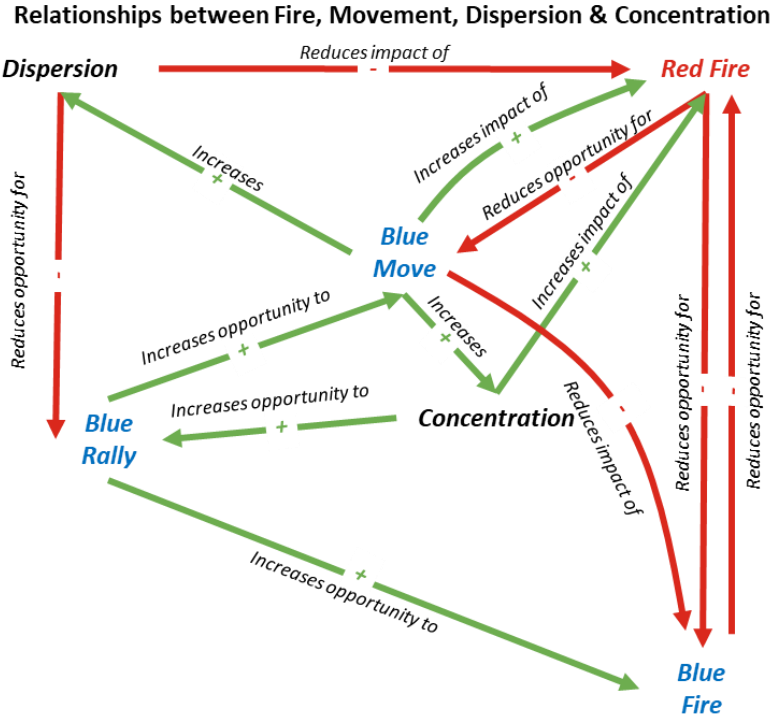
Run 7 – run the wargame with the addition of low light night rules. This should really expose the risks and opportunities of fighting at night from an attacker and defender perspective and the importance of sequencing activity.

6.6 Review and Discussion. After 7 runs the players are in a position to discuss what the simulation may be lacking in terms of realism and how these could be simulated using wargame mechanics. Consider prompting the discussion with such factors as; Maps and terrain; Counters and abilities; Turn sequence and phases; Types and numbers of dice; Non dice methods of adjudication; Victory conditions; Other components or actions.

6.7 Further runs – From here you can experiment with the Low Light (5.2), variations of red defences (5.3) and Advanced Morale (5.4) rules in concert with types of Blue Fire Support to see how the players adapt their tactics.

6.8 Modelling Relationships

This model shows the positive reinforcement (green) and negative reinforcement (red) relationships between actions/outcomes in the wargame. Even in such a simple wargame (and it is very simple compared to commercial versions) there is a depth of complexity that this model helps explain. Blue movement would appear to be the best place to start as it is central to the model and has the majority of relationships.



The player must choose to move at some point if they are to achieve the objective as stated in the scenario. The choice is therefore how many sections to move (reducing the options to fire) and whether to move in a dispersed or concentrated fashion. Dispersion will reduce the impact of red fire but must be balanced against a reduced opportunity to rally. Concentrating will do the opposite. The determining factor at this point may be the distance from the enemy and thereby the base likelihood of red fire being effective. Then again, at closer distances the 'concentration – rally – blue fire – red fire – blue move' feedback loop may become more prevalent. Concentration can also be the cause of effective red fire which in turn prevents effective blue fire and thus causes a fatal feedback loop that even rallying (the positive of concentration) cannot solve.

GLOSSARY

Turn – a determined period of time within the totality of time allotted to the wargame. Multiple turns comprise a game.

Phase – a procedure within a turn, usually concerned with a theme or activity. Multiple phases usually comprise a turn.

Counter – a game piece typically representing combat power. These are generally two sided providing a number of states (ready/unready or full combat effectiveness/reduced combat effectiveness).

Dice Roll – a single throw of the dice which provides the element of chance. This is usually modified by factors based on real world data.

Hex – an artificial imposition over otherwise boundless terrain to control activities in the wargame. Usually this concerns movement in six directions and distances for both movement and combat.

Range – the distance in hexes between two counters. This includes the end, or target hex, but not the starting hex.

Hit – the successful impact of direct or indirect fire on a blue/red counter. This will cause the counter to become spent.

Move – the action of altering the position of a force element's counter by placing it in an adjacent hex.

