

Tactical Combat Series:

Series Rules, ver. 3.1

©1994. The Gamers, Inc. All Rights Reserved.

Series Design: Dean N. Essig

Playtesting: Perry Andrus, Marty Arnsdorf, Dusty Brown, Dave Demko, Kelly Eggers, Jeff Emde, Lee Forester, Dave Freidrichs, Owen Fuller, Stanley Friesen, Don Gilbertson, John Gilmer Jr., Alan Guile, Wig Graves, Mike Haggett, Paul Herkes, Simon Hoare, Jean Jodoin, Scott Johnstone, Lee Kail, John Kisner, Braden Lynch, Mike Malone, Ernie Miller, Rod Miller, Randy Morfitt, Don Nelson, Don Nesbitt, Peter Perla, Dave Powell, Nigel Roberts, Bob Runnicles, Bob Schindler, Rod Schmisser, Ken Schreiner, Sam Simons, James Sterrett, James Stormes, Joe Sylvester, Bill Tallen, Jerry Terrell, Steve Vance, Ric Walters, Zach Waltz, Al Wambold, and all the 3.0 players who called or wrote....

Table of Contents

Page	Item
1	Introduction
	Version 3.1
	The Components
2	Beginner's Note
	Playing Solitaire
	1.0 General Game Concepts
	2.0 Sequences of Play
3	3.0 Units
4	4.0 Modes
5	5.0 Stacking
	6.0 Command
11	7.0 Visibility & Weather
12	8.0 Line of Sight
13	9.0 Fire Combat
14	10.0 Losses
	11.0 Area Fire Combat
15	12.0 Point Fire Combat
16	13.0 The Suppressive Fire Action
17	14.0 Overwatch
	15.0 AT Rolls
18	16.0 Morale
20	17.0 Artillery
22	18.0 Ind. Fire vs. Point Targets
	19.0 Smoke
23	20.0 Movement
	21.0 Minefields
24	22.0 Assault Combat
25	23.0 Overrun Combat
	24.0 Consolidated Assault
	25.0 Special Units
27	26.0 Aircraft
	27.0 Night
	Designer's Notes

Introduction

The *Tactical Combat Series* (TCS) contains realistic, playable games of specific World War II actions. The game system was designed to handle two roughly regimental-sized forces in battles lasting a day or two. The system's emphasis is on command and combined arms effects. To provide an engine to drive the command system (the game's heart), the system has a relatively simple set of combat and movement systems.

✪ This rules version does not support the *Modern Expansion* rules presented in *Force Eagle's War*. Please use the 2nd Edition rules when playing that game. Otherwise, these rules are compatible with all earlier *TCS* games.

Version 3.1

This is an update of the 3.0 rules to accommodate your comments and suggestions. I won't try to summarize all the actual changes here as there are many and I'm sure to miss a few little ones. The changes will stick out to people who are familiar with the 3.0 rules; those who aren't will be learning them fresh anyway. Thanks to all who sent in their ideas and comments—most generous were Don Nelson (author of the *Buttoned Up* rules), Lee Forester (who suggested pages and pages of ideas), and Perry Andrus (who kept pushing for improvement). Suffice it to say, these rules are now set in stone and will hit version 3.2 only if some errata needs inclusion.

I'm sure you'll find the game plays faster and cleaner as a result. ENJOY!

The Gamers

The Components

I. The Map

The map included in this game depicts the area in which the battle was fought. To eliminate troublesome folds, carefully backfold each crease. Secure the map to the playing surface with *drafting tape* or play it under Plexiglas to help protect your gaming investment.

A. The Hex Numbering System. Every hex on the game map is identified by a hex number (e.g. 29.17). The digits before the decimal point (29.xx) indicate the vertical hex column, reading along the map from left to right. The digits after the decimal point (xx.17) identify the exact hex in the column, reading from bottom to top. To reduce map clutter, hex numbers are printed only on every fifth row of hexes (xx.05, xx.10, xx.15). To find hex 29.17, for example, follow the xx.15 row until you find the 29.xx column, then count up two hexes to 29.17. If the game uses more than one map, any reference to a hex number will include the appropriate map letter, as in B29.17.

B. Map Edge Hexes. Only hexes with at least 1/2 hex showing are playable.

C. Off Map Movement and Fires. Unless specifically allowed in a given game, units cannot conduct any sort of off-map movement. Destroy units forced off the map. Artillery Fires which scatter off the game map have no effect on units on it.

II. The Rules

Every Gamers' Brand game contains separate Series and Game rulebooks. The Series rulebook contains the rules generally applicable to all the games in the series. The Game book gives the details needed for a specific game, including any special rules, scenarios, and set up information.

A. Organization. Section and Case numbers outline the rules. Each major



grouping of the rules is a section; a paragraph within a rules section is a case. The number 4.2 would, for example, refer to section 4, case 2. A specific case can contain a number of related statements. Statements within a case are numbered as in 4.2a, 4.2b, etc.

B. Repetition. Once stated, a rule is repeated *only* if needed for clarification.

★ The rules use the term “Assault-style Combat” to replace the more tedious “Assault, Consolidated Assault, and Overrun Combats” with the same meaning.

III. Set Up Notes

1. “w/i X” means set up the unit at or within X hexes of the listed hex.

2. Units can set up in any mode and can be mounted or dismounted.

3. Units can never start the game overstacked.

4. Unless noted otherwise, units start at full strength.

5. Where given, spread losses as equally as possible within the listed organization. If Losses are by type, eliminate the losses from that type.

6. Historical orders are for informational purposes only. The player is free to create his Op Sheets before the game begins. All Op Sheets created before the game start play implemented. Unless the scenario requires otherwise, these can be of any type. Players cannot begin the game with unimplemented Op Sheets—these must be drawn up no earlier than turn one.

7. In older games where an at-start value for “Company Morale” is given do the following: average the Company Morales of all the companies in the battalion (ignore companies which did not have Company Morale before), and divide the result by 5 (round normally). That is the Battalion Morale for that battalion at start.

Beginner's Note

If you are new to wargames, **WELCOME!** This is an exciting and challenging hobby that allows for more intellectual competition than almost any other game form. Each wargame, in addition to being a competitive activity, also gives players a glimpse of history in action unavailable elsewhere.

To learn to play, browse through the rules and other components to become familiar with them. Try to develop a good idea of what exists in the game and where to locate it. Then read through the rules lightly. Never attempt to memorize game rules! Set up a few units and run through

the individual sequences with the rules handy to follow how they work. Allow the game to teach itself to you as you look up things you're unsure about. If something still confuses you or doesn't seem right, feel free to call or write to ask.

After learning the various procedures using a handful of units, set up the smallest or shortest scenario available in the game. Play it with a friend with the rules readily available. It will probably be best to not use the Command Rules in your first battle.

When you feel comfortable with the major game rules and the game's mechanics, read more closely the main Command Rules (6.0) and experiment with them. This system adds greatly to the game's realistic portrayal of WW II combat by imposing the limitations unavoidable in real battle.

By this time you will have mastered this game series and will be able to play any game in it with a minimal amount of rules learning. Good luck and good fighting!

Playing Solitaire

You can easily enjoy this game series solitaire. While such playings will lack the tension of not knowing the enemy's plan, this can be made up for by rigidly following the orders you give as intended at the time you wrote them.

Playing solitaire is best using the command system. You do not have to “forget” what the enemy is doing, etc. Play each side (orders and all) the best way you can. Do not write Op Sheets that directly counter the other side's intentions not yet shown by movements on the map. If you do, you will only destroy your own fun. Remember, the command system was not designed as a limited intelligence tool, but as a limitation on responsiveness. Play out the Op Sheets you've made up as you intended when you wrote them. Make no modifications to them because of changing circumstances. Assign any Op Sheets you want and force yourself to live with the consequences. The result will be a game that tells you its battle's story, and you can enjoy the fun. Playing solitaire with a scenario's optional historical orders can yield insights into how the actual commanders fought the battle.

1.0 General Game Concepts

1.1 Scale

Each turn is 20 minutes (one hour at night) and each hex 125-yards with a 20 meter contour interval. Some early games had a 10 meter contour interval. The

personnel units are generally platoons. Most weapons units (AT guns, etc.) represent a single gun, mortar, or artillery piece, and all vehicle units (tanks, recon vehicles, etc.) are individuals. Carriers (trucks, halftracks) represent sufficient vehicles to carry a full infantry platoon.

1.2 Retreat Rule

Players retreat their own units. A retreat must begin with the hex opposite the enemy action that caused it. If that first hex is blocked, you can substitute another. Following the first retreat hex, the retreat path can be anywhere, provided the unit does not circle back to its original location. If the unit is unable to retreat as required, destroy it. Retreating units do not generate Overwatch Triggers. Units **must** end their retreat further from all enemy units than when they began the retreat. **Units which cannot do so are destroyed.**

1.3 Standard Rounding Rule

Round .00 to .49 down, round .50 to .99 up.

When rounding must occur, do so only after making all modifications (before final application). In no case should you round a number before another manipulation. Example: Three fires of 3 points each fire at a target. Each Firer is suppressed (meaning they fire at half strength). The total fire strength is 5.

1.4 Fog of War

To increase realism, a player should not be aware of the enemy's Op Sheets, Battalion Morale values, task organizations, artillery availability or ammunition, nor any future plans that might be converted into Op Sheets. It is OK to look at enemy stacks in this system.

1.5 Dice Rolls

Many two-dice rolls in this game system are sequential (in the 11..66 format). For those unaccustomed to sequential rolls, roll two dice. Read the red die as the tens digit and the white die as the ones. For instance, a roll of 3 on the red die and 4 on the white one would be 34.

