The Last HUNDRED YARDS

PLAYBOOK
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24.0 Rule Examples

24.1 Terrain
24.1.1 Units on the Same Level

[4.2.1a]   *not*

[4.2.1a

[4.2.1b]

[4.2.1d]

[4.2.1c]

[4.2.1c]

higher   *[4.2.1c]*

equal   *[4.2.1c]*
higher

[4.2.1d]

[4.2.1c]

[4.2.1e].

[4.2.1e].

24.1.2 Units on Different Levels
[4.2.2]

Case A:

(a Blocking Terrain Hex)   [**4**, *the high-est level,* **-2** *for the level two forest]*

Blind Hex Table

Case B:

(i.e., Blocking Terrain Hex)   [**4**, *the highest level,* **-2** *for the level two hill]*
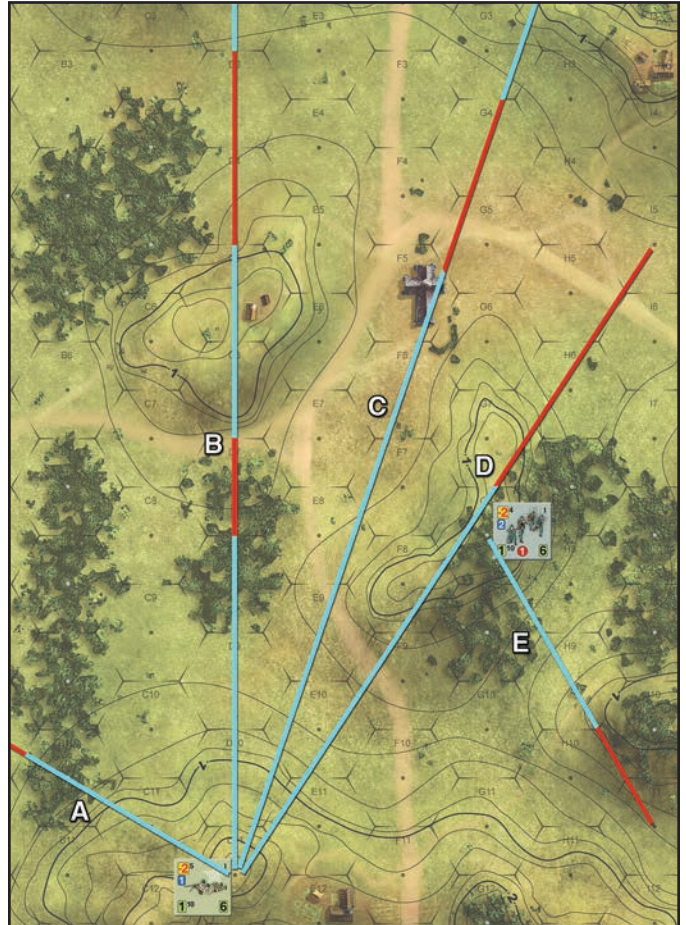
Blind Hex Table

Case C:

(i.e., Blocking Terrain Feature)   *[4, the highest level, -1 for a stone building]*

Blind Hex Table

Case D:

        (i.e., Blocking Terrain Feature)
[4, the highest level, -2 for the level two hill and -2 for the heavy woods]

[4.2.2]

Case E:

[4.2.1a]

[4.2.1b]

24.1.3 Enclosed Road - Urban Buildings
24.1.3.1 Observation

    A

                    B, C, D   K

    [4.1.9.4a]   E, F, G   H
              A *[4.2]*   I, J   L
                A   *[4.0 c)]*
    A
B, C, D   K
                                        [4.1.9.4a]
F   A *[4.2]*
                A   *[4.2.1f]*   E, G   H
                            A
    A   *[4.2.1f]*   I, J   L
                A   *[4.0 c)]*

24.1.3.2 Small Arms Fire
- **Unit A:**   B   C

                    K
                        D

- **Unit B:**   A, C   K

                    D

- **Unit C:**   A, B, K   L

                    D

24.1.3.3 Anti-Tank Fire
    A, B, C, D   K

Anti-Tank Fire into or from an Urban Road Hex *[4.2.1f]*:
- **Unit A:**   F
                                            A
        E, G   H
                                            A
- **Unit B:**   G   J
                                                B
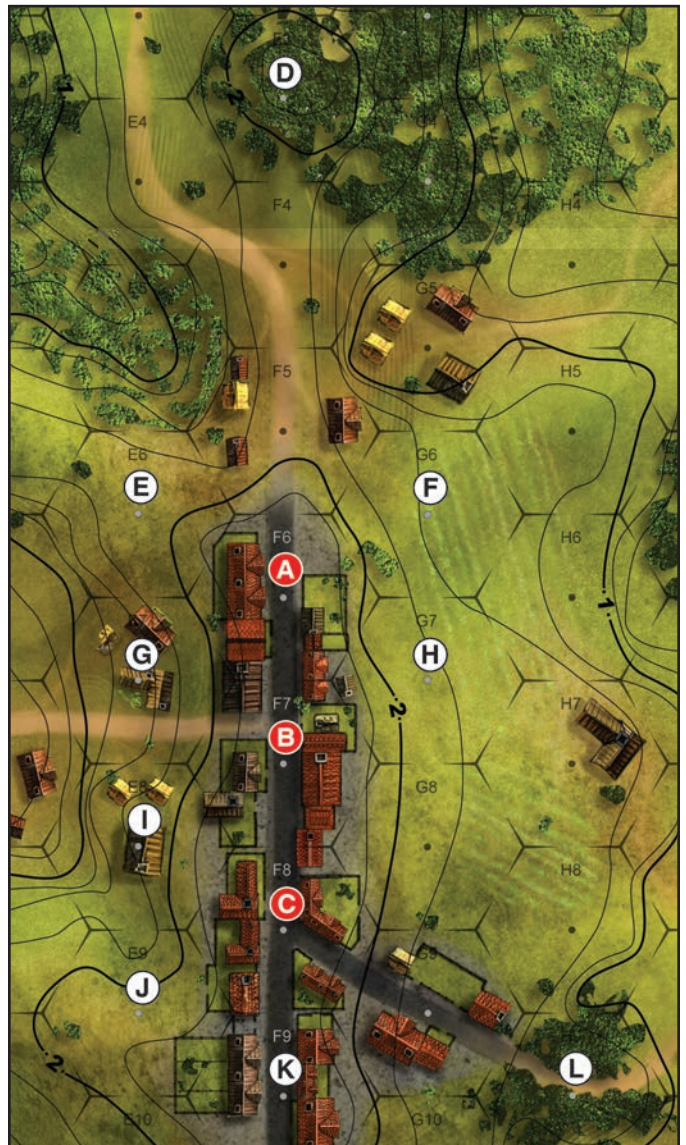   H   I
                                                B
- **Unit C:**   G, H, I   J

        C

*Note: A unit in **A** or **B** would receive the Hull down DRM if fired on from units **F** and **G** respectively because the fire is not along a road. Units **A**, **B**, or **C** would not receive the Hull Down DRM if fired on by units **K** or **D** because the fire is along the road and they are not at a higher level than **K** or **D** [11.5.4j].*

24.1.3 Enclosed Road - Rural Buildings

24.1.4.1 Observation

A

                        B   C   D

E

[4.1.9.4a]

A

B, C   D   E   E

[4.1.9.4a]

24.1.4.2 Small Arms Fire

    B   A

                                  C, D,

E   *[4.1.9.4b]*

    B   B   C   B

                          [4.1.9.4b]

    D   E

.

24.1.4.3 Anti-Tank Fire

    A   B, C   D

    E   *[4.1.9.4b]*

  A   B   F

                      [4.2.1 f].

*Note: Unit **B**, although in an Enclosed Road hex, would not receive the Hull Down DRM if the incoming fire is along the road from units **A**, **C**, **D**, or **E** [11.5.4j]. It would receive Hull Down if fired on from unit **F**.*

24.2 Platoon Activation

[Note: If he had been successful in his attempt for Coordinated Activation, he could have conducted actions with any and/or all units of   platoons as well as any eligible ad hoc units before calling for   ].
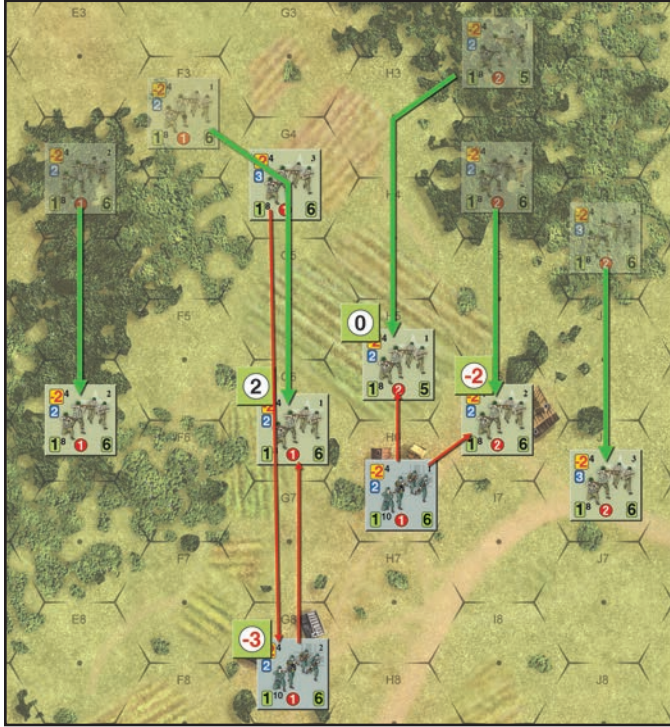
Reaction

Note that there is no platoon Activation required for Reaction.

2   *[**1** for its SAV and **1** for Proximity Fire]*

Reaction
any

Note that the American 3rd Squad of the 1st Platoon could not fire at the German 1st Squad because it did not conduct an action in its LOS. A player can only fire at *enemy units that conducted actions in their LOS prior to a call for Reaction.*

Play now returns to Step 1

0   *[**1** for its SAV, **1** for Proximity Fire, -**2** for Split Fire]*
2   *[**1** for its SAV, 1 for Proximity Fire, -**2** for Split Fire, -**2** for the wooden building]*
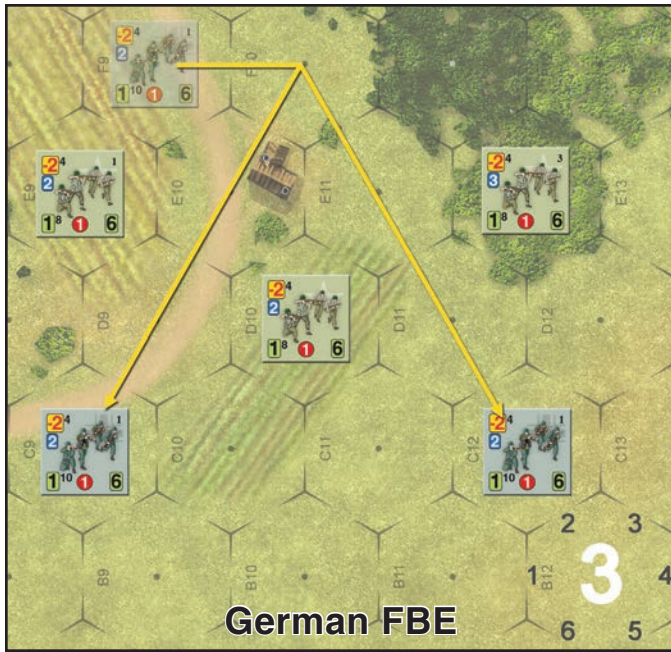
24.3 Withdrawal or Retreat
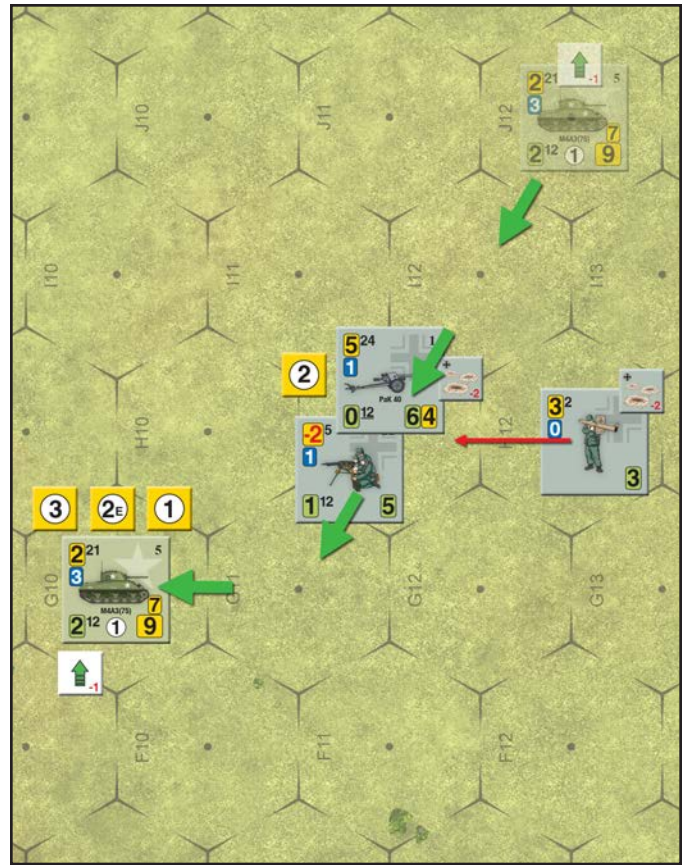### 24.3.1 When the Hex Sides are Parallel to the FBE
[10.3.1.1a]   *[14.3.3.1a]*

toward
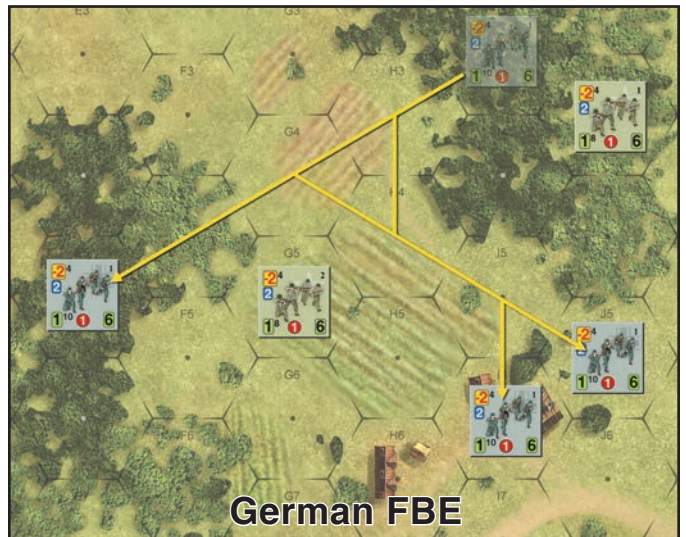
24.3.2 When no Hex Sides are Parallel to the FBE
[10.3.1.1b]   *[13.6.3.1b]*