Fire – the action of using direct/indirect fire to attempt to hit an opposing force element counter.

Rally – the action of attempting to turn a spent element fresh. This is affected by the proximity of the Pl HQ if blue and the number of hits sustained (advanced rules).

LIVING RULES

These rules are subject to iterative improvement based on the feedback from you, the players. To ensure you have the latest version visit the website https://www.ukfightclub.co.uk/take-that-hill. Email us with suggestions at ukfightclub@outlook.com.

What is UK Fight Club?

BLUF - Fight Club (FC) is a grass roots wargaming experimentation group built by a core group of motivated officers in the Army Headquarters. It has grown to encompass the full range of civilian and military wargaming stakeholders from an international stage.

WHY

- FC believes that **wargaming has vast potential benefits** for defence through education, training, analysis and decision making which are not being fully exploited.
- FC thinks we **do not have time to wait** for established organisations, institutions and hierarchies to close the gap themselves.
- FC wants to help **produce adaptive thinkers** throughout our defence sector to create a competitive advantage across all domains.
- FC wants to increase the **frequency, variety and intensity** of force on force training to better reflect the challenges of real world adversaries.

HOW

- FC provides **Commercial Off the Shelf (COTS) simulations** to an interested user groups in order to test hypotheses, challenge accepted wisdom and create new methods of thinking around both emergent and legacy problems. This occurs both at unclassified and classified levels.
- FC **introduces members to various specific/multi domain simulations** via a campaign of learning, having proved the concept with bespoke testing beforehand.
- FC connects its members with a **unique webinar series** of expert speakers and panellists providing insights into the greater application of wargaming and future influences on the subject.

WHAT

- FC is **not fixated on any particular COTS game** or, specific computer simulations – all forms of wargaming are under consideration.
- It has aligned with the Dstl partnership with a commercial games company Slitherine/Matrix Games who have specifically made available three COTS games:
  - Command: Modern Air/Naval Operations – 'Google Earth' meets Janes. A constructive sim that allows military platforms to be modelled on the earth's surface. Heavy player interaction and scripting required to achieve military operation fidelity.
  - Flashpoint Campaigns– a Cold War era constructive sim, hex and counter, similar to many manual wargames and familiar to a mil audience as a CoA wargame execution.
  - Combat Mission Shock Force 2(CMSF2) - a constructive sim that focuses on Pl-Bn level tactical engagements. It only two modes of play – 1 human vs AI or 1 human vs 1 human and as such is more of an individual tactical trainer than a simulation that can be used to run a constructive exercise such as CAST.
- FC is **developing two manual wargames** Take That Hill (rural platoon tactical) and Take That Street (urban platoon tactical) as primers to foster greater military familiarity with wargaming mechanics.

WHO

- FC is an **informal network** existing between, behind and within established organisational hierarchies. This enables it to remain independent, innovative and active.
- FC is a **flat community of interested willing enthusiasts** who are contributing in their own time in addition to their own job specs. It is rank aware but not rank constrained.
- FC is **not a e-sports social club** pursing entertainment value. We are interested in serious games for professional outcomes – having fun along the way is a bonus.
- FC's mantra is **THINK – FIGHT – LEARN – REPEAT**

"**TAKE THAT HILL!**" is an original wargame design by **Professor Phil Sabin**, formerly of Kings College London. His aim was to simulate the tension between concentration and dispersion in infantry tactics.

Philip Sabin is Professor of Strategic Studies in the Department of War Studies at King's

College London (KCL), where he has taught since 1985. He studied at Cambridge and London Universities, and held research posts at Harvard University and the International Institute for Strategic Studies. He has worked closely with the UK military for many years, especially through the University of London Military Education Committee, the Chief of the

Air Staff's Air Power Workshop, and KCL's academic links with the Defence Academy and the Royal College of Defence Studies.

Professor Sabin's current research and teaching involves strategic and tactical analysis of conflict dynamics from ancient to modern times. He has written or edited 15 books and monographs and several dozen chapters and articles on a wide variety of military topics, including nuclear strategy, British defence policy and air power.

Professor Sabin makes extensive use of conflict simulation techniques to model the dynamics of various conflicts. His recent books **Lost Battles** (London: Continuum, 2007) and **Simulating War** (London: Bloomsbury, 2012) both make major contributions to the scholarly application of conflict simulation techniques. He has just published a simulation of the grand tactics of World War Two air combat, in Angels One Five (California: Victory Point Games, 2015.

KING'S College LONDON