2.0 Sequences of Play

In all cases requiring a die roll to determine the sequence of events, each player rolls two dice. The player with the higher roll chooses to be first or second. Reroll any ties.

2.1 Outline Sequence of Play

- Command Phase
- Aircraft Fire Phase
- Action Phases
- Clean Up Phase
- Turn End

2.2 Narrative Sequence of Play

Command Phase

Both players do the following:

- 1) Accrue Weighted Turns.
- 2) Make any implementation checks.
- 3) Create new Op Sheets.
- 4) Make any Task Organization changes.
- 5) Make any Reserve or Alternate Die

Roll Check attempts.

Do these only in the order above. When weather needs to be determined, do so on hourly turns (0600, 0700 etc.). Where aircraft sorties need to be determined by dice rolling, do so for the turn at this time.

Aircraft Fire Phase

Roll to determine which player fires first (see 2.0). One player at a time resolves all his available sorties in a single batch.

Action Phase

Roll to determine who conducts his phase first (see 2.0). Each player has his own separate Action Phase. Conduct them one right after the other.

Remove your own Battery and Battalion Barrage Markers from your last Action Phase, and place reinforcements on the appropriate map edge at the **beginning** of the phase. If an enemy Artillery Barrage Marker or an enemy unit blocks the precise hex of reinforcement entry, shift the reinforcements along the map edge anywhere at or within 10 hexes of the assigned entry hex. Reinforcements cannot be withheld until later turns.

In his Action Phase, a player can conduct Mode Change, Movement, Artillery Missions, Suppressive Fire Actions, Assault-style Combats (Overruns, Assaults, Consolidated Assaults), Overwatch Fires, Save Yourself Retreats (SYRs), Minefield Breaches, and By-Force Minefield Crossings. In either Action Phase both players can conduct appropriate Overwatch Fires.

- Conduct these actions in **any** desired sequence or order.

At the end of your Action Phase, remove any **Bad Shoot** Barrage Markers from the map.

Clean Up Phase

Both players work together to do all of the following. **ORDER** is important:

1. Remove all Suppressed, Buttoned Up, Illumination (Illum) and Fired Markers.
2. Reduce all Paralyzed Markers to Suppressed Markers.
3. Remove all regular smoke markers and Level 1 Smoke Barrage Markers.
4. Flip all Level 2 Smoke Barrage Markers to Level 1 Smoke Barrage Markers.
5. Both players recover their Battalion Morale simultaneously. Roll one die separately for each battalion with a non-zero Battalion Morale. If the roll is equal to or less than the battalion's current Battalion Morale, reduce that Battalion Morale by 1. On any other result, there is no effect.

Turn End Phase

Advance the Turn Marker ahead one space and, for another turn, proceed again from the beginning of the sequence.

2.3 Assault Sequence of Play

- Attacker announces intention to Assault a given hex
- Defender's fight or flee decision
- Attacker moves into hex
- The Defender Fires, followed by the Attacker
- Each target checks Morale right after being fired upon (perhaps before returning fire, depending on the firing order) **EVEN** if the Area Fire Table result does not call for a Morale Check—the unit **MUST** check Morale.
- The Attacker decides if he wants to continue the combat.
- If the combat continues, the attacking units must enter Fire Mode.
- Repeat above fire steps until the combat ends.
- No Overwatch Trigger is generated.

2.4 Overrun Sequence of Play

- Attacker enters hex (at a +3 MP cost)
- The Defender Fires, followed by the Attacker
- Each target checks Morale right after being fired upon (perhaps before returning fire, depending on the firing order) **EVEN** if the Area Fire Table result does not call for a Morale Check—the unit **MUST** check Morale.
- Attacker must exit hex.
- Exit hex is an Overwatch Trigger.

2.5 Consolidated Assault

- Attacker enters hex (at a +3 MP Cost to vehicles and carriers, no cost for infantry)
- Mounted attacking units may dismount
- The Defender Fires, followed by the Attacker
- Each target checks Morale right after being fired upon (perhaps before returning fire, depending on the firing order) **EVEN** if the Area Fire Table result does not call for a Morale Check—the unit **MUST** check Morale.
- The Attacker decides if he wants to continue the combat.
- If the combat continues, the attacking units must enter Fire Mode.
- Repeat above fire steps until the combat ends.
- No Overwatch Trigger is generated.

2.6 Artillery Fire Resolution Sequence

- Announce Target Hex, caliber of shells, ammunition type, type of fire (battery, battalion, fast fire, etc.) and spotter.
- Place Target Hex Marker.
- Use the Adjustment Table to determine if a Good, Bad, or No Shoot occurs. Scatter if appropriate.
- Replace the Target Hex Marker with the appropriate Barrage Marker.
- Resolve all fire combats in or adjacent to the Barrage Marker's Attack Zone.

3.0 Units

The game's playing pieces—the counters—represent combat units, vehicles, and informational markers. The word "unit" often denotes any counter representing troops or vehicles—as opposed to informational markers. Each unit belongs to one of the following categories: infantry, weapons, vehicle, or carrier.

3.0a Infantry Units. The infantry unit category includes not only infantry platoons, but also engineers, military police and other troop units. Infantry units are area-type targets and firers. They have Morale and make Morale Checks. Only this unit type can breach minefields or attack in Assault Combats and make AT Rolls.

3.0b Weapons Units. These units represent heavier weapons systems that require a crew of three or more. They generally have one step (MG units and mortar platoons have two). They have Morale and make Morale Checks. These units can **never** attack in Assault-style Combat, conduct minefield breaches, or make AT rolls.

3.0c Vehicle Units. A vehicle is an individual combat vehicle, such as a tank, assault gun, tank destroyer, or SP artillery, not specifically designed to carry passengers. These are generally Point targets armed with Point weapons. They can tow weapons. They do not have Morale and are capable of Overrun Combat. These units can carry other units using special rules.

3.0d Carrier Units. Carriers have a white box around their silhouette. These are trucks, halftracks, and other vehicles whose purpose is the transportation of men and equipment. They function like vehicles above, except that they can use the carrier rules to transport other units. They can tow weapons. They have no Morale and are capable of Overrun Combat.

3.0e The counters are coded for firing class and type. A box around the range number indicates an Area-type direct fire weapon. A circle around the range number indicates an Area-type indirect fire weapon. A white range number blocked in red indicates a Point-type firer's nominal range.

3.1 Target and Firer Types

There are two classifications on a unit's Move Mode side which give a unit's firer and target characteristics.

3.1a The target and firer types are Area-type (A-type) and Point-type (P-type), plus the combination target type called Both-type (B-type). A- or P-type firers engage A-type targets on the Area Fire Table. P-type firers engage P-type targets on the Point Fire Table. P-type firers can engage B-type targets on either table. A-type firers can fire only on the Area Fire Table, while P-type firers can fire on either table.

3.1b The abbreviations on the unit's back are: "A" for Area, "P" for Point, and "B" for Both. A "dash" in the firer type's place indicates a unit without a weapon or with a special classification (such as on-map artillery).

3.1c Whenever directing fires against a B-type target, the firing player must select the fire resolution method (Area or Point) before resolving his fire. B-type units are **not** subject to "double-jeopardy" whereby the same fire is used against them on each table in turn. The Artillery Point Fire Table does not affect B-type targets.

4.0 Modes

All units in the game have two modes: Fire and Move. Modes determine many of a unit's capabilities. The side of a counter facing up shows that unit's Mode.

A Platoon is indicated by three dots, a Section by two.

Company and Battalion

Regiment and Division

An Infantry Platoon (Fire Mode Side)

Area Firepower

Morale (white on red indicates morale)

Range (red square outline indicates direct fire)

An Infantry Platoon (Move Mode Side)

Firer Type (P=Point, A=Area)

Target Type (P=Point, A=Area, B=Both)

Movement Allowance (TO=Tow Only)

Basic Weapons Symbols

AT Gun

MG (Machine-Gun)

Infantry Gun

Mortar

Game Markers

Turn

Day

Step Loss one step down

Weather

Fired

Buttoned Up

Suppressed

Target Hex

Paralyzed

Illum Round

Minefield

Smoke

Battery, Good Shoot

Battalion, Bad Shoot

Mine Breach

Level 2 Smoke

Dug In

Level 1 Smoke

A Typical Vehicle

Type

Platoon, Company Battalion, Regiment Division

Attack Rating

Point Defense (Black in Yellow)

Nominal Range (shown by white on red)

A Truck

Type

White Box shows Carrier status

Company, Battalion Regiment

Attack Rating (no weapon)

Point Defense (Black in Yellow)

A Mortar Platoon

Caliber

Company, Battalion Regiment Division

Morale (shown by white on red)

Fire-power

Range (Red circle indicates indirect fire)

TCS Unit Explanations

4.1 Mode Change

A player can change unit modes during his Action Phase. Units can change from Move Mode to Fire Mode at NO Movement Point (MP) cost. It requires 1/2 of a unit's Movement Allowance (round normally immediately) to switch from Fire Mode to Move Mode. Tow-only units have an assumed Movement Allowance (MA) of two for this purpose. A unit may also be required to change mode, at no MP cost, when it conducts a Save Yourself Retreat (SYR), suffers a Suppressed or Paralyzed Morale result, or during an Assault-style combat.

4.1a Restrictions on Mode Change. Suppressed, Paralyzed, or Fired-marked units **cannot** change mode. Units **required** to change Mode (due to Morale results or Assault-style Combat) can do so even if Suppressed or Fired-marked. Units being towed or mounted on a carrier must remain in Move Mode. Being Buttoned Up has no effect on Mode Change ability or the MP cost to enter Move Mode.