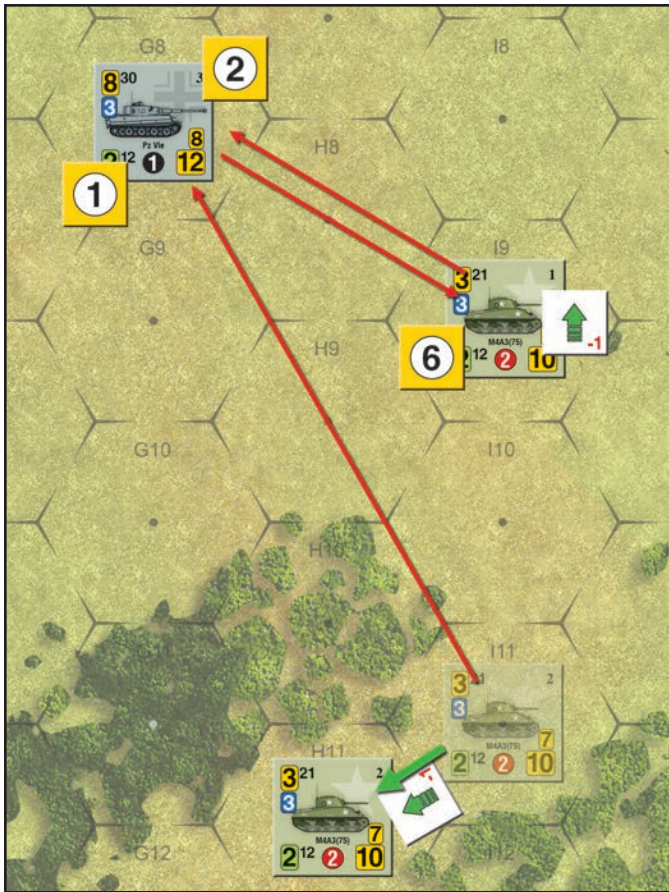*toward its FBE*

24.4 Overruns

toward

[5 for the Anti-tank gun ATV and -1 for Motion and -1 for Suppression]

2e   *[3 for the LATWs ATV, -1 for Motion, and e for Enfilade]*

24.6 Halt & Fire

[10.4.3]

2
*[**3** for its ATV, **-1** for firing from its current hex]*

[10.4.3]

24.5 Shoot & Scoot

[10.4.2],

2
*[**3** for its ATV, **-1** for firing from current hex]*

[10.4.2]

1
*[**3** for its ATV, **-2** for maneuvering to an adjacent hex]*

6   *[**8** for its ATV,*
*-**1** for Suppression, -**1** for the Motion marker on the Sherman]*
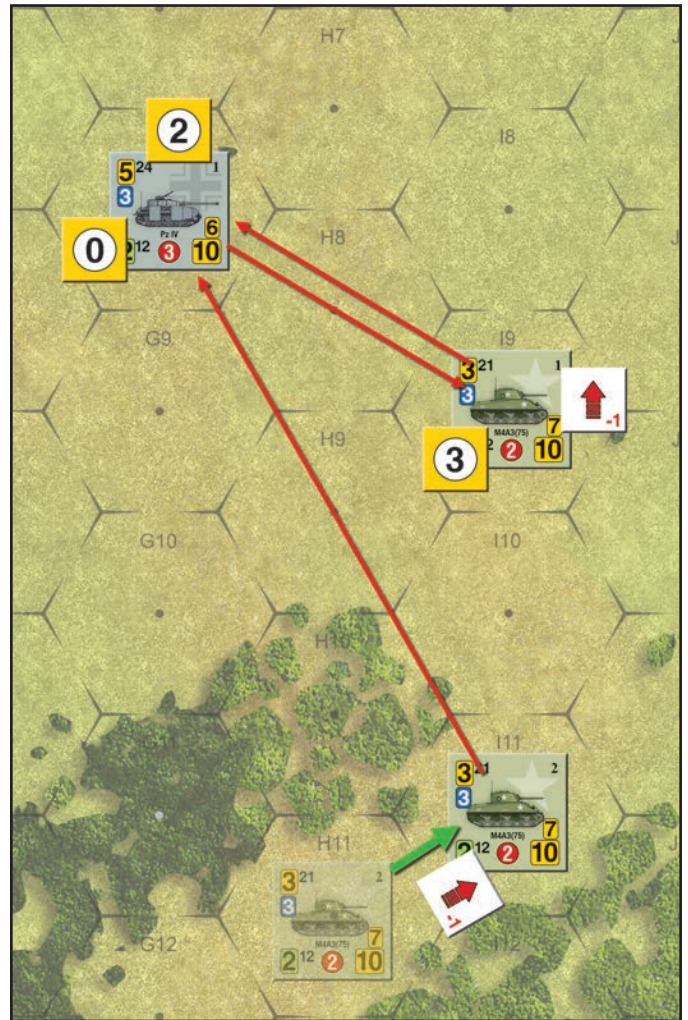
0   *[**3** for its ATV, **-2***
*for firing from an adjacent hex, **-1** for Obscure Target]*

*[**5** for its ATV, **-1***
*for Suppression, **-1** for the Sherman's Motion marker]*

24.7 Enfilade
24.7.1 Against a Firing Unit

[11.1.1]

Platoon Activation Cycle;

1 *[1 for its SAV]*

Note: Due to the possibility of enfilade, a fire action marker may be placed in such a way as to show the hex side (e.g., the American squad) or the vertex (e.g., the Sherman tank) through which they fired.

2 *[1 for its SAV, +1 for the Enfilade]*

3 *[3 for its ATV]*

5e *[5 for its ATV, with an e for the Enfilade]*

24.7.2 As a Result of Crossfire

rear arc

[11.1.2]

Platoon Activation Cycle;
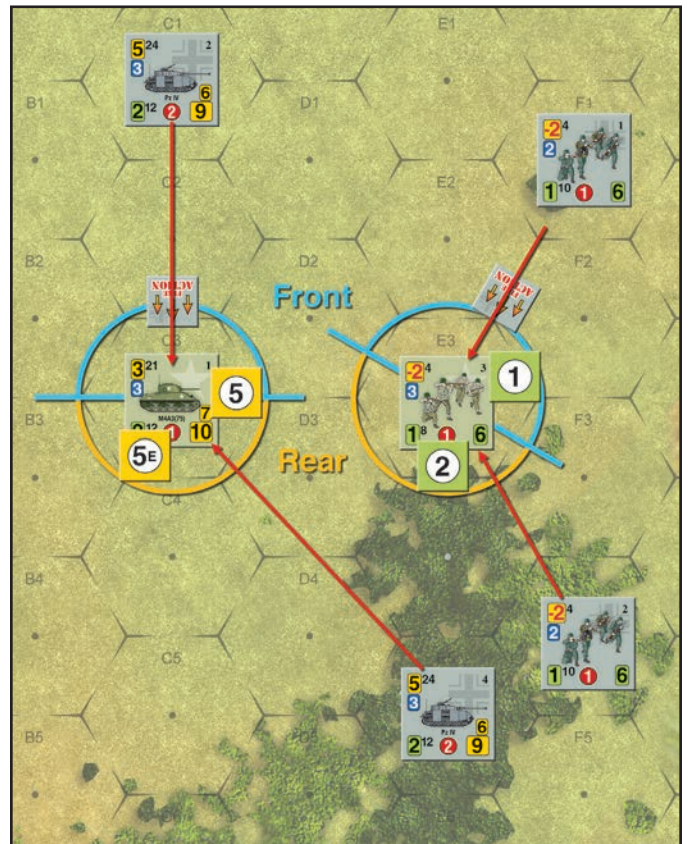
2 *[1 SAV for the German 2nd Squad, 1 for Enfilade]* **1** *[1 SAV for the German 1st Squad]*

5e *[5 ATV for Pz IV #4, with an e for the Enfilade]* **5** *[5 ATV for Pz IV #2]*
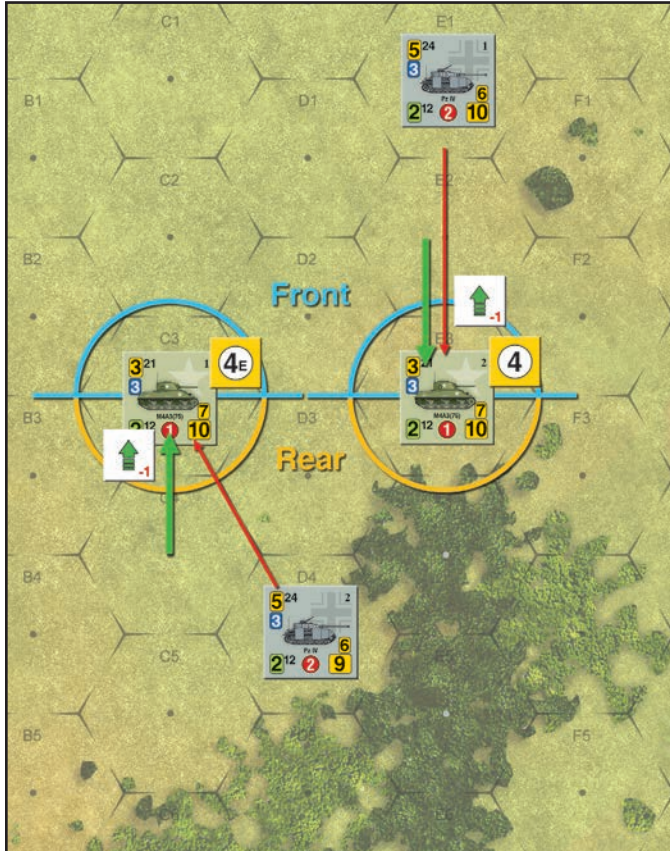
24.7.3 Against a Maneuvering AFV

rear arc

[11.1.3]

Platoon Activation Cycle

4e   [*5 ATV of the German Pz IV #2, with an **e** for the Enfilade, and **-1** for the motion*]

4

[*5 ATV of Pz IV #1, and **-1** for the motion*]
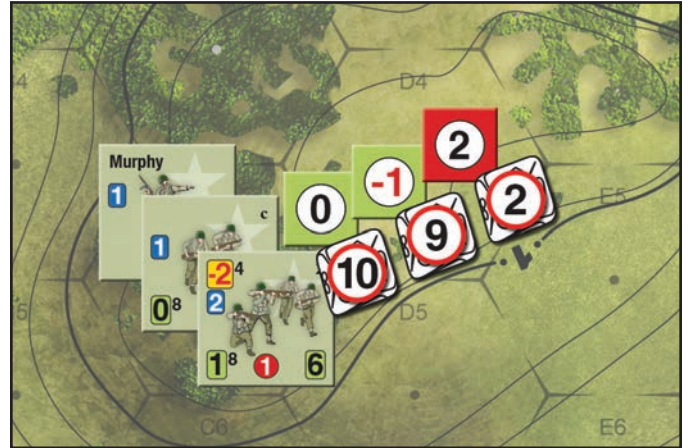
Pz IV #1

24.8 Fire Resolution

24.8.1 Simple Fire Resolution

2

0   **1**

[Note: In cases where both players have units in the same hex (i.e., an assault) a player's units are subject only to the SADRM markers on his units while both player's units are subject to all MDRM markers in the hex]

2   **2**
Final Fire Attack Result   **4**   **1**
            Final Fire Attack Result   **8**   **10**
   0   *Final Fire Attack Result*
*[Note: The Final Fire Attack Result of 10 would be reduced by **1** if the hex contained a friendly undisrupted platoon leader of the same platoon, provided the platoon leader's Cohesion was greater than the Cohesion of the best combat unit (i.e., 2nd Squad) in the hex.]*
            highest Final Fire Attack Result

Final Fire Attack Result

24.8.2 Complex Fire Resolution

2
- **Sherman #1**   **2**
        2   **11**
      [*2 ATDRM, + die roll of **9***]   **10**

      12 [*2, + die roll of **10***]   **10**

- **Sherman #2**   **2**

         2

    10 *[2 ATDRM, + die roll of 8]*   **10**

    12 *[2 MV, + die roll of 10]*,

- **1st Squad**

                    [13.3.7a]

                    [11.4.8g]

           8 *[die roll of 8, + 0 SADRM]*   **2** *[die roll of 2, + 0 SADRM]*
           8

- **MG Section**   *non-Rider*   *[13.3.7b]*

                    8 *[die roll of 8, + 0 SADRM]*   **2** *[die roll of 2, + 0 SADRM]*
                    8

         12 *[die roll of 10, + 2 MDRM]*

24.8.3 Fire Resolution in an Assault Hex

a **0**   **1**

                    an adjacent

hex *[10.5.2.1]*

         a non-adjacent hex [10.5.2.2]

[Units in a hex marked with an Assault Nationality marker cannot react. The one exception being that a non-disrupted platoon leader can request an MFA, if available, in his hex; 10.5.3.1a.]