4.2 Mode Effects

Units in Fire Mode can fire Suppressive Fire Actions or Overwatch. Move Mode units can move, conduct Assault-style Combats, Mount or Dismount carriers, and breach minefields. In Assault-style Combat, mode has no effect on the ability to fire. **EXCEPTION:** Even then, Move Mode Mortars and towed units **CANNOT** fire. Mode has no effect on the ability of a unit to spot for **Mortars**, **BUT**, in order to spot for Artillery Missions, a unit must be in Fire Mode and have been that way since the beginning of the current Phase.

5.0 Stacking

Stacking is the placing of more than one unit in a single hex. Enforce stacking limits at the end of each Action Phase **and** during the execution of Assault-style Combats (both sides can stack to the limits during Assault-style combats, count up each side independently of the other). The owning player destroys the excess in any overstacked hexes. The two stacking rules below do not affect each other in any way.

5.1 Stacking Limits

5.1a Vehicles and Carriers. No more than 5 vehicle and/or carrier units can stack in one hex.

5.1b Other Units. A maximum of 30 steps of other unit types can stack in a single hex.

5.1c Combinations. A single hex can hold the maximum of both 5.1a and 5.1b at the same time.

5.2 Handling Rules

5.2a Stacking and unstacking have no Movement Point cost. Stacks need not move together. Players can freely create and break up stacks during movement.

5.2b Units in a hex can be in any mode or Morale condition.

5.2c Friendly and enemy units can occupy a hex together only during an Assault-style combat. Units can never end a phase stacked with an enemy unit. Destroy units forced to enter an enemy occupied hex for reasons other than Assault-style attacks.

5.2d Unlike in some other Gamers brand games, both sides can examine the contents of any enemy stack at any time anywhere on the map.

6.0 Command

The command rules impose realistic limits on the player's ability to rapidly change missions. Create Op Sheets to define your objectives. The units on an Op Sheet must execute the mission on that sheet until they accomplish the mission, are reassigned, or the player cancels it.

6.1 Playing without Command (optional)

You can easily play without the formal command system. Skip all the rules in section 6. Players can easily choose between realism and simplicity to suit their tastes. The game design works with or without the Command Rules.

⊗ Some Tactical Combat Series games (such as **Hunters from the Sky**) do not make use of the main Command Rules. For those games, ignore all of the rules from 6.0 through 6.16. Special rules will cover Digging In in those games as section 6.16 would not be used. Check with the Game Specific rules to determine if the Command Rules apply. Unless the game rules specifically state they don't, the main Command Rules **do** apply.

6.2 Unit Actions Unaffected by Command

Op Sheets show only the functions of higher level units (battalions, etc.). Much of what unit counters do, while part of a higher plan, need not be mentioned or controlled by Op Sheets. These items include (but aren't limited to) fire combats (Overwatch or Suppressive Fire Action), exact unit movements, Assault-style attacks, minefield operations, and artillery fires. Play proceeds along Op Sheet

frameworks, but Op Sheets do not control precise unit actions—as would be the case in games featuring plotted movement.

6.3 Units without Orders

Units not listed on a current implemented Op Sheet's Task Organization are in a "No Orders" Status and Unassigned. Only when a new Op Sheet which contains them implements does such a unit become "assigned" and leave No Orders Status.

6.3a Unassigned units must remain at or within 5 hexes of a specific center hex. The owning player chooses and records this center hex. He cannot change that hex unless the units become assigned and then unassigned again later or if 6.3c or 6.14a applies. Each center hex can be for as many units as the player wants.

6.3b Important: Unassigned units are never Dug In and **CANNOT** fire Suppressive Fire Actions (SFAs); they **can** fire Overwatch Fires. Otherwise, Unassigned units can freely move and fight within their 5 hex radius.

6.3c The player must give each unassigned unit group (those with in the radius of a common hex) a contingency plan. They can be told to defend in place, but they can do so for no more than 3 turns. Such a group must also be told what to do upon reaching the time limit. Such instructions cannot be more complex than "retreat quickly to X" (X must be **at least** 10 hexes from the earlier center hex). Upon reaching X, the player must record a new center hex and the process begins again.

6.4 Higher Commander's Intent

The higher commander's intent drives the player's operations. These intents appear in the game rules. The intent is a battlefield vision that your commander wants you to create. You can freely use your units to make his intent come true. Your success on the game map will be judged by your success in achieving that intent. It will determine your victory or defeat.

6.5 Op Sheets

Each Op Sheet contains all the instructions for its Task Organization. An Op Sheet can be implemented or non-implemented. An Implemented Op Sheet has passed its Command Prep (see 6.9) and its units must now follow its instructions. Non-implemented Op Sheets are still in their Command Prep and cannot control their units.

**OP SHEET**

Time: 1020

Type: Attack

Size: 1

(one infantry Bn
plus parts of one
Tank Bn less staff
modifier)

Task

Organization:

Support:

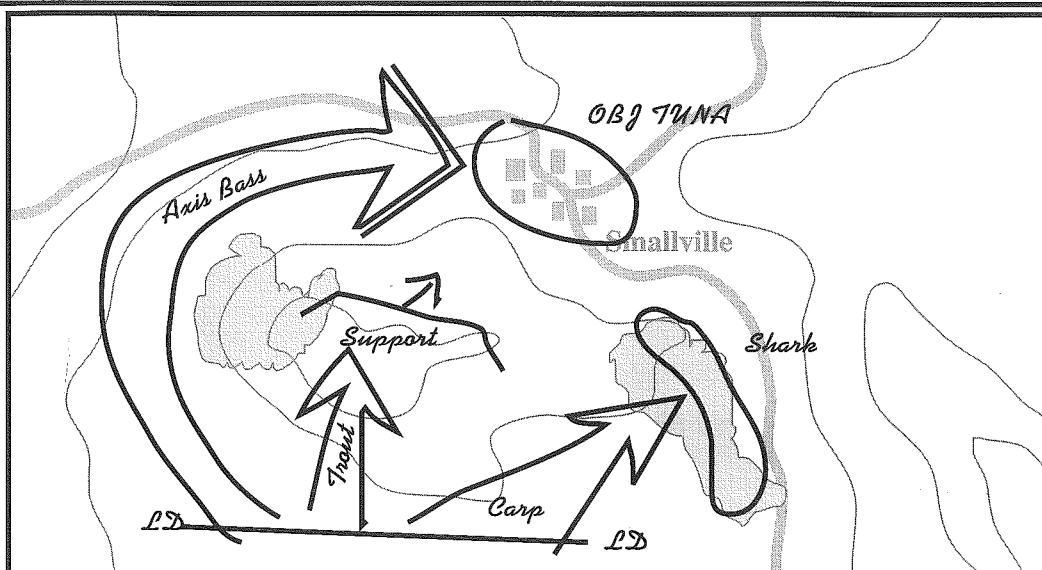
A Co, B Co,
Bn Wpns

Assault:

1, 2 Tank Plt,
C Co

Security:

3 Tank Plt

**Written Notes:***Move in three axes**Group Security: Move along Carp to Shark.
isolate OBJ Tuna.**Support: Move along Axis Trout to the support position.**Assault: Move along Axis Bass to seize OBJ Tuna.***Failure****Instructions:***Return to LD and
await new orders.***A Complex Fire and Movement Attack Op Sheet. Fish Motif.**

6.5a The Graphic. The graphic is a reduced version of the game map on which players draw up their operations. Other than the use of alternates, reserves, and the addition of new units to the Task Organization, make no changes to the graphic after creating it. We recommend the use of standard US Army (NATO) symbols. A list of useful symbols is on the back of this rulebook. Players can use custom symbols as long as both players agree to their meaning. The graphic alone should provide much of the information needed for another person to understand the Op Sheet.

6.5b Written Notes. The written notes give the information needed to cement together the graphic's logic and order. Written notes should be as short as possible. They should explain the execution details for the graphic so another person can fully understand the Op Sheet.

6.5c Failure Instructions. Every Op Sheet must give instructions of what to do if it fails. The determination of failure is up to the owning player. These instructions must include where the units are to withdraw to await further orders. Failure instructions can only entail a rapid movement to a rear position, avoiding enemy contact on the way. Any parts of a Task Organization that execute failure instructions become unassigned.

6.6 Op Sheet Types

Each Op Sheet can entail a number of actions (movements, attacks, etc.). The number and type of "sub-missions" is unlimited. While a sheet can contain any number of sub-mission types, a given set of units on an Op Sheet can only have one. In other words, a company could never be ordered to attack a hill—and then defend it—on the same Op Sheet. That would take two separate Op Sheets. (For instance, a player can have an attack Op Sheet. Simultaneously he draws up a Prepared Defense Op Sheet. The defense accrues time while the attack is underway and the player doesn't roll for it until the objective is secured.)

Multiple sub-missions here refers to having a single Op Sheet which deals with a large number of units, say a regiment, in which one battalion is doing one job, and another is doing something else—no single batch of units (such as a battalion) is trying to pull off two successive tasks on the same Op Sheet.

It is OK to assign one element the job of attacking through a route to and through one hill and into another—that would be considered to be one attack. It is also allowed to generate a defense in zones which allow the player's units to defend one phase line after another as the situation develops. It is

important to avoid being too "tight" in terms of the mission allowances for an Op Sheet—provided you are not setting up a single order to attack an objective and then defend it on the same Op Sheet, you are probably OK.

Identify each Op Sheet as one of four types: **Attack**, **Hasty Defense**, **Prepared Defense**, or **Move**. Categorize the Op Sheet itself according to the *one* highest ranking operation on it according to this order:

- 1) Prepared Defense
- 2) Attack
- 3) Hasty Defense
- 4) Move.

6.6a Prepared Defense. A Prepared Defense is similar to a Hasty Defense, except that there is enough time for the troops to dig in fully to include the laying of minefields.

6.6b Attack Type. An Attack-type Op Sheet is any that includes any offensive operations—even to occupy terrain not garrisoned by the enemy. A group of units in Reserve counts as a group with attack orders.

6.6c Hasty Defense. A Hasty Defense is a quick defensive order that does not allow enough time to dig in fully or lay mines.

OP SHEET

Time: 1020

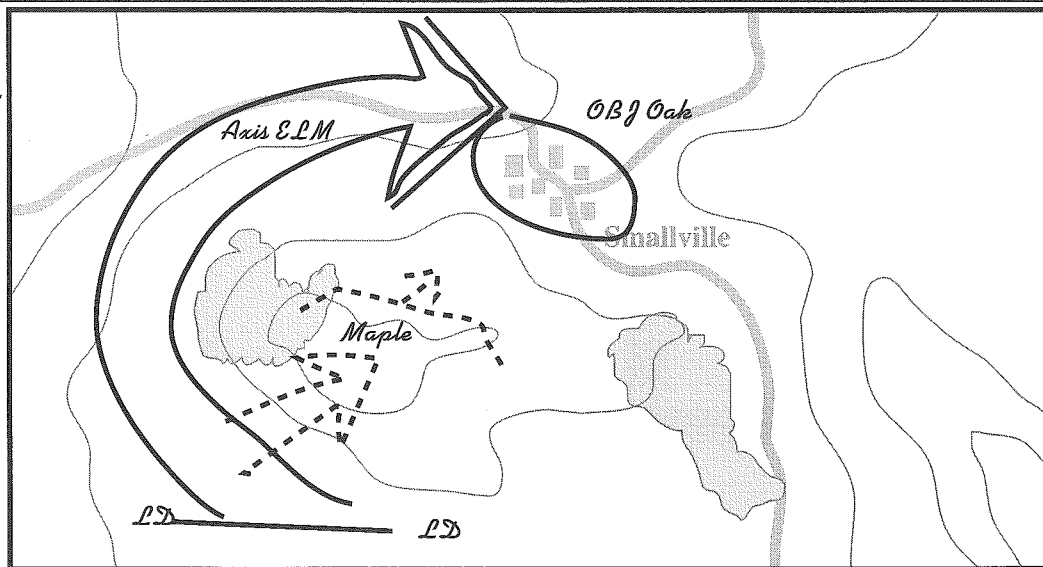
Type: Attack

Size: 1
 (one infantry Bn
 plus part of one
 Tank Bn less staff
 modifier)

Task

Organization:

1-123 Infantry
 A-58 Tank Bn

**Written Notes:**

Advance along Axis Elm to seize OBJ Oak. Use alternate route to Maple to provide support with B-1-123 if needed.

Failure Instructions:

Return to LD and await new orders.

A Simpler Attack Op Sheet. Tree Motif.

6.6d Move Type. Move orders are for non-combat movement. Units with Move-type Op Sheets must follow failure instructions if they make enemy contact.

Design Note: The concept of attacking an objective while a defense order accrues time in your pocket might raise eyebrows. The point here is that only a limited amount of the time spent implementing a Prepared Defense is that actually spent digging (gamers typically think that the time it takes to put together a prepared defense is due to digging alone). Actually, the majority of the time is expended doing coordination with other friendly units (units in the area, supporting units, securing needed supplies, setting up artillery fires, etc.) in order to be "ready to defend." The actual digging does not take all that long and need not be finished for the unit to be "ready to defend"—indeed doctrine in most countries is that field position improvement is an ongoing process that never is really finished. The time accrued represents the staff preparing for a mission it knows is coming up—not Snuffy digging a prepared hole that he carries with him in the attack...

Play Note: In conjunction with the above, be careful where your units are when you start rolling for a Prepared Defense—a

lucky die roll might cause you to dig in at a location you don't want. Wherever all the units are the instant the roll is successful is where they will be dug in—so be careful.

6.7 Task Organization

List the units making up an Op Sheet in its Task Organization. The Task Organization must provide a complete unit listing for that Op Sheet. Units not so listed cannot operate as part of an Op Sheet. The player can assign his units (on or off map) to any Op Sheet he devises.

6.7a List all units that are to conduct an Op Sheet's operation on that sheet's Task Organization. Players can divide their units as they see fit. If a Task Organization contains the "304 PG Rgt," then that Op Sheet contains all the 304th Panzergrenadiers' elements—including those off-map. Off-map elements contained on a Task Organization do count for that sheet's size modifier. Never leave any doubt about which units are or aren't in a Task Organization.

6.7b Limitation on Op Sheet Assignments. Never list a unit on more than two Op Sheets (one implemented, one not, or two non-implemented ones—never two implemented Op Sheets).

6.8 Op Sheet Creation

Players can create Op Sheets both before the game and during any Command Phase. When drawn, Op Sheets are non-implemented (except for those drawn before the game, see III.6). When the player successfully rolls on the Command Prep Table, the Op Sheet is implemented. A player can draw up any number of Op Sheets in a turn. Complete all Op Sheet parts when first creating it. A player can assign any of his units (on or off map) to any Op Sheet. Forces placed on a new Op Sheet while under an old implemented one remain under the old sheet's control until the new one implements.

6.9 Command Prep

Each Op Sheet begins its "Command Prep" when the player creates it. The Command Prep ends when the player implements the Op Sheet using the Command Prep Table.

6.9a While not assigned to some implemented Op Sheet, units belonging to a non-implemented Op Sheet are unassigned (see 6.3).

6.9b The game rules give each side a Command Prep Rating. This rating reflects each side's command system's ability to conduct operations quickly, or—more specifically—to change plans rapidly.

6.9c Op Sheet Size. Op Sheet Size modifies the player's Command Prep

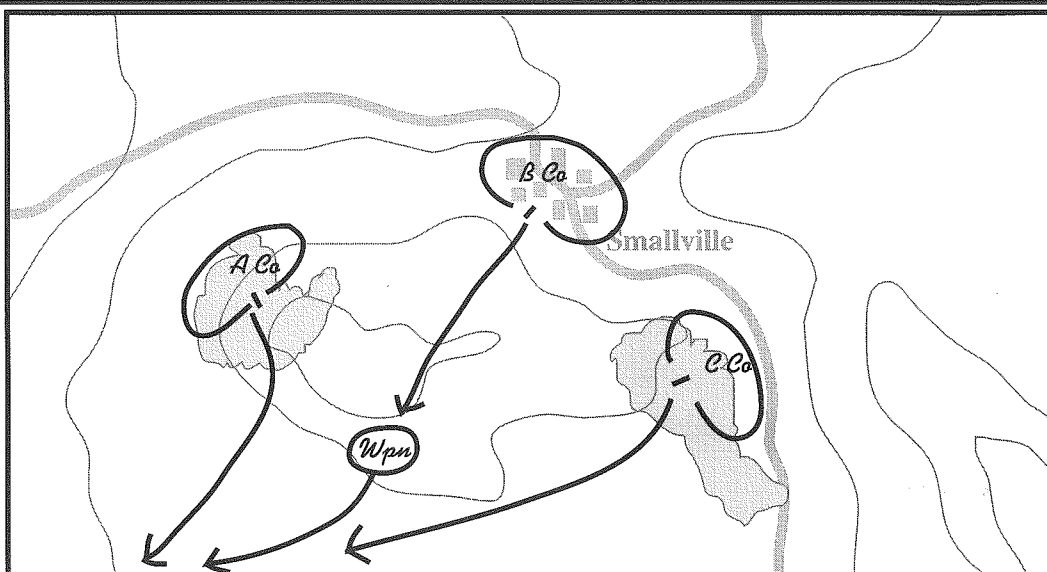
**OP SHEET**

Time: 1020

Type: *Prepared
Defense*Size: 0
(one infantry Bn
less staff modifier)

Task

Organization:

1-123 Infantry**Written Notes:***Defend in battle positions.***Failure****Instructions:**

*Withdraw as shown.
B Co to delay at Wpn's
Position as rear guard.
B Co to withdraw after
other units leave map.*

A Positional Prepared Defense Op Sheet.

Rating for use on the Command Prep Table. To find the appropriate size, determine the number of elements in the Task Organization. An "element" is the representation of battalions of any type. Extras—such as regimental AT guns, Weapons Companies, Scout platoons, and other items not represented by a battalion—do not count. No matter how **much** of a given element is present, count it as one element. A group containing three companies each from a different battalion would have a size of 3, while one that has all three companies from the same battalion would have a size of 1 (which becomes a 0 with the staff modifier (6.9d)). A group with an infantry battalion, two tank platoons (of the same battalion as each other) and an AT Gun (from the regimental weapons) would have a size of 2 (after 6.9d, this becomes a 1).

6.9d Staffs. Any Op Sheet having one or more battalion (or higher) staffs attached to it subtracts ONE from the Op Sheet size. A staff is attached if the Op Sheet has at least one **whole** battalion (which must include all parts not in the dead pile) assigned to it. Multiple staffs do not give additional modifications.

For example, a full Infantry Battalion would normally get a size of 1, but since it has a staff attached the size is 0.

6.9e Weighted Turns. Each turn, a non-implemented Op Sheet accrues "weighted turns" representing the value of the time spent preparing. Before checking any Op Sheets for implementation in each Command Phase, add a number of marks (according to the following) to each sheet's tally. The number of marks made each turn depends on the condition of the units in each Op Sheet's Task Organization. If **all** the Op Sheet's members are **unassigned** AND **none** received any **direct fires** in the previous turn, the number is 3 weighted turns. If some (or all) are assigned, BUT **none** received direct fires in the previous turn, then the number is 2 weighted turns. If **ANY** member of the Task Organization received **DIRECT** fires in the previous turn, then the number is 1 weighted turn. If Task Organization falls into more than one category, it gets the smallest applicable number.