                              2   *[0 for the MV, -2 for the IP]*

                              1
         [0 MV, -1 for the secondary impact hex]

                    primary
                              1

                    [11.4.8e]

                                        0
    1   **2**
         [0 SADRM, + die roll of 7], **5** *[-1 SADRM, + die roll of 6]*   **8** *[-2 MDRM, + die roll of 10]*

         [13.1, Step 1]

         Note that the same die roll for the Mortar Fire Attack is used for both sides.
                    10 *[0 MDRM, + die roll of 10]* *instead of a Final Fire Result of 8 for the American units because*

the German 1st Squad does not receive the -2 for the IP [12.1, Step 2]. As a result, because the Final Fire Result is ≥ 10, the German 3rd Squad suffers a casualty and disrupts.

24.9 Assaults
24.9.1 Assault

d   **0**   *[1 for the MG section's SADRM, -1 for the hill]*

adjacent hex

non-adjacent hex

d

0   *[0 for its SAV, -1 for Suppression, and 1 for Proximity Fire*

c

Note that although Lt. Steiner and the German 2nd Squad are temporarily stopped, they will be placed in the assault hex (unless they declare a Feint [10.5.2.4]) during Marker Adjustment of the Platoon Activation Cycle.

For this example, both fire attacks have no effect.

8 *[2 for the Assault Value of the 3rd Squad, 2 for the Assault Value of the 2nd Squad, 1 for Lt. Steiner, 2 for the Encirclement marker, and 1 for the Cohesion Differential (7 vs 6), the difference in the Cohesions of the best German combat unit (3rd Squad) vs the Cohesion of the best American combat unit (2nd Squad)]*

6 *[2 for the Assault Value of the 2nd Squad, 1 for Section c, 1 for Lt. Murphy, 1 for the IP, and 1 because at least one German combat unit assaulted from a lower level (uphill)]*

2 *[8 for the German's Total Assault Value less 6, for the American's Total Assault Value]*

8   **6**   **2**

Assault Resolution Table

24.9.2 Assault by Infantry and AFVs

0   *[1 for its SAV, -1 for firing up a hill or into woods (note that a player gets one or the other TEM, but not both)]*

[0 SAV +1 for proximity Fire -1 for the German AFV]

For this example, all fire attack results have no effect.

24.9.3 Vehicle Destruction Attempt

[14.3.2]

4 *[2 for a squad of any nationality, +2 for the LATW section]*

9

10
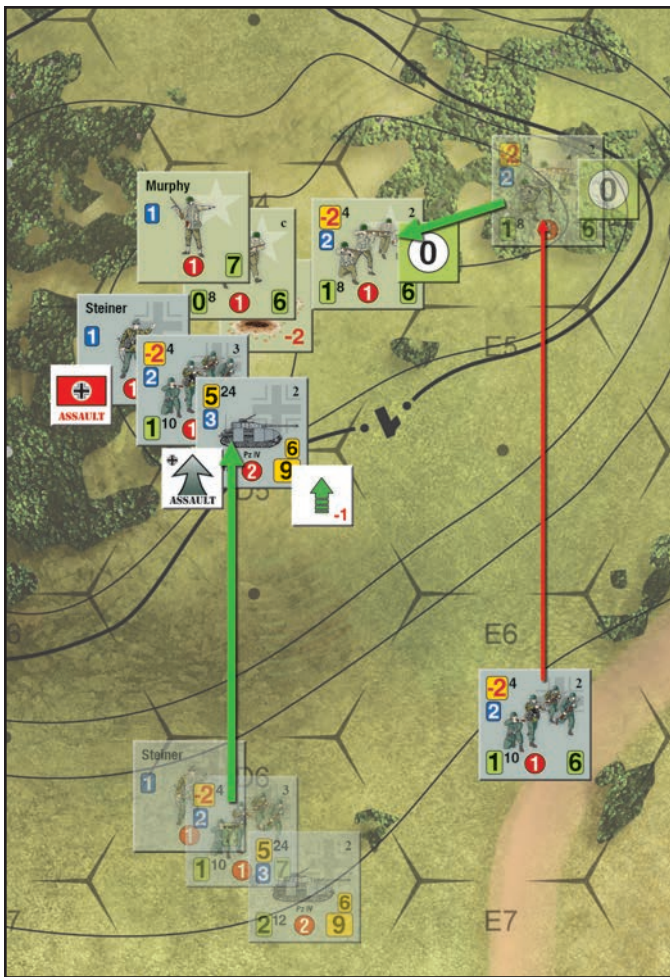
6 *[2 for the Assault Value of the 3rd Squad, 1 for Lt. Steiner, 2 for Pz IV (3 less 1 for its motion), and 1 for the Cohesion Differential (7 vs 6), the difference in the Cohesions of the best German combat unit (3rd Squad) vs. the Cohesion of the best American combat unit (2nd Squad)]*

6 *[2 for the Assault Value of the 2nd Squad, 1 for Section c, 1 for Lt. Murphy, 1 for the IP, and 1 because a least one German combat unit assaulted from a lower level]*

0 *[6 for the German's Total Assault value, less 6 for the American's Total Assault Value]*

0

Assault Resolution Table
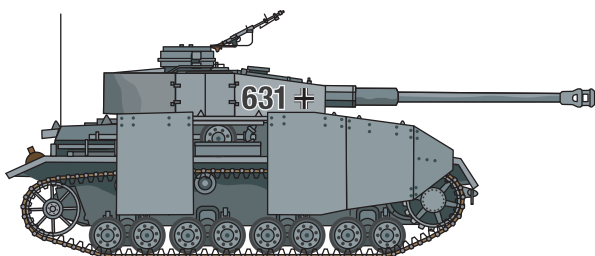
6 *[2 for a squad of any nationality, +2 for a German squad after 9/43 (i.e., Panzerfaust), +3 because the American tank is un-supported in or adjacent to a cover terrain hex, and -1 for its Motion marker]*

13

24.10 Mortars
24.10.1 Mortar Fire Action (MFA)
Russian MFA:

Mortar Fire Action Table

(2 for a primary impact hex and 0 for a secondary)

1, 2, 4   6   8   9   7

7

Mortar Fire DRM Table

7   1   *[2 for an MDRM in a primary hex +1 for airburst and -2 for the IP]*

1   0   *[0 MV for a Secondary Impact Hex]*

2   0   *[0 MV for a sSecondary Impact Hex]*

4   -1   *[0 MV for a Secondary Impact Hex +1 for airburst -2 for the IP]*

6   -1   *[0 MV for a secondary hex +1 for airburst -2 for the IP]*

German MFA:

Mortar Fire Action Table

(2 for a primary impact hex and 0 for a secondary)

5

5   -1   *[0 MV for a Secondary Impact Hex +1 for airburst -2 for the IP]*
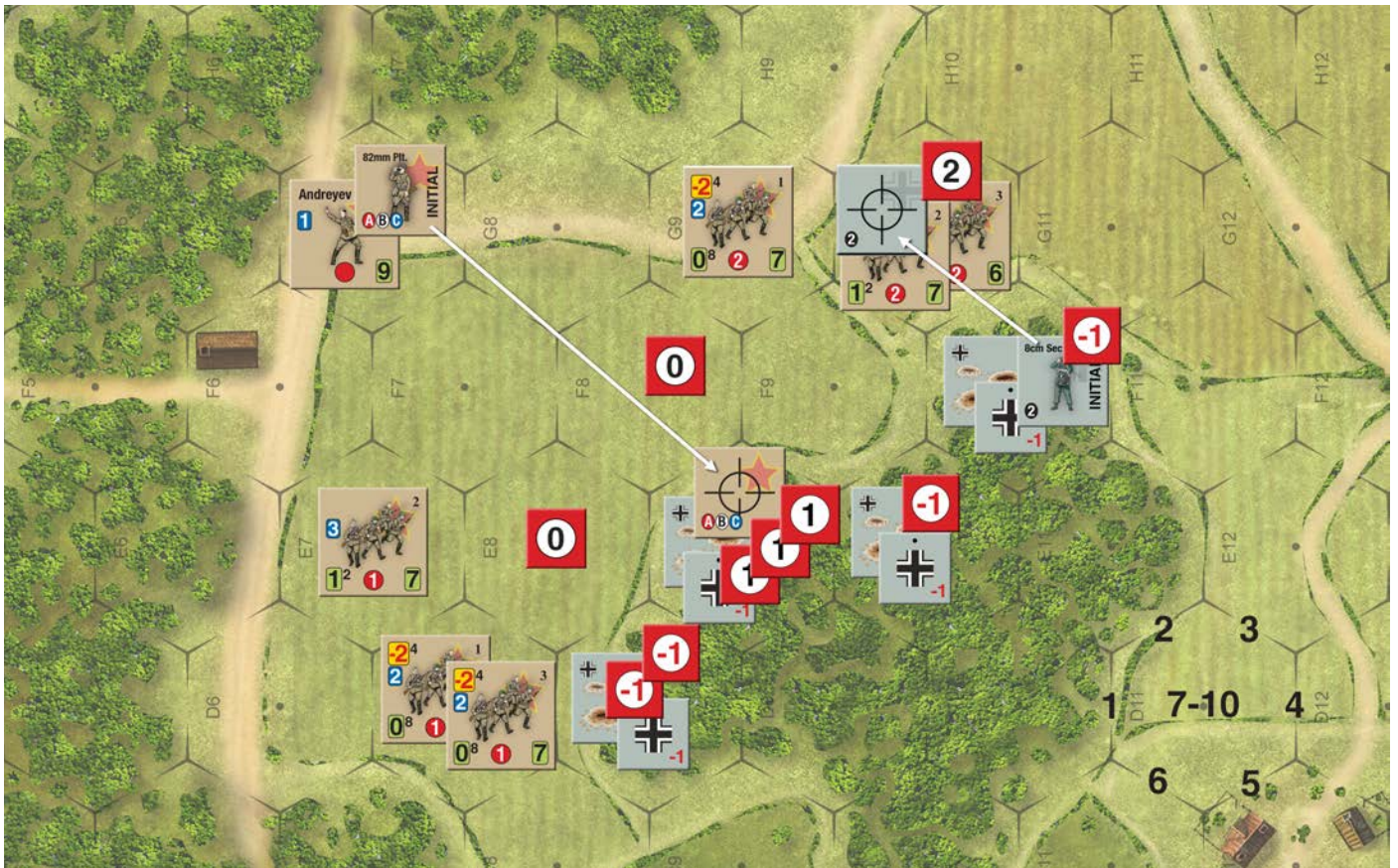
24.11 Russian Command & Control

[11.3a]
[10.5.1a]

[15.2.2.2]

.