Example: Weighted Turns

The weighted turns given to each Op Sheet each turn is a simple idea that looks confusing as a rule, but is easy to understand by example. Weighted turns represent the preceding turn's value for mission preparation (and the tally likewise represents the summation of the earlier turns for this purpose). Obviously, units under fire require much longer to prepare

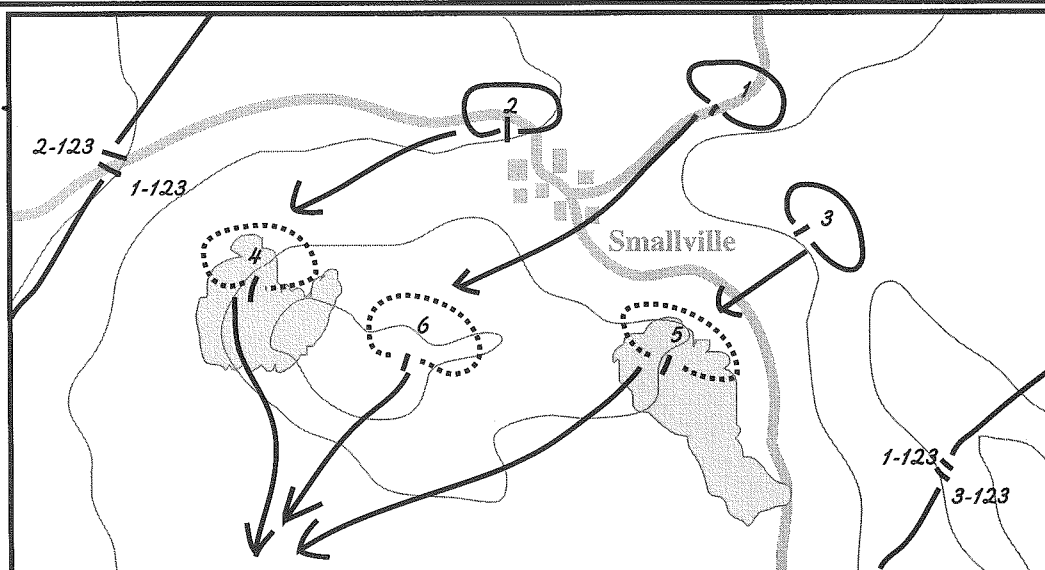
for new missions than those in protected assembly areas. So, if you have three groups, one attacking a hill, one in defense, and another in an assembly area, they would get 1, 2, and 3 turns of credit or weighted turns respectively each turn. If each group was fired upon with direct fires in the preceding turn, they would each get only one turn of credit.

6.9f The Command Prep Table. During each Command Phase, the player can attempt to implement each of his non-implemented Op Sheets. The player is never forced to try to implement an Op Sheet.

Use the Command Prep Table to implement Op Sheets. Add the total weighted turns accrued so far and follow the row giving the Op Sheet's type across to find the column containing that number. Modify your Command Prep Rating for the Op Sheet's "size" (6.9c & 6.9d). Find the row containing the modified Command Prep Rating and cross index it with the column found earlier to locate the table's value. Roll two dice. If the roll is greater than or equal to the table's value, implement the Op Sheet. Otherwise, the attempt fails, and you can try again next turn. Roll separately for each Op Sheet.

OP SHEET

Time: 1020

Type: *Hasty
Defense*Size: 0
(one infantry Bn
less staff modifier)Task
Organization:
1-123 Infantry**Written Notes:***Defend in first Battle position...on order fall back to second BP.**A Co: BP 1...BP 6 B Co: BP 2...BP 4 C Co: BP 3...BP 5**Delay in BP until withdrawal is ordered..***Failure
Instructions:***Withdraw off map
as shown.***An Elastic Defense Op Sheet.****Example: The Command Prep Table**

A player has a non-implemented attack Op Sheet with a full regiment on it awaiting implementation. So far it has accrued (it is sitting in a protected assembly area) 27 weighted turns. It has a size of 2 (three battalions less the staff modifier). The player has a Command Prep Rating of 3.

Cross indexing the modified Command Prep Rating (5) with the 27 weighted turns (along the Attack-type line) gives a required roll of 10 or more. The player rolls two dice and gets a 6. The order does not implement...and the player curses his bad luck and threatens to sack the regimental commander.

On the next turn, he tries again. This time he has accrued 30 weighted turns (three more for this last turn) that changes the needed roll to a 8. The player grits his teeth and rolls the dice getting an 8 implementing the Op Sheet. Elated at this turn of events, the player chortles his approval thereby warning the sly mug across the table to watch out. Our hero realizes this and kicks himself for his lack of a poker face and promises himself to do better next time.

6.10 Implementation

Upon a successful roll on the Command Prep Table, an Op Sheet implements. The

player must follow each implemented Op Sheet until he removes that sheet by whatever means: mission completion, failure, or unit reassignment.

6.10a Newly implemented Op Sheets **always** supersede older ones whenever a conflict arises, and the "age" of an Op Sheet is always dependent on when the sheet was implemented, **not** when it was written.

6.10b The player is free to use his units as he sees fit in following Op Sheet instructions, but he must follow them. He is free to vary his operational tempo for any reason he chooses, provided he does not violate Op Sheet instructions.

6.11 Mission Success

At some point the player can find that he has successfully fulfilled an Op Sheet's instructions. Once a mission succeeds, the units become unassigned (6.3). Remove completed Op Sheets from play.

6.12 Mission Failure

Every Op Sheet requires instructions about what to do if it fails. The decision to call off a mission rests solely with the player. The player can decide to start executing Failure Instructions in any friendly phase.

6.12a Any group moving via failure instructions **must** avoid enemy contact. If it cannot do so, the player must give it new failure instructions in the next Command Phase. Units cannot follow failure instructions which force them to move toward enemy locations—it is possible they might not be able to move at all, but be pinned in the middle of enemy territory as unassigned units—and that's bad.

6.12b It is possible for only a portion of a Task Organization to fail. An example would be a battalion defense where one company gets hammered, while the others are OK. Cross out the failed units from the Op Sheet and allow them to independently follow the failure instructions.

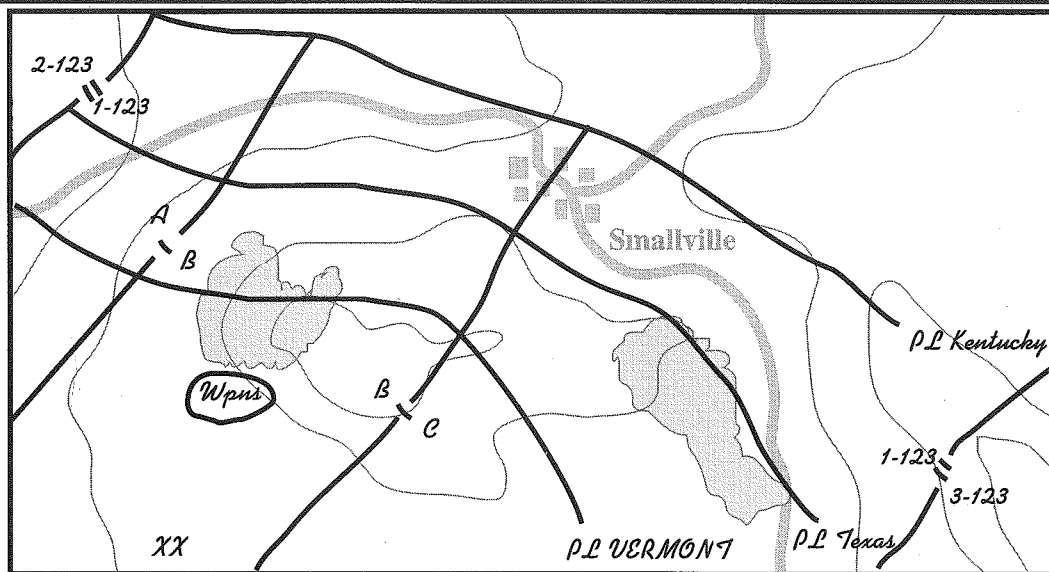
6.12c Any group of units from an Op Sheet which follow their failure instructions automatically become unassigned.

6.13 Special Handling Issues

6.13a Removing Units from an Implemented Op Sheet. If a new Op Sheet implements listing all or some of another implemented Op Sheet's Task Organization, erase the reassigned units from the older Op Sheet. Also, a player can voluntarily scratch off units in a Task Organization during any Command Phase and make them unassigned.

OP SHEET

Time: 10:20

Type: *Hasty
Defense*Size: 0
(one infantry Bn
less staff modifier)Task
Organization:
1-123 Infantry**Written Notes:**

*Defend as far forward in zone as possible.
Start at P.L. Kentucky and withdraw or advance
as needed.*

**Failure
Instructions:**

*Withdraw off map
at the vicinity of
point XX*

A Zone or Sector Defense Op Sheet. State Motif.

6.13b Removing Units from a Non-implemented Op Sheet. The player can scratch off units on such a Task Organization during any Command Phase. DO NOT adjust the Op Sheet's size modifier.

6.13c Adding Units to an Existing Implemented Op Sheet. To add units, draw their part on the graphic and add the written notes. Add them to the Task Organization. Those units (only) must go through the implementation process (using the staff modification from the gaining sheet, if any, and the size of the adding force only—determine weighted turns based on the adding force only) and they cannot function with their new Op Sheet until they implement it themselves.