(Note: LOS is not required if a unit is within two hexes of their leader [15.2.2.1.d])
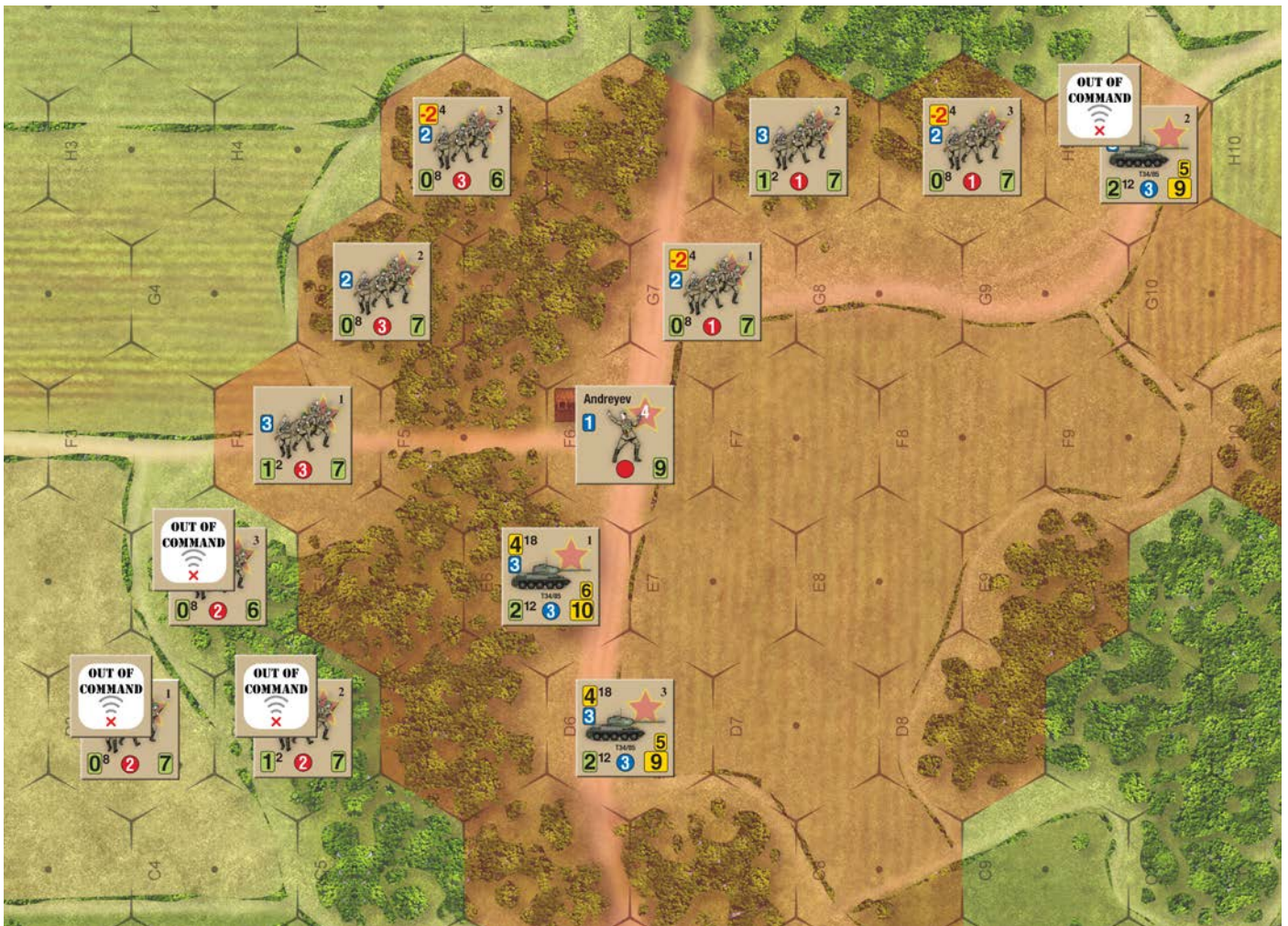
25.0 Extended Examples of Play

25.1 Infantry and Mortars

Situation:
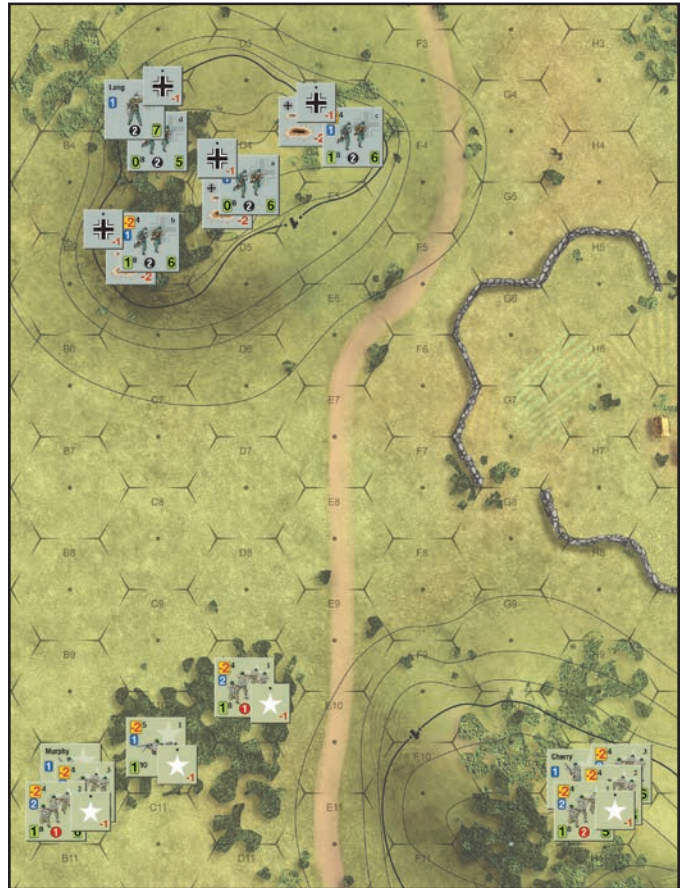
Positions at Start

American Plan:

German Plan:

c

Game Turn 1

Initiative Phase:

c   2

[2 for 8cm MV, +0 for open terrain]

Activation Phase: *Co-*
ordinated Activation

0

[0 for 8cm MV]   c

[1, the firing unit's SAV, -3 range,
and -1 for the stone wall]

a   b

[**Note:** *Units of the active player have a maneuver allowance of 3*
MP or 2 hexes whichever is greater]

b   4

[1 for its SAV, -2 for range, -1 for concealment, and -2 for the IP]

b

Reaction

Turn 1 Activation

1
6   7-10   2
5   Scatter   3
4

b
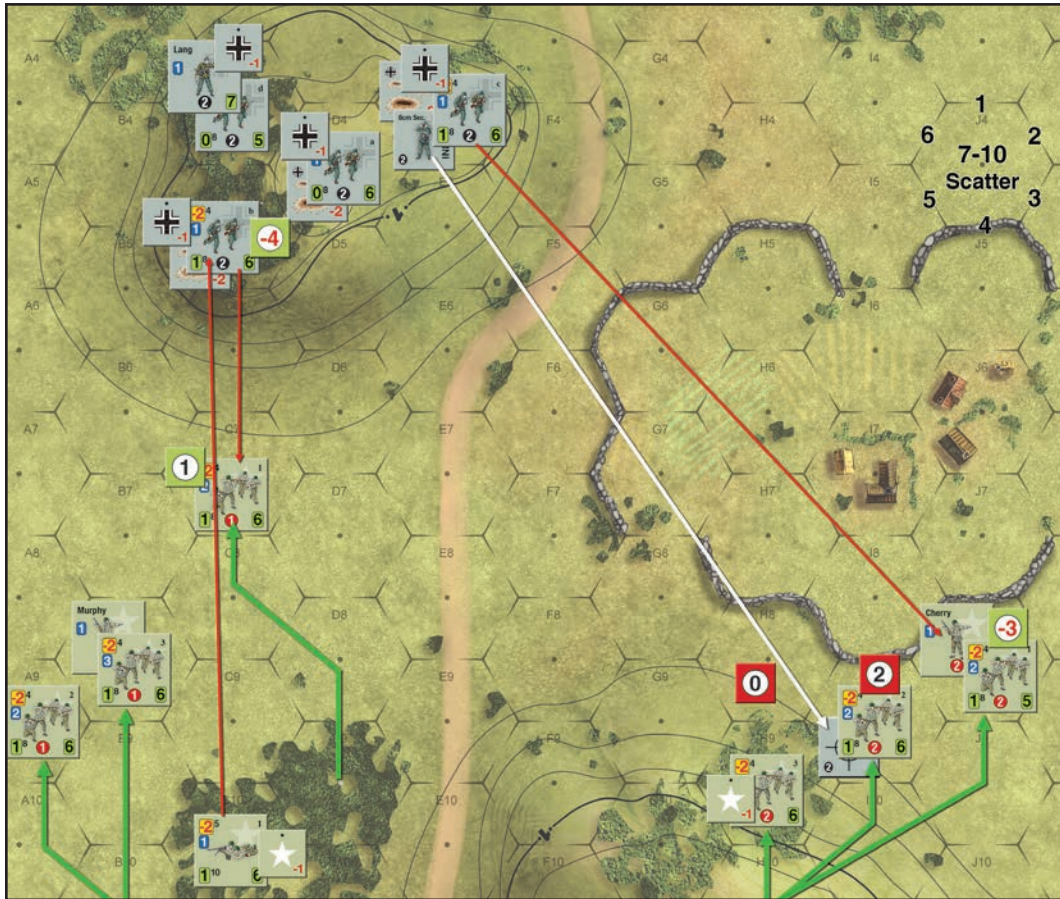
a 1   *[1 for its*
SAV, -1 for Suppression, and
1 for Proximity Fire]

b

a

Fire Resolution Phase:

Generally, units may only react if an enemy unit conducted an
action in their LOS.

[**Note:** *If there are other units in the hex, and the best*

unit is disrupted, the other units would have to conduct Cohesion Checks and disrupt if they fail]

Turn 1 Fire Resolution

The result of the fire attacks are as follows:

- **German Section b:**
  9, **-4**

  b

- **American 1st Squad, 1st Platoon:**
  +1

- **American 2nd Squad, 2nd Platoon:**
  +2

b

- **American 1st Squad, 2nd Platoon:**   **-3**

Assault Phase:

Mortar Fire Adjustment Phase:

2

0

Time Lapse Phase:

At the end of Game Turn 1 the Attacker's Score is 8 *[Time Lapse of 4 minutes and 4 Casualty Points due to the step loss suffered by the 2nd Squad, 2nd Platoon].*

End of Game Turn 1

Game Turn 2

Initiative Phase:

+2

b

temporarily

Reaction

Activation Phase:

b

b

1 *[1, for its*

b -3 *[1, for its SAV, -2*

SAV in open terrain] **c** *for range, -2 for the IP]*

4 *[1, for its*

SAV, -3 for range, -1 for the stone wall, and -1 for the hindrance

of the MDRM marker]

b

b **c**

(disrupted units suffering

a subsequent disruption suffer a casualty)

*[***Note:** *The maneuver allowance for reacting units is 2 MP or*

1 hex which ever is greater]

Reaction

a

(when the unmodified recovery

die roll = 10, a non-vehicular unit becomes Heroic)

a 3 *[0 for its SAV, -3 for range]*

Turn 2 Activation

b
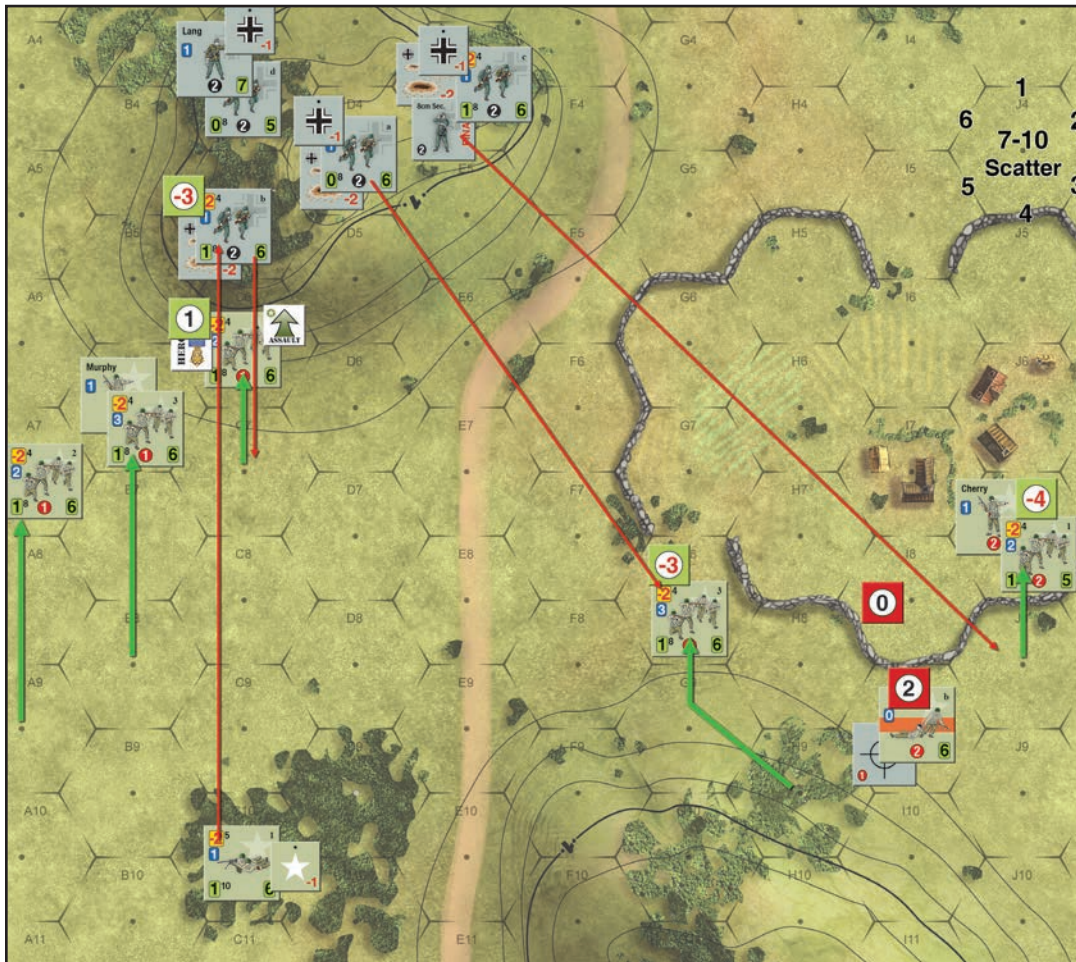
Fire Resolution Phase:

• **American 1st Squad, 1st Platoon:**

• **German Section b:** 3

b

b's
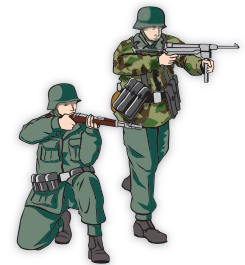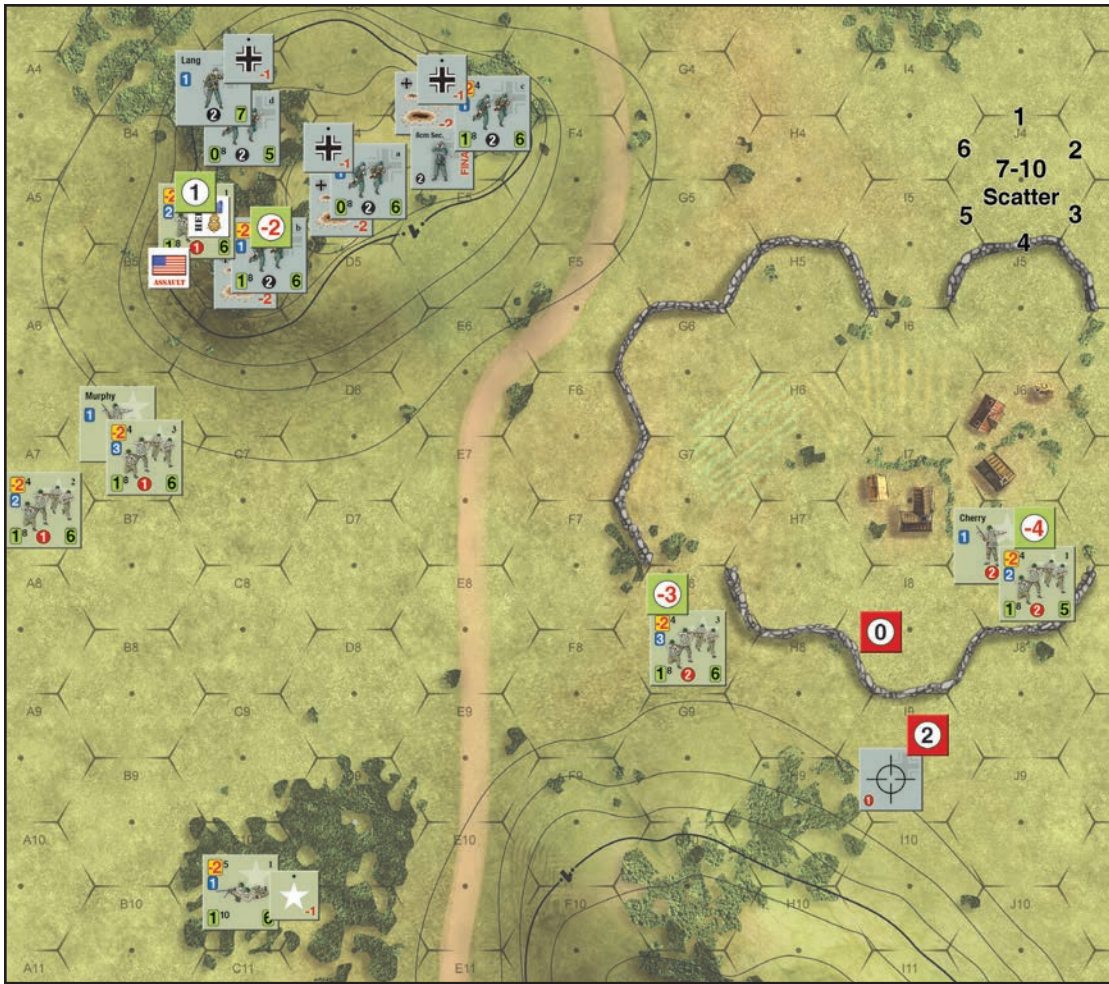
Turn 2 Fire Resolution

- **American 3rd Squad, 2nd Platoon:**   5 -3
                                2
        2   6
- **Lt. Cherry and the American 1st Squad:**   6 4
                                2
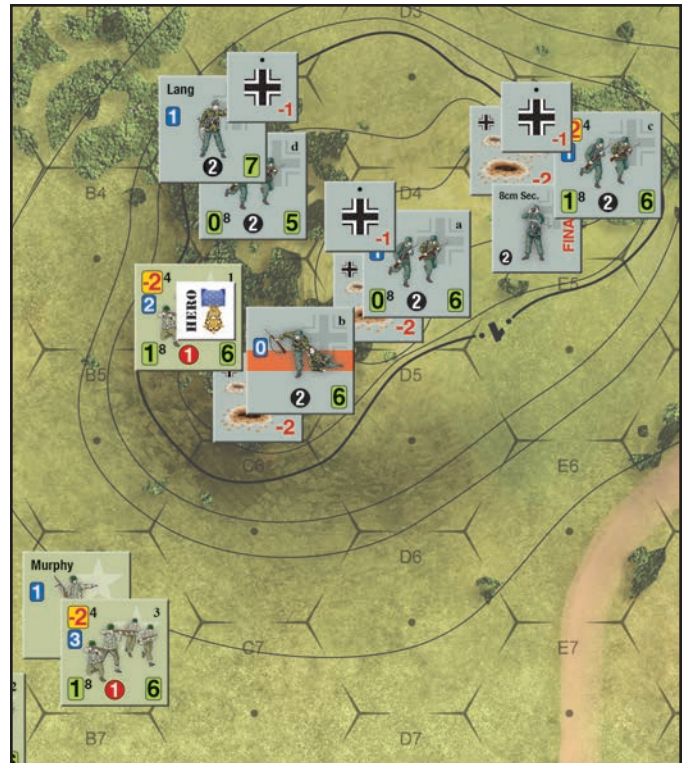   2   5

Assault Phase:

                                            b
            2 *[Section **b**'s Assault Value of **0**,
+ **1** for the IP and +**1** for the major contour crossed by the American
1st Squad]*   4 *[1st
Squad's Assault value of **2**, +**2** for the Cohesion Differential (8–6=2)
between the American 1st Squad and the disrupted German Section
b]*   2
        5, +**2**   7

                                b

                    4

Turn 2 Assault Resolution

Mortar Fire Adjustment Phase:

*[The German player may attempt to regain mortar support in subsequent game turns and would do so on a die roll ≤ **4**.]*

Time Lapse Phase:

[4

for the first game turn and 3 for the second]
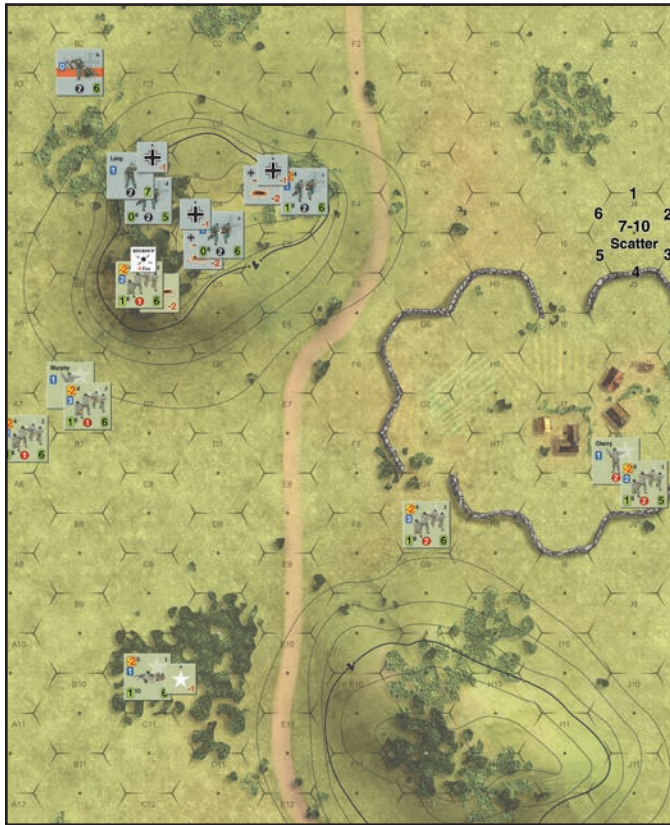
End of Game Turn 2

At the end of Game Turn 2 the Attacker's Score is 13 *[7 minutes +6 for Casualty Points due to loss of the 2 combat steps of the eliminated 2nd Squad, 2nd Platoon]*
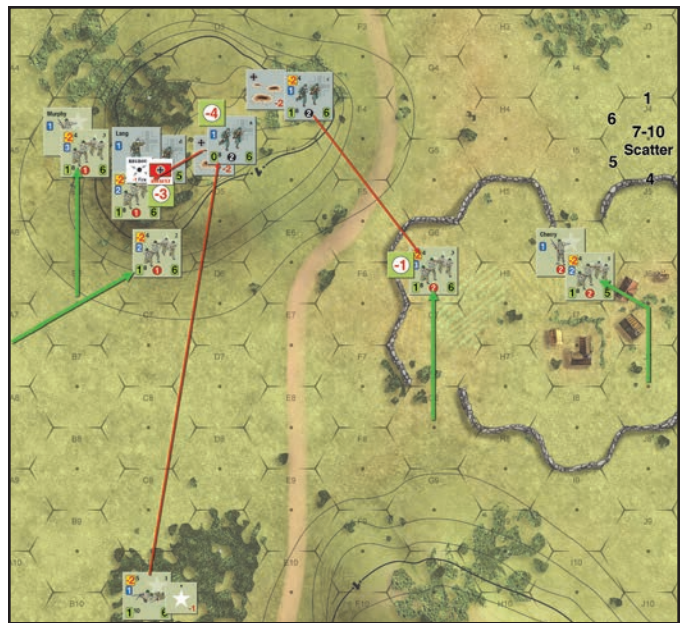

Game Turn 3
Initiative Phase:

2

[The German player has no Initiative DRM as stated in the mission setup]

Turn 3 Activation

Activation Phase:

a   **4**

*[**1** for its SAV, **-3** for range, **-2** for the IP]*

Reaction

a

a **3**   *[**0** for its SAV, **-1** because it is Suppressed, **-2** for the IP]*   c

*[**1** for its SAV, **-1** for range, and **-1** for the wall]*

d   *[**Note:** German Section **b** cannot react (attempt to recover) because it did not see an enemy unit conduct an action in its LOS].*   *Reaction*

Fire Resolution Phase:
• **American 1st Squad, 1st Platoon:**   **3**

• **American 3rd Squad, 2nd Platoon:**   **1**

Turn 3 Fire Resolution

• **German Section a:**   **4**

Assault Resolution Phase: **d**

       2 *[+**1** for Section **d**
and +**1** for Lt. Lang]*
3 *[+**1** for 1st Squad's Assault Value, +**1** for Cohesion Differential,
+**1** for the IP]*   **1** *[2 -3],*

Turn 3 Assault Resolution

8 – 1

       a

Mortar Fire Adjustment Phase:

Time Lapse Phase:

       *[4 for the
first game turn, 3 for the second, and 5 for the third]*

End of Game Turn 3

At the end of Game Turn 3 the Attacker's Score is 21 *[12 minutes,
+9 Casualty Points, due to loss of a total of 3 American combat
steps, including the reduction of 1st Squad, 1st Platoon this game
turn]*

Game Turn 4
Initiative Phase:

Activation Phase:

       c   **4**   *[**1** for its SAV, **-3** for range, **-2**
for the IP]*

       d

       envelop

       *[the defenders suffer envelopment because the
American units entered the hex occupied by German Section **d** from
two non-adjacent hex sides]*

       a

       Reaction

Turn 4 Activation

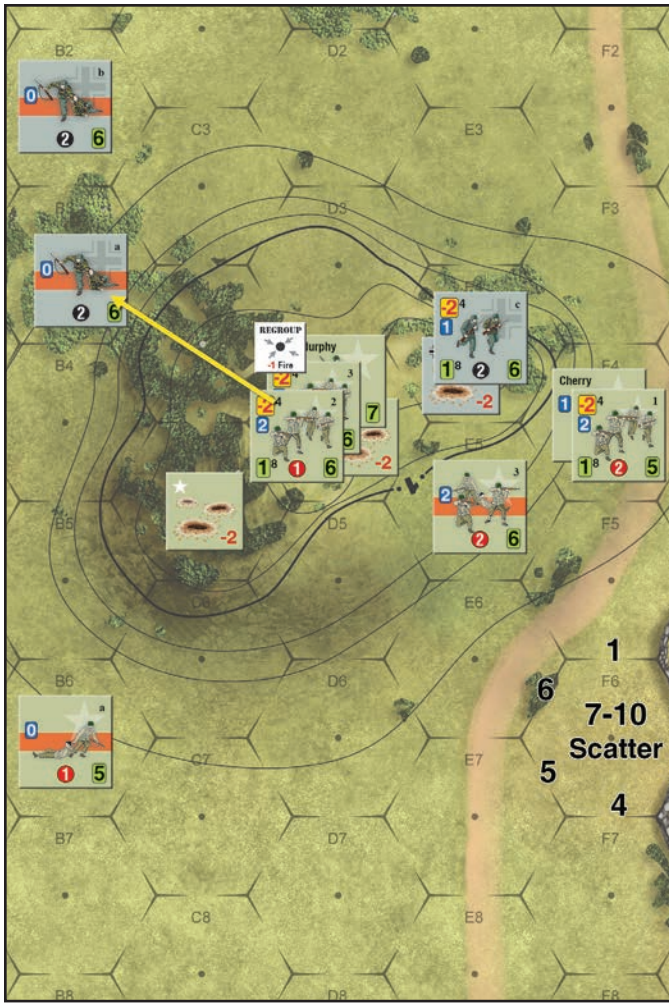
Turn 4 Fire Resolution

Fire Resolution Phase:

• **American 1st Squad, 2nd Platoon:**

• **American 3rd Squad, 2nd Platoon:** 1

• **German Section c:** 4
1

Assault Resolution Phase:

d

4 *[1 for the Section d's Assault Value, +1 for Lt. Lang, +1 for the hill hex, +1 for the IP]*

10 *[2 for 2nd Squad's Assault Value, +3 for 3rd Squad's Assault Value, +1 for platoon leader Lt. Murphy, +2 for the Evelopment marker, +1 for Cohesion Differential (6 – 5) and +1 because the Germans are marked with a Regrouping marker]*

6 *[American net Assault Value of 10 minus the German net Assault Value of 4]*

a   c

*[**Note:** German Section **d** cannot react because it's in an assault hex. Again, Section **b** cannot react because it did not see an enemy unit conduct an action in its LOS]* Reaction

Reaction

a

1   *[0 for its SAV, +1 for Proximity Fire]*

c

1   *[1 for its SAV, -1 for Suppression, +1 for Proximity Fire]*

d

[The current Time Lapse of 12 minutes and 7 minutes representing the time required for the platoon to designate a new platoon leader]
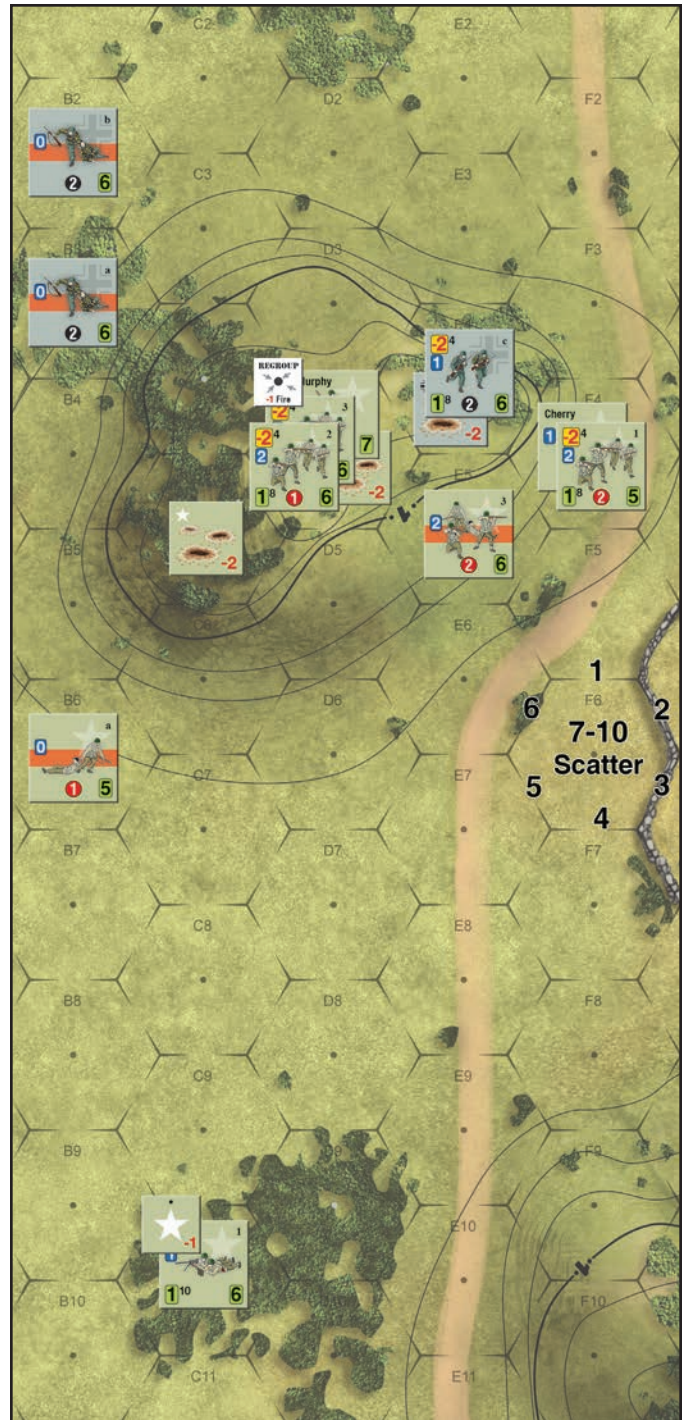
Turn 4 Assault Resolution

Continuation of Assault Resolution Phase:

a

2 [**1** for its Assault Value, +**1** for the IP]   **6** [**2** for 2nd Squad's Assault Value, +**3** for 3rd Squad's Assault Value, +**1** for Lt. Murphy]

4 [6 – 2]

4

Mortar Fire Adjustment Phase:

Time Lapse Phase:

[4 for the first game turn, 3 for the second, 5 for the third and now 4 for the fourth]

End of Game Turn 4

At the end of Game Turn 4 the Attacker's Score is 22

25.2 Armor

Situation: *January 5th, 1945.*

Positions at Start

Turn 1
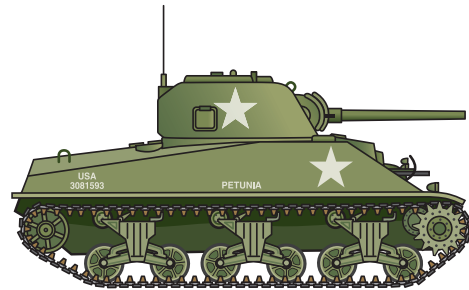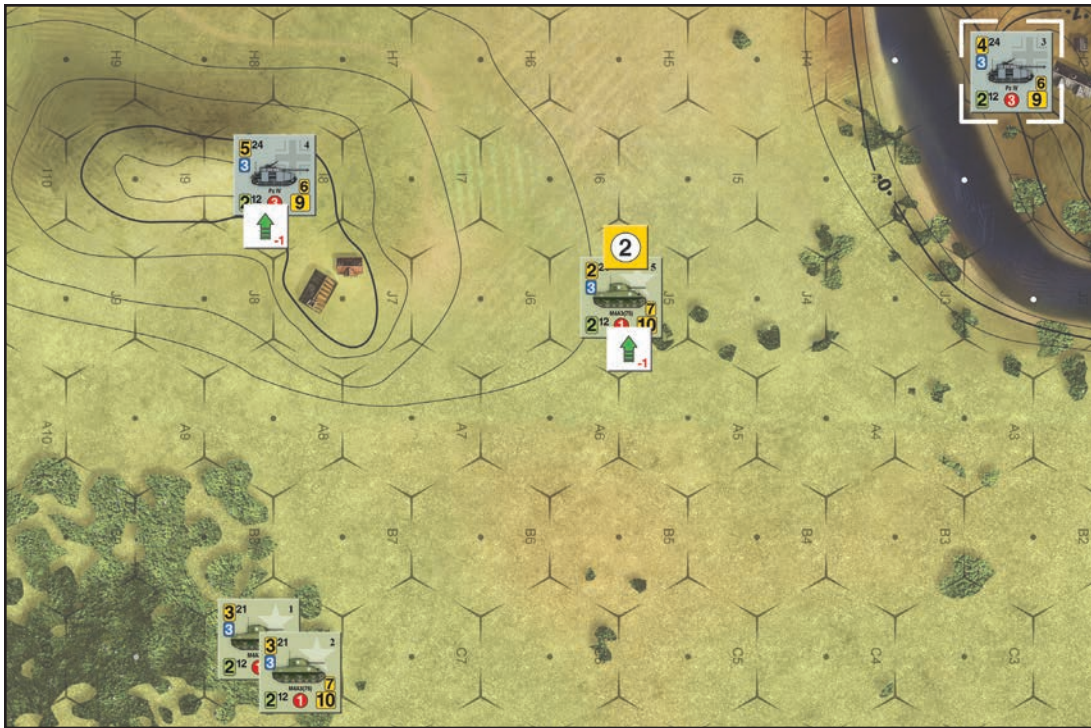
Initiative:

Activation:
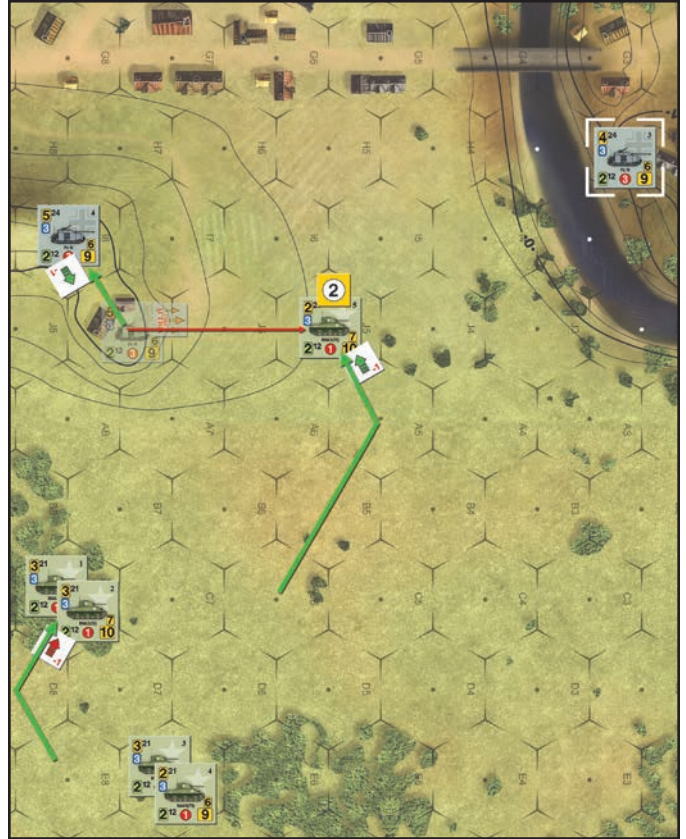
Turn 1 Activation

[17.9b],

[10.4.2]

2 *[5 ATV, -2 for the Shoot & Scoot to an adjacent hex, -1 for the motion target]*

Fire Resolution

Fire Resolution:

Time Lapse:

Turn 2

Initiative:

Activation:
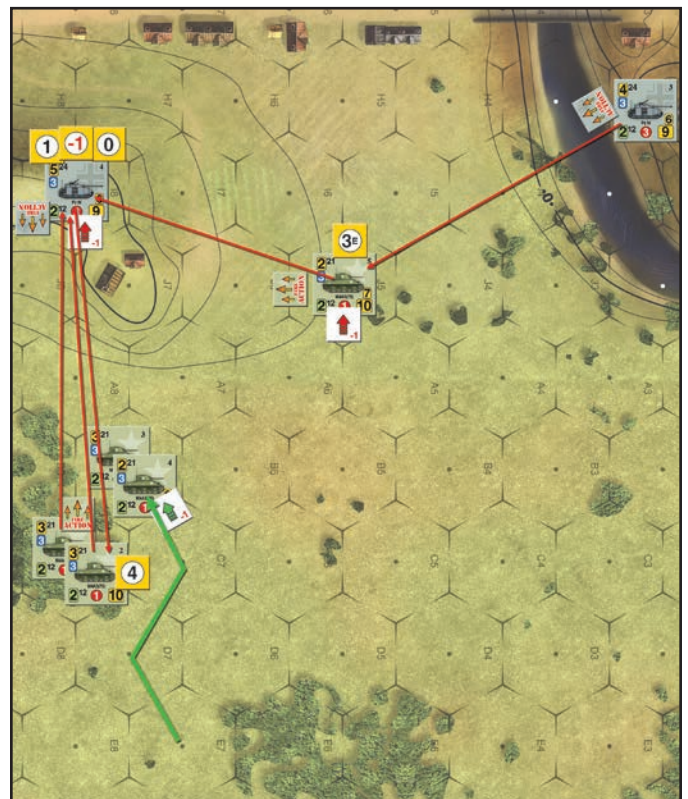
[10.4.3]
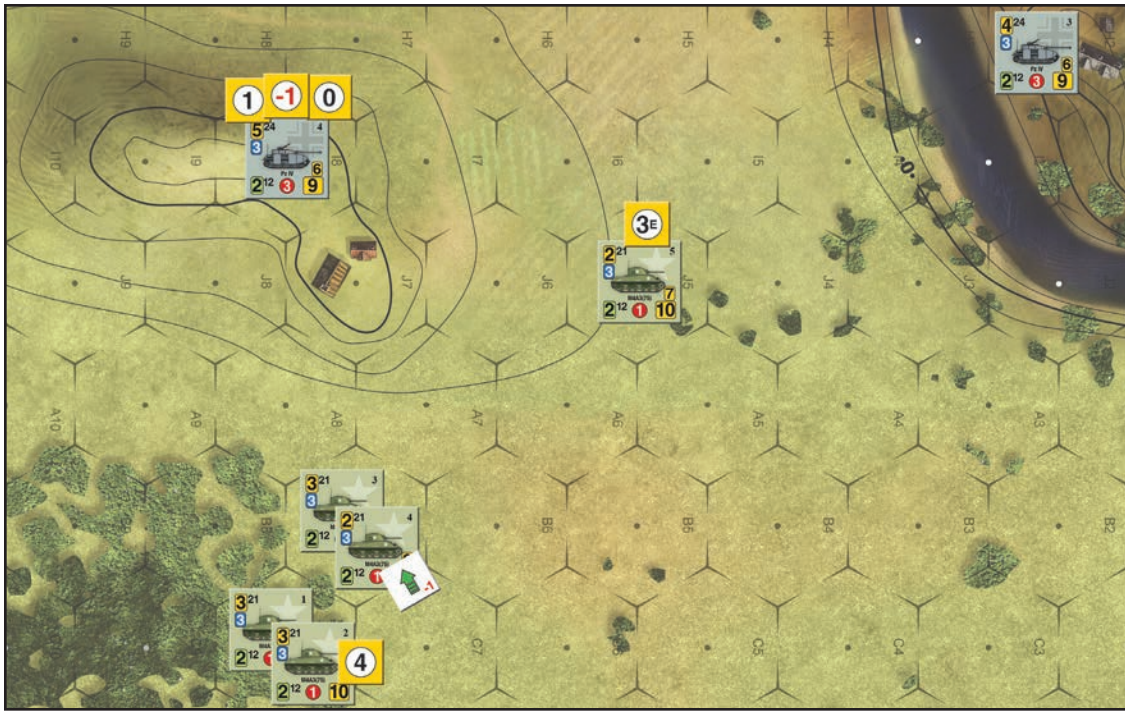
4   [5 ATV,

-1 for Halt & Fire from its current hex]

Situation at the End of Game Turn 1

Turn 2 Activation

Fire Resolution

1 [**3** ATV, **-1** *for firing at unit on a higher level,* **-1** *for motion target*]

0 [**3** ATV, **-1** *for Suppression,* **-1** *for firing at unit on a higher level,* **-1** *for motion target*]

1 [**2** ATV, **-1** *for firing at unit on a higher level,* **-1** *for Motion firer,* **-1** *for motion target*]

a **3e** [**4** ATV, **-1** *for motion target*]

Fire Resolution:

• **Sherman #2:**

5

• **Sherman #5:**

8

• **Pz IV #4:**

6

Time Lapse:

Situation at the End of Game Turn 2

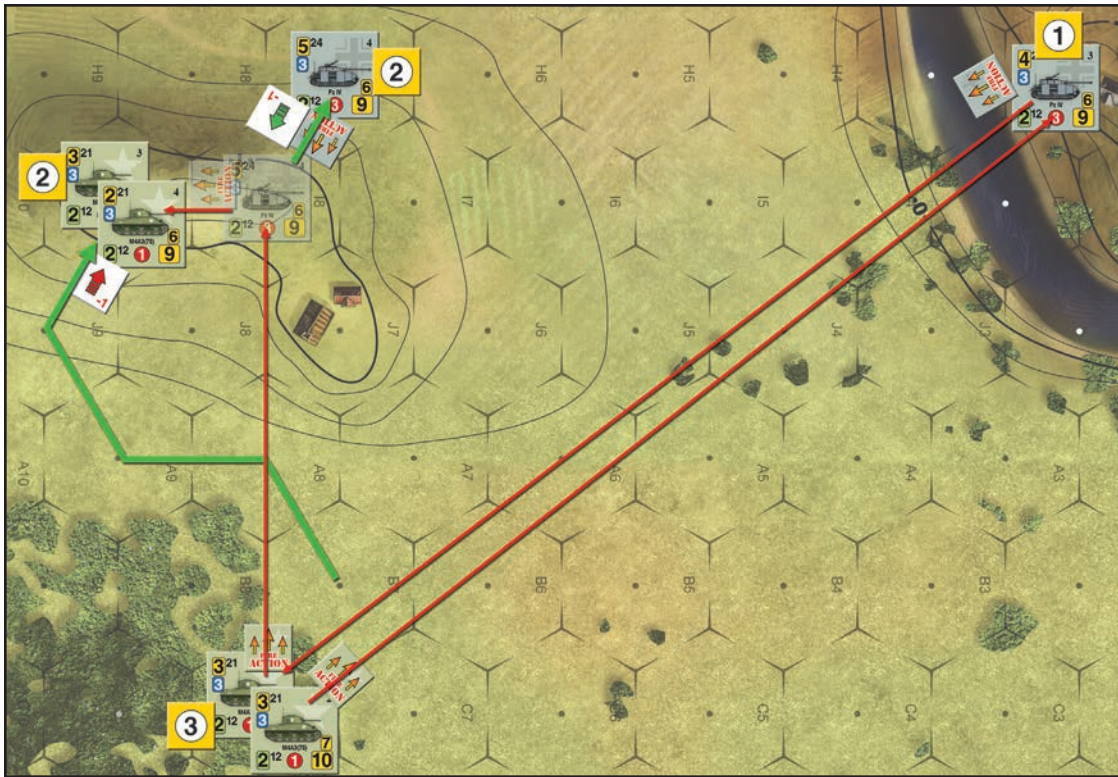## Turn 3

Initiative:

Activation:

2 [**3** ATV, **-1** *for firing against a target at a higher level*]

a **1** [**3** ATV, *and* **-1** *for firing against a target at a higher level, or* **-1** *for the rural building; the TEMs are not cumulative*]

Turn 3 Activation

Fire Resolution:
- **Sherman #1:** +3

  11

  10
- **Sherman #3:**

  5

- **Pz IV #4:** 9, +2

  11

- **Pz IV #3:.** 7, +1

  8

  9

2 *[5 ATV, -2 for the Shoot & Scoot to an adjacent hex, -1 for a motion target]*

3

[4 ATV, -1 for Suppression]

Time Lapse: 9
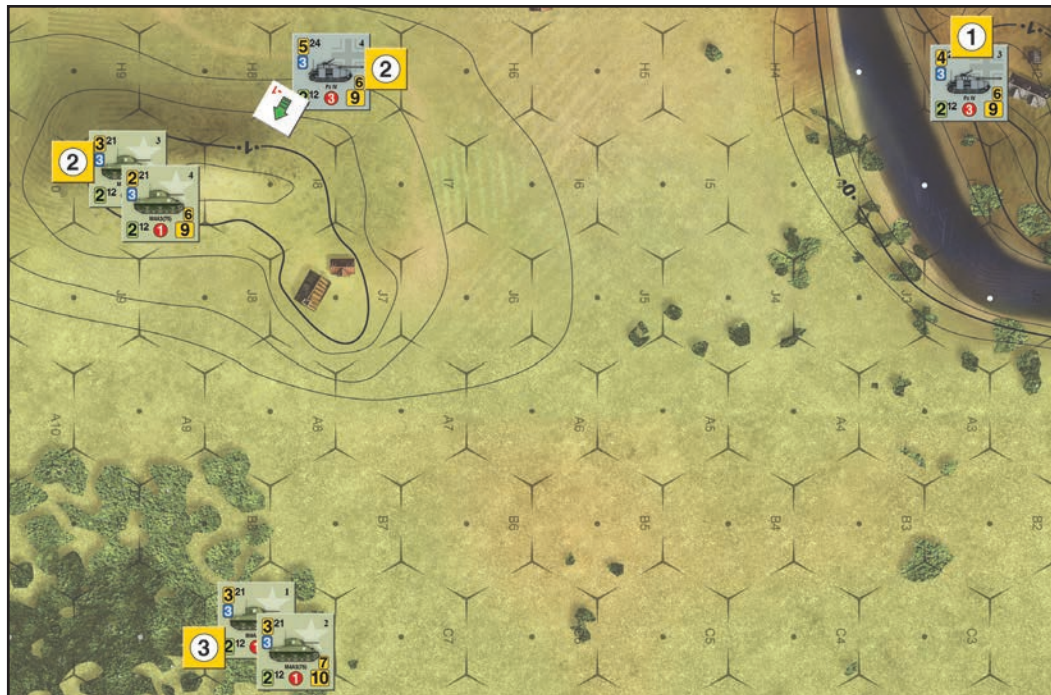
Turn 3 Fire Resolution
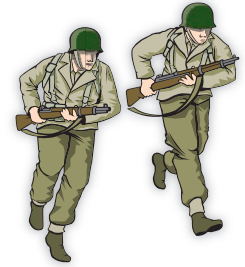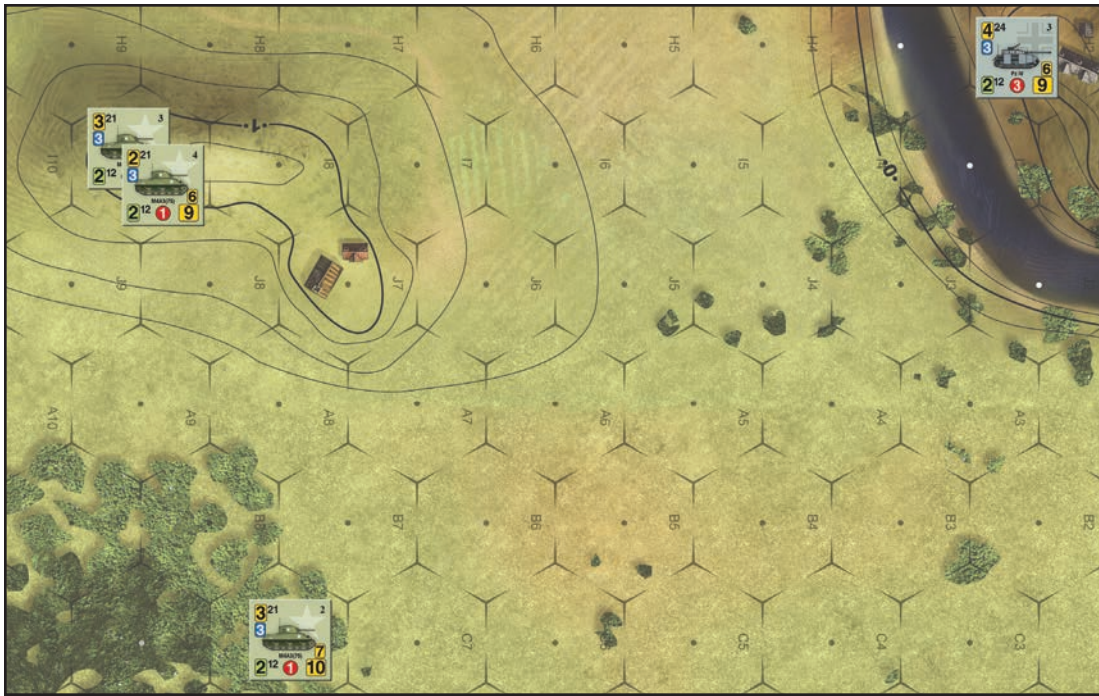
Situation at the End of Game Turn 3

Turn 4

Initiative:

Activation:

2   [*3 ATV, **-1** for the cover of the rural building*]

1   [*2 ATV, **-1** for the cover of the rural building*]
1

[*3 ATV, and **-1** for range, and **-1** for firing against, firing against a target at a higher level **or** the cover of the rural building; the TEMS are not cumulative*]

Turn 4 Activation

Turn 4 Fire Resolution

2 [**4** *ATV,* **-2** *for the Shoot & Scoot to an adjacent hex,* **-2** *for the Split Fire,* **-2** *for being Suppressed (-1 for every two DRM markers rounded up)]*

Time Lapse:

Fire Resolution:

• **Sherman #3:**

    4

• **Sherman #4:**

    8

• **Pz IV #3:**

    11

    4

    11
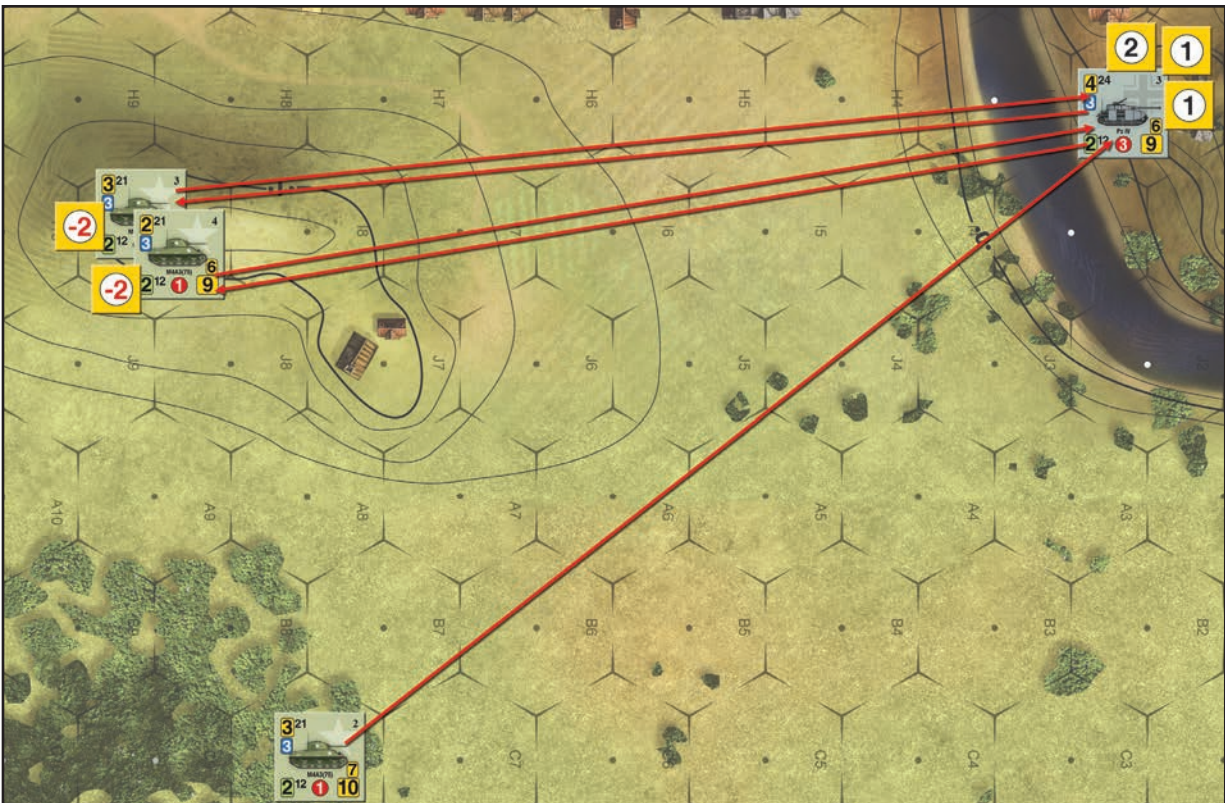
The Last Hundred Yards - Designer's Notes

What Are We Doing Here?

Why we do what we do in *The Last Hundred Yards*
why we do what we do

Time Lapse System

The Last Hundred Yards

"What battles have in common is human: the behavior of men struggling to reconcile the instinct for self-preservation, their sense of honor, and the achievement of some aim over which other men are ready to kill them. The study of battle is therefore always a study of fear and usually of courage; always of leadership, usually of obedience; always of compulsion, sometimes of insubordination; always of anxiety, sometimes of elation and catharsis; always of uncertainty and doubt, misinformation and misapprehension…above all, it is always a study of solidarity, and usually disintegration; for it is toward disintegration of human groups that battle is directed",
The Face of Battle

Initiative System

(representing the active player)

LHY

enemy

friendly

e.g., momentum

(initial friendly maneuver action)

(enemy fire reaction)

(friendly

fire reaction)

(enemy

fire reaction)

(enemy maneuver reaction)

Activation Cycle

(friendly mortar fire reaction)

(friendly maneuver reaction)

"where there is action, there's a reaction."

Maneuver

**It is important to note that in *LHY*,
each unit is limited to a single action or reaction per game turn.**

helpful

when encircling an enemy
hex

entering an enemy-occupied

good for avoiding

Enfilade

**If the enemy did not see you maneuver, he will not be able to
react.**

every

LHY,

Fire Mechanics

Armor

any

all

Modeling Behavior through the Manipulation of Weapon Data:

DRM markers

SADRM

ATDRM

MDRM

"The enemy was maintaining their onslaught and pressing forwards regardless of losses. Returning fire, my company was retreating deeper into the forest. A tank duel ensued under conditions of extremely limited visibility and maneuverability. Sometimes we were shooting at each other from point-blank range. Solid shells whizzed past, with shrapnel shells and aerial bombs exploding all around. Tanks, vehicles, the forest—everything was on fire. Control of the whole company became impossible, and combat took place in separate independent actions. Finding cover behind the trees, using glades, cuttings and clearings, the company held the enemy off with great effort."

Red Army Tank Commander: At War in a T-34 on the Eastern Front

"Wilf, our gunner up in our turret, fired three times in ten seconds, with Stang our breech-man grunting as he reloaded with amazing speed each time. Our rounds deflected off the Stalin's huge turret twice – and the third actually stuck in the armor plate, a slug of German steel jammed into a slab of Russian steel, its tracer still glowing red. Beyond the Stalin, I saw a Tiger roll into a depression in the ground, burning from the engine deck; and then another of our panzers standing still, with its hatches open and the crew climbing out with their uniforms on fire. Suddenly, my glass vision block shattered as we were hit on our front plate by the Stalin facing us. I heard another impact striking our turret, and a long groan from somebody up there, followed by a series of shouted commands from Helmann. Yet another impact came, low on our front hull, and the blow threw me back in my seat. My ears were ringing, and I could see nothing through the wrecked glass except the red sunset sky. Helmann kicks me in the back, the tip of his polished boot brought me to my senses. In the seat alongside me, Kurt was yelling, 'Push out the glass, Faust' while Helmann was screaming, 'Faust, ram that Stalin. Ram it!' In a daze, I unclamped the vision block from inside, raised the armored bracket and pushed the broken glass out onto the hull front. A blast of freezing air came in, bringing smoke and sprays of ice - and then a blast of metal fragments as another shell hit us, blowing scabs of armor plate off our front. With bits of metal in my face, I drove the Tiger straight at the Stalin, aiming hull-to-hull across the rolling ground. I could not understand why our gun was not firing – then I realized the terrible groan, which erupted when the Stalin's shell hit us told me someone in the turret was badly wounded. With no gun, we could only use our sixty tons and our Maybach as a battering ram – it was either that, or sit obediently and be shot to pieces."

Tiger Tracks – The Classic Panzer Memoir.

"Lt. Danby's tank crept forward along the narrow main street, negotiating through the tricky sunlight patterns filtering through the gently rustling leaves of the trees overhead. Every ghostly flicker off a stone wall or glint behind a half shuttered window mocked mortal danger. Danby's tank idled frequently in order to not outpace the doughboys jockeying in fits and starts among the nearby buildings, and the M4A1's motor growled as if annoyed. From the turret hatch, Danby watched and listened for any other Marders attempting escape through the crossroads. Inside, Cpl. Vargo kept the main gun ready with his hands resting on the traverse controls and his foot hovering near the fire switch. Pvt. Dishner sat cramped and sweating on the opposite side of the main gun, ready to recharge the barrel with a new round of AP or HE. The tank and infantry team progressed without incident past the Mourier blacksmith shop, the post office and Martel's home. As they drew near the crossroads, however, a bitter chorus of German small arms fire crackled with sudden vitality, the bullets hissing and popping through the hot air. Some shots pinged off the tank hull while others screamed as they ricocheted in wild directions off the stone and asphalt. The Germans were not going to relinquish the crossroads without a fight. Concerned about being hit by a Panzerfaust, Danby ordered Tikkanen to halt the tank until the infantry could clear the immediate area. While sergeants barked orders and encouragement, the men shot forward, leapfrogging along the walls and doorways and returning fire with their M-1 Garands and BARs. The advance fell far short of dislodging the determined German defenders, and a static firefight ensued." *Day of the Panzer: A Story of American Heroism and Sacrifice in Southern France.*

all other weapons put together, at least as far as the infantry are concerned...[However] exact figures for mortar casualties are hard to get. Medical records only show the weapon causing the casualty in a few cases. A number of infantry battalion MOs... all agreed in placing the proportion of mortar casualties to total casualties among their own troops as above 70%".

Montgomery's Scientists: Operational Research in Northwest Europe.

D-Day

"The battlefield of Normandy was somewhat confined, meaning the defensive area, including likely approach routes, was mapped and plotted in by artillery and mortar observers. When Allied infantry entered the German defensive area they would come under fire from a few German riflemen. The idea was to get the allied soldiers to drop to the ground for cover on a likely spot selected by a forward observer. When the Allied soldiers ducked for cover, a barrage of mortar fire was immediately under way. The mortar fire would come in quickly, hit with great accuracy, and usually have a devastating effect. This is because they knew in advance where to fire, and the crew was ready and waiting to fire. The allied officers had a hard time convincing their soldiers that it was far less dangerous to keep moving than to stop when taking light small arms fire. 70% losses to mortar fire may be exaggerated, but in Normandy, and probably elsewhere, the mortar was the deadliest German light infantry weapon."

Avgörandets Ögonblick: Invasionen i Normandie [Determining the Decisive Moments: The Invasion of Normandy]

Roles of the Mortar:

most

Mortars

Perhaps the biggest drawback of the mortar was the high rate of ammunition expenditure and the need to husband ammunition. Thus, target selection was vital.

"The Germans use mortars in large numbers... In the present campaign, casualties from mortars have been particularly heavy and have contributed as much as anything else to making advances slow and costly. The casualties in the present campaign from mortars have been very heavy, heavier in fact than from

tical ability. It will primarily be determined by your character, your reputation, not much for courage—which will be accepted as a matter of course—but by the previous reputation you have established for fairness, for that high-minded patriotic purpose, that quality of unswerving determination to carry through any military task assigned to you.".

Organization:

six
six   *two*

Maintaining the Initiative:

Fire Control:

(not removed from play as result of a casualty)

In Reaction:

Platoon Leaders

"When you are commanding, leading [soldiers] under conditions where physical exhaustion and privations must be ignored, where the lives of [soldiers] may be sacrificed, then, the efficiency of your leadership will depend only to a minor degree on your tac-

Directing Mortar Fire Support:

(slight wound)

Leading Men Under Fire:

Elite vs Regular Units

Leading from the Front:

Recovery – Rallying his Men:

Platoon Leader Casualties:

Leadership:

Initiative:

Initiative at the Squad Level:

[This reflects the superior training and experience of the NCOs at the squad level]

Coordination:

Esprit De Corps:

The Imperial Japanese Army

When it came to weapons production, the Imperial Japanese Army's requirements often came in second to the needs of the Imperial Japanese Navy. The Army was an infantry-heavy organization that lacked much in the way of the modern heavy weaponry other armies enjoyed. Their antitank capabilities were extremely limited; artillery was often lacking and sometimes restricted to small, outmoded pieces; and its armored forces included obsolescent tanks that were greatly inferior to their opponents' armor. To help compensate for the lack of heavy weapons, the Imperial Japanese Army worked hard to develop large numbers of what were probably the best light infantrymen in the world at the time. Their creed stressed relentless offensive action seeking a quick decision and emphasizing spiritual factors including zealous dedication and fighting spirit. Night attacks were a true specialty, and their weaponry reflected their light and fast doctrine. To offset their frequent lack of artillery, the Japanese augmented their firepower through the extensive use of mortars, the best and most cost-effective substitute for industry-intensive heavier artillery. And few were as feared, or as effective, as the Type 89 "Knee Mortar," or grenade discharger.[1]

www.ibiblio.org/hyperwar/Japan/IJA/HB/HB-7.html

The Red Army

house. He kept silent and did not take any action. We all thought the position hopeless. We blamed the chain of command: the company commander had blamed the battalion commander, and he blamed the regimental commander in his turn, and so on—all the way back to the Kremlin. But the next day, the charge went in the opposite direction and, as a rule, it was restricted to soldiers or platoon commanders. After the battle was over and reviewed, the guilty were found and punished.

Tank Rider: Into the Reich with the Red Army

The true state of affairs was that everyone was afraid of being blamed and severely punished. The subordinate officers would never take independent action to change the orders that came from above. The entire Soviet system, both civil and military, rested on a rigid subordination from the bottom up. The highest authority was considered to be true and infallible. If a battle was won, everyone thought it was only thanks to the supreme leader's personal qualities. Recruitment was not based on merit but on executive orders year-to-year." *Born Under a Lucky Star: A Red Army Soldier's Recollections of the Eastern Front of World War II*

Red Army Tank Commander

Russian Tactical Doctrine:

Assault! Assault! Assault!

Command and Control:

"The house, where we took refuge, had been under fire too. The four of us, my friend Vasily, a soldier from a rifle company, a senior lieutenant, and I, sat on the floor near the window wall. As I suspected, being inside the house was a great risk. At any second, a shell could fly into a window, or a mortar could explode on the roof. The sense of danger and fear forced me out to the backside of the house. My friend and the soldier from the rifle company came after me. The senior lieutenant stayed in the

Tactics
Attacking Principles:

This is a key to success in

action

Other Principles:

Defending Principles:

initial

(especially superior enemy armor)

(i.e., leap frogging)

Mike Denson