6.13d Adding Units to an Existing Non-implemented Op Sheet. These units cause the subtraction of 3 weighted turns per element (battalion) added. The result must be the actual remainder or zero, whichever is more. Change the size modifier to reflect the new Op Sheet size. No other delays incur by adding units to an existing non-implemented Op Sheet.

6.13e Reinforcements and Op Sheets. Handle these according to 6.13c, 6.13d above or allow them to enter unassigned and write up a new Op Sheet for them. It is also perfectly acceptable to write up Op Sheets for reinforcements ahead of their

arrival. Count all turns accrued before arrival at the 3 per turn weighted level.

6.14 Special Instructions

The following are different in some respects from the foregoing and supersede the earlier rules where conflict exists.

6.14a Preliminary Instructions. Follow these immediately—before the Op Sheet implements. Use preliminary instructions to get units to a common assembly area to prepare for future combat operations. When drawing up a new Op Sheet, the player can list any preliminary instructions he wants. These units must avoid all enemy contact during this movement.

Drop units from any implemented Op Sheet they might be on if assigned Preliminary instructions. They perform the instructions and are then unassigned.

6.14b Reserves. Use reserves to give Op Sheets a bit more flexibility. Designate reserves when drawing up the Op Sheet. Any portion of an Op Sheet can be in reserve. Consider an Op Sheet's reserves to have Attack-type orders for implementation purposes. Uncommitted reserves are unassigned. To commit a reserve, the player must first draw in the reserve's intended use on the Op Sheet's graphic (which cannot be changed later) and successfully pass a

Die Roll Check (see 6.14d). Non-implemented Op Sheets cannot make any use of their reserves.

6.14c Alternates. A player can list alternate routes and/or objectives on an Op Sheet. The player can switch to these in the same way as he commits reserves. Draw alternates on the graphic when creating the Op Sheet. Once a player switches his Op Sheet to its alternates, he cannot later switch back.

6.14d Die Roll Checks. To commit a reserve or switch to alternates, make a Die Roll Check in the Command Phase. Conduct a Die Roll Check as follows: Roll one die. If the roll is greater than or equal to the Command Prep Rating of the checking side, then the Die Roll Check is successful. Otherwise, it has no effect. A player with a Command Prep rating of 7 or more cannot pass a Die Roll Check and is therefore unable to use Alternates or Reserves.

Example: Die Roll Check

A player with a Command Prep Rating of 3 wants to release a reserve. To perform his Die Roll Check, he rolls one die and gets a 3. He can release his reserve.

Play Note: It is possible (for some armies, anyway) to establish Op Sheets which consist of nothing but reserves. That allows

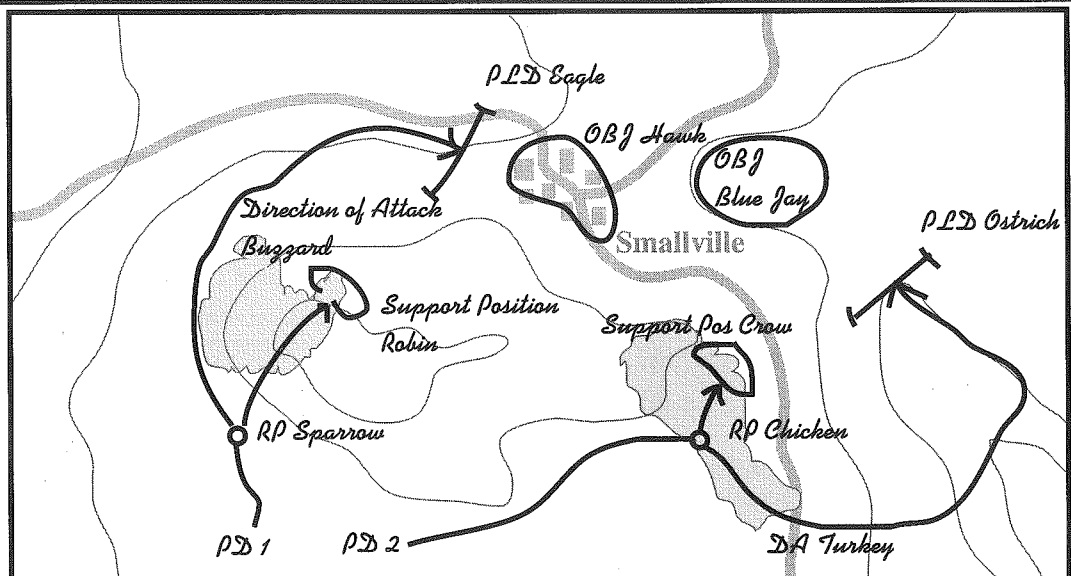
OP SHEET

Time: 1800

Type: Attack

Size: 1
(two infantry Bns
less staff modifier)

Task
Organization:
1-123 Infantry
2-130 Infantry
3x 75mm AT



Written Notes:

1-123 with 2x 75mm AT makes the main effort.
Leave Point of Departure 1 two hours after 2-130
moves out of P.D. 2.

At Sparrow, send B Co and the AT Guns to Robin.

Continue on DA Buzzard, deploy on P.L.D. Eagle,
and attach to capture OBJ Hawk.

2-130 with 1x 75mm AT makes a supporting attack..
Leave Point of Departure 2.

At Chicken, send B Co and the AT Gun to Crow.

Continue on DA Turkey, deploy on P.L.D. Ostrich,
and attach to capture OBJ Blue Jay.

This attack is to draw the enemy's attention from the
main effort on OBJ Hawk.

Failure Instructions:

Withdraw to P.D.s
to await further
orders.

A Night Attack Op Sheet. Bird Motif.

a player a great deal of flexibility when he doesn't know where the enemy might be coming from. Such play is allowed, but must be used with care so as to not lose track of your own forces.

6.15 Line Entry Command (optional)

Line Entry Command is a shorthand version of the command system. It does require a fair degree of honesty to use, since there is no graphic to follow.

6.15a For each Op Sheet in this system, allocate one line on a piece of paper. Enter the units involved on the left followed by the Op Sheet size and type. Jot down the mission of the units (e.g., Attack to capture village A).

6.15b Each Command Phase, jot down the weighted turns and make any implementation rolls normally. Place a check mark to the right of any line that implements.

6.15c You must come up with an idea of how you want to execute the mission when it is first written and follow that plan when it implements—regardless of changing circumstances.



6.16 Digging In

Digging In is a condition of a task force with an implemented Prepared Defense Op Sheet.

Digging In is a property of an Op Sheet and not usually shown mechanically (but see 6.16f). All members of a Task Organization with an implemented Prepared Defense Op Sheet are Dug In. No other units are ever Dug In.

6.16a A unit loses its Dug In status if it leaves its hex. Units cannot reoccupy the hex to regain the benefit. A hex is Dug In only for the units in a hex at the moment the Op Sheet implements. Changing mode does not cancel the Dug In status of a hex.

6.16b Any number of units in a hex can be Dug In.

6.16c Players must keep track of which units are or aren't Dug In (see 6.16f).

6.16d Vehicle and Carrier units cannot be Dug In.

6.16e Op Sheet Changes & Requirements. Any change in an Op Sheet causing a unit to become unassigned or assigned to some mission other than Prepared Defense (Prepared Defense in the same location, that is), causes the unit to automatically lose Dug In status. Units assigned to an implemented Prepared Defense Op Sheet are Dug In only if the mission they are to conduct is also Prepared Defense.

6.16f A limited number of Dug In Markers are available in some TCS games. Even in these games there is not enough of these markers to mark every Dug In unit on the map—they are intended to help in areas where players might get confused.

7.0 Visibility and Weather



The individual game rules can give visibility and weather effects.

When not explicitly given, there are no special effects due to weather.

7.0a Visibility is the maximum range at which LOSs can be unblocked. LOSs longer than the current Visibility are automatically blocked.

7.0b Weather can apply restrictions according to the game rules. When used, determine the Weather every hour turn during the Command Phase by a die roll on the Weather Table. The Weather determined affects the entire hour after the roll.

7.0c Night has its own effect on visibility (see 27.0).

7.1 Spotting Ranges

The ranges at which certain types of fires can occur is limited by "Spotting Ranges." Regardless of the appropriate Spotting Range, firing range might be still further limited by LOS (8.0) and weapon ranges.

7.1a The available Spotting Ranges are given on the Spotting Range Chart. The player must know the type of fire (Suppressive Fire Action, Fire-based Overwatch, or Movement-based Overwatch), the target type, the firer type, the range, and the target hex's terrain type. The Spotting Ranges are meant to be intuitive and easily memorized.

7.1b Regardless of other circumstances, fires are not allowed beyond the appropriate Spotting Range.

7.1c In the case of spotters for Mortars, the range from the spotter is used, NOT the range from the Mortar itself.

7.1d In the case of mixed Target or Firer types, apply the following. In the case of the Target, use the type with the longest Spotting Range. In the case of the Firer or Spotter, use the type with the shortest Spotting Range.

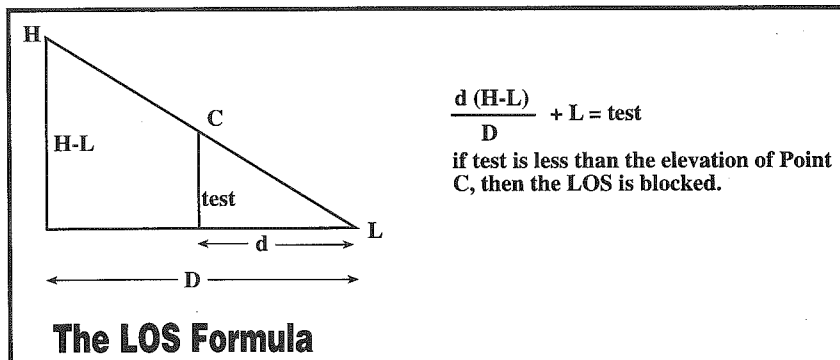
Design Note: Probably the most important feature of the modern battlefield is the fact that to any one observer on it, there is little or nothing to see. This has been termed the "Empty Battlefield". Even what appears to be "open" terrain is filled with minor obstructions to observation (trees, bushes, high grass, walls, small buildings, depressions, gullies, drainage ditches, and so on) making what appears to be an easy task to the game player (seeing what's coming at him) impossible. Rather than to attempt to control what a player knows, these rules inhibit his ability to use that knowledge. Furthermore, when you see that infantry running up the "barren" hill at you, remember there is a lot of firing going on which is beyond your control and of too little effect to worry about—the pot-shots of individual riflemen who are engaging fleeting targets of opportunity.

8.0 Line of Sight (LOS)

A Line of Sight (LOS) check determines if two units can see (and fire on) each other. Newer games have a hex center dot to facilitate these rules. Older games in the series (1991 and earlier) do not.

8.1 General Rule

8.1a LOS is determined by tracing a straight line from one hex's center dot to another. A thread or cut rubber-band can be



of help. Features that lie along this line might block LOS.

8.1b Determining a Point or Hex's Elevation. The map has been printed with contour lines (natural measurements of the ground elevations) and a color-coding to assist in determining the elevation of any hex. The elevation of a particular contour line is given along the line in meters. The Contour Interval (vertical distance between the lines) is 20 meters. Ignore "Spot Elevations" and "Benchmarks" when evaluating elevations; they are for location reference only. The judgment of the elevation of a point falls into one of three categories:

A) Hilltops. A Hilltop is an area encircled by one last high contour line (possibly with the help of the map edge) and does not contain any contour lines higher than that top line. Elevations on a Hilltop are equal to the contour line encircling the feature. Hilltops are, in effect, flat.

B) Between or On Contour Lines. Draw a line through the point being evaluated which is perpendicular to the next higher and next lower contour lines. This line must begin at the next lower and end at the next higher contour lines. Determine which quarter mark the point is closest to (0/4, 1/4, 2/4, 3/4, 4/4). Add this proportion of the contour interval (20m) to the lower of the two contour lines used (you'll add one of the following: 0, 5, 10, 15, or 20). In other words, a point which falls closest to the 1/4 mark above the 30 meter contour line would have an elevation of 35 meters. Accuracy beyond 5 meters is not required. The case where a contour line goes right through the point is the easiest—read the value of that contour line and that is the elevation.

C) Bottoms. A Bottom is the inverse of a Hilltop. It is an area encircled by one last low contour line (possibly with the help of the map edge) and does not contain any contour lines lower than that final line. Elevations in a Bottom are equal to the contour line encircling the feature. Bottoms are, in effect, flat.

8.2 Determining LOS

8.2a Rules of Thumb. If terrain along the line between the firer and the target is higher than both, the LOS is blocked. Terrain lower than either never blocks. If this principal does not decide the issue, follow the LOS Decision Rule (8.2b) below.

8.2b LOS Decision Rule

Step 1: Determine a straight line between the firer and target hex centers.

Step 2: Determine each end point's elevation.

Step 3: The targeted player selects a point of his choice along the LOS line as his "Point of Contention." Select any point along the line not in, or along the hexsides, of either end hex. (EXCEPTION: in Movement-based Overwatch Trigger spotting, he can select any point in the target's hex closer to the firer than the trigger's hexside.) He can select only one point and cannot later change it due to a bad choice.

Step 4: Determine the ground level of the Point of Contention (including modifiers), as well as the distance in hexes from the Lower End Point to both the Point of Contention and to the Higher End Point, and the Higher and Lower End Point elevations.

Step 5: Work through the following formula, if the selected Point of Contention is greater than or equal to the result, the LOS is blocked. Otherwise, the LOS is not blocked.

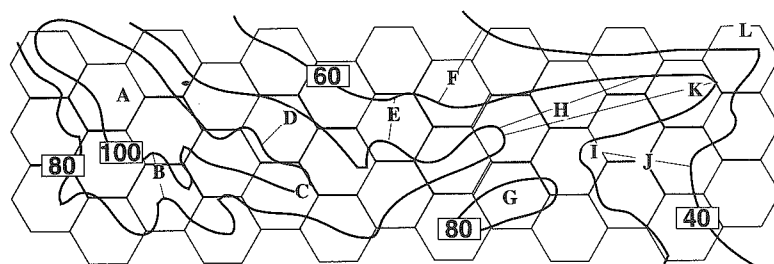
$d(H-L)/D + L$ where...

d= The distance from the Point of Contention to the Low End Point.

H= The raw elevation of the High End Point.

L= The raw elevation of the Low End Point.

D= The distance from the High End Point to the Low End Point.



POINT	ELEV.	POINT	ELEV.	POINT	ELEV.
A	100 (Hilltop)	E	65	I	55
B	95	F	55	J	50
C	100	G	80 (Hilltop)	K	60
D	85	H	70	L	40

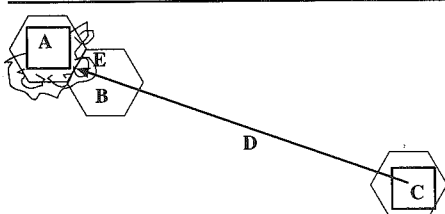
(Bottom)

The above is intended to help by showing the placement of the perpendicular lines (the thinnest ones).

They have been omitted where unnecessary.

Each point is in the center of mass of the letter.

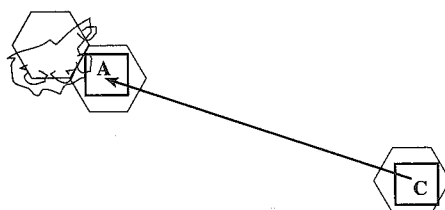
Elevation Determination



Here unit A moves into hex B. Enemy unit C attempts to spot the Overwatch trigger along the center of the hexside unit A used to get into B along the LOS C.

This LOS is blocked by the edge of the woods at E. So, no Overwatch fire is possible.

Hexside LOS

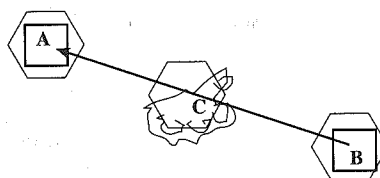


In another phase, the LOS between units A and C comes up again when unit C wishes to fire an SFA at unit A.

This time, the LOS is to the center dot of unit A's hex and is not blocked by the woods as before.

Unit C couldn't engage A when it moved into position, but it can now AFTER A enters Fire Mode.

Hex Dot LOS



In this example, B is attempting to fire upon A, but the LOS is contended over point C. Point C has an elevation of 30 m which becomes 50 m because of the woods.

d = 3 hexes

H = 60m

L = 25m

D = 8 hexes, giving the formula set up as: $3 \cdot (60 - 25) / 8 + 25 = 38.125$, which is less than Point C, so the LOS is Blocked.

Formula Calculation

Line of Sight Issues

Example: Working through the LOS Formula.

The players run into a dispute over LOS which cannot be resolved to both's satisfaction by "eye-balling" the terrain. The LOS is from a AT Gun to a Movement-based Overwatch trigger generated by a moving tank. The moving player selects a point along the LOS

which is atop a small hill which has forest on it. The elevation of the Point of Contention is determined to be 40 meters (the elevation of the last contour line of the hill the PoC is on) plus 20 meters for the trees, for a total of 60 meters. The Higher End Point is determined to be 125 meters (it is slightly above the 120 meter contour line). The Lower End

Point is in a hex where the center dot lies right on the 20 meter line, so it is 20 meters. The distance between the Lower End Point and the Point of Contention is 6 hexes and between the Lower End Point and the Higher End Point is 15 hexes. This sets up the formula as follows:

$6 \cdot (125 - 20) / 15 + 20$ which equals 62 meaning the LOS is not blocked, but was very close.

8.3 Effects and Restrictions

8.3a LOS is either blocked or unblocked. Blocked LOSs do not allow fire combat or spotting to occur between the hexes in question. Unblocked LOSs allow fire combat and spotting in both directions. LOS has no other effects.

8.3b Trees (in forest, woods, hedgerow, orchard and other symbols) and buildings (alone or in towns and villages) add 20 meters to the ground's elevation if at the Point of Contention.

8.3c Units can always fire into or out of—but not through—forest, orchard, and town or village hexes. If the elevations work out correctly, it is possible to fire over these features. See also 8.3h.

8.3d Units have no effect on LOS.

8.3e Features within an end-point hex of an LOS never block an LOS, with the exception of when the Overwatch Trigger is in the center of the hexside a unit crossed to enter the hex—in that case, features in the end-point hex can block LOS.

8.3f Smoke and artillery Attack Zones are an infinitely high LOS block in its hex and hexsides. LOSs can freely pass into or out of such hexes, but never through them.

8.3g LOSs are never blocked into a unit's adjacent hexes. (This supercedes 8.3e.)

9.0 Fire Combat

Fire combat occurs in two forms in this game system: Area and Point. Area Fires are sprayed into a hex. Point Fires are aimed shots at a specific target within a hex. Firing types are either Area or Point. An Area weapon can only use the Area Fire Table. Point weapons can use either the Point Fire Table or the Area Fire Table.

Fire combats occur in the Action Phases as Suppressive Fire Actions (SFAs), Overwatch Fires, or Assault-style Combats.

Artillery Barrage Markers automatically attack any unit which enters a hex in or adjacent to their Attack Zones.

9.1 General Restrictions on Fire Combat

9.1a A unit can fire as many times in an Action Phase as it has Overwatch Triggers, plus up to one Suppressive Fire Action. Mortar units can only fire ONCE per Action Phase (for a total of TWICE in a turn).

9.1b Only units in Fire Mode can fire. **EXCEPTION:** Mode has no effect on the ability to fire in Assault-style combat or to conduct AT Rolls, **BUT EVEN** in Assault-style Combat, Move Mode Mortars **CANNOT** fire.

9.1c Non-Artillery Fires have no effect on other units which are not in the target hex.

9.1d All direct fires require an unblocked LOS from the firer to the target. Indirect weapons (such as Mortars and artillery) require an unblocked LOS from a spotter to the target.

9.1e The Area Fire Table firepower of Suppressed and Buttoned Up units is $\times 1/2$. Paralyzed units generally cannot fire, but when they can, treat them as Suppressed.

9.1f Mounted units can fire only in Assault-style combat. Towed units can never fire.

9.1g No single unit can split its fire into multiple targets. Exception: The Pillboxes in **Omaha** which have two weapons systems each can fire these weapons individually at the same or different targets—together or separately.

9.2 Target Type Restrictions

A unit's target type (Point, Area, or Both) determines how an enemy unit can engage it. Point targets are hard vehicles that require a direct hit to be destroyed. Area targets are soft units and subject to elimination by random shots or explosive bursts. B-type targets are large enough to be aimed at and destroyed by Point weapons, but are soft enough to be destroyed by MG fires. A unit's target type appears on the counter's back.

9.2a Engage Point targets with the Point Fire Table, AT Rolls, and the Artillery Point Target Fire Table.

9.2b Engage Area targets on the Area Fire Table.

9.2c Engage B-type targets with the Point Fire Table, AT Rolls, or the Area Fire Table. Do not engage B-type units with the Artillery Point Fire Table—apply the artillery fires to the Area Fire Table instead.

9.3 Terrain Effects on Fire Combat

Each fire table gives terrain effects for each of four different classes of terrain: Billiard Table, Open, Partly Protective, and Protective. The Terrain Effects Chart will list the class of each of the game's terrains.

9.3a The applicable terrain effects are those of the target's hex and hexsides. Use the most protective terrain of the target hex when resolving a fire combat—therefore, a hex with some Open terrain and a small amount of forest (Partly Protective) would be considered to be Partly Protective.

9.3b Terrain has no effect on Area Fire Table rolls caused by minefields.



10.0 Losses

Losses for all units are in steps. Different unit types have different numbers of steps available. Mark

step losses by placing Step Loss markers under the unit.

10.0a Infantry Platoons have five steps. Mortar Platoons, Infantry Sections, and MG units have two steps. All other units have one step.

10.0b Step losses **do not** affect the firepower of most units, but they do affect Morale Checks (see 16.2). **Important:** Mortar Platoons, however, have their Fire Strength HALVED if they have lost one of their steps.

Design Note:

The lack of effect due to hits in, say, an infantry platoon, can seem odd at first and—in fact—earlier versions of this system did include a reduced firepower rule. After some reflection, I determined that this degradation was inappropriate. The reason? Let's take the infantry platoon as an example...all but one point of most infantry unit's firepower comes from its machineguns. As the unit takes losses, unless one of the guns is destroyed (unlikely) the platoon will scramble to ensure that the guns are manned and firing right up to the end. So, while that one point of firepower keeps dropping due to losses, the bulk of the firepower remains the same until the last step (the last six guys available to feed the "pigs") is destroyed and no one is left to man the guns. Disagree if you like, but I believe history, and the inner workings of infantry units bear this out. A much more important method of reducing enemy fire effectiveness is suppression by fire, both in real life and here.

10.0c Whenever a fire table result calls for one or more step losses, adjust the markers under the target units and kill off any that reach their step loss limit. Permanently remove destroyed units from play.

10.0d Step losses belong to the unit that incurred them. Never transfer, absorb, or consolidate them with other units.

10.0e Ignore casualties in excess of the number of steps in a stack.

10.0f In Area Fires, step losses can come from any unit in the hex—**BUT** the first loss must come from the largest unit (in steps) in the hex. After that first loss, remaining losses can come from any unit in the hex. After the first step loss, split the remaining step losses in half and round normally. The defending player selects which units to inflict those losses upon. After these losses are taken, the attacking player inflicts the remaining losses (those left-over after the division by 2 and rounding procedure) on the units of his choice.

Example: Loss Distribution. Player A makes an Area Fire attack against a stack of Player B's units. The Area Fire Table result turns out to be 8 steps plus a Morale Check (a Three Dice result totaling 16 which is divided by 2). After Player B gets done screaming at Player A and kicking furniture around the room, they must inflict the 8 steps. There are two infantry platoons and an AT Gun in the target hex. First, they take the very first step loss from one of the infantry platoons. This leaves 7 steps to distribute. They divide the 7 by 2 and round normally to get 4. Player B inflicts 4 step losses between the two infantry platoons. Player A then gets to inflict the remaining 3 step losses. He takes great care to kill off the AT Gun and then to hit the infantry platoon hard which has the worst morale of the two—thereby setting up the target hex for a big failure when it comes time to do the Morale Check required of the Area Fire Table result. Player B swears under his breath.



11.0 Area Fire Combat

Resolve fires against area targets using the Area Fire Table. Handle the attack as one strike against the hex, with all Area and B-type targets being attacked together. Note that Area- and P-type firers can combine directly to make common Area Target attacks. Point weapons can make such shots (and add in with other units) at ranges up to 2x their nominal range, inclusive.

Procedure:

Identify the Target Hex and the firers. Total the applied firepower and find the column heading containing that amount. Apply any applicable column shifts from the lists above the table.

After finishing the above, roll two dice on the table and read the result. Apply the result. If one or more step losses or a Morale Check result occurs, do a Morale Check on the stack.

11.1 Restrictions

11.1a Area Fires do not affect P-type targets. Exception: See Buttoning Up, 16.7. Ignore P-type targets and anything mounted in Half-tracks (count things being towed) when calculating the stacking modification for an Area Fire Combat.

11.1b Any of the eligible target units in a hex can be used to satisfy the loss required (given 10.0f). If a carrier is destroyed, automatically destroy any mounted or towed units with it.

11.1c A hex which does not contain any targets susceptible to the Area Fire Table can be engaged anyway. See Buttoning Up, 16.7.

11.1d A hex can be fired upon any number of times in a single phase.

11.1e Apply the Range Shift of the longest range firer (or spotter, in the case of Mortars) involved. No range modification is ever used when the Area Fire Table is used to resolve Artillery or Sortie attacks.

Design Note:

The longest ranged firer is used to help the game inhibit giant consolidated and coordinated shots (quite rare in real life, but all too common in wargames) from occurring. The game was designed to highlight and reward the kind of close-in sporadic fighting that did occur—not the typical wargame 'everyone within two clicks fire up that platoon in hex 12.34' shot.

11.1f Combat results on the Area Fire Table appear as step losses. Sometimes the casualty result gives a number of dice. In those cases, roll that number of dice and divide the results by 2. If the casualties are high enough as a result of the Area Fire Table result, one or more might be added to the Battalion Morale of units in the hex—see the Battalion Morale Additions Chart with the Area Fire Table for details.

11.1g While it is generally true that units can fire any number of times in a turn (given appropriate triggers and the like) there are two important restrictions to keep in mind: No unit can ever perform more

than one Suppressive Fire Action in a turn and Mortars can fire only ONCE per Action Phase (for a total of twice per turn).

11.1h Any unit which enters any hex in or adjacent to a Barrage Marker's Attack Zone is automatically attacked by that marker. Units in hexes in the Attack Zone are attacked with full strength. Those in hexes adjacent to the Attack Zone are attacked with half strength. Separately handle this attack on the moving units the instant the units enter such a hex. Repeat the attack (from the same or different Artillery Barrage Markers) each time they enter such a hex. The attack made on the moving units does not involve or affect any units which already happen to be in the hex. If more than one Barrage Marker affects a given hex, make one attack with the cumulative firepower of all the Barrage Markers affecting the hex.

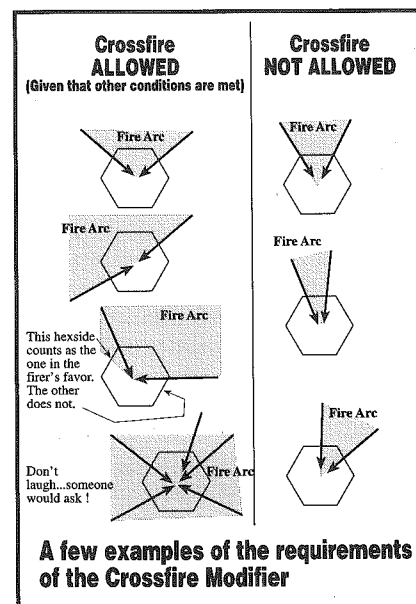
Example: Area Fires

One player announces an Area Fire in the form of a Suppressive Fire Action on a hex containing three halftracks with two mounted platoons and one dismounted platoon. It is in Open terrain and some of the units are in Move Mode. The attacking strength is 11 and all the firing units (including the Mortar's spotter, but not the Mortar unit itself, which does not matter) are 4 hexes away.

The 11 firepower gives the 10-12 column which is not shifted for the open terrain, nor for the 4-hex range, but is shifted +1 for the Move Mode units. Only the non-mounted platoon counts for stacking, so there are 8 steps in the hex giving another +1 shift. The total shift is +2 and the fire is resolved on the 17-20 table.

The firing player rolls two dice rolling a 46 which is a "One Die x 1/2" result.

The player then rolls one die (getting a 5) and divides the result by 2 which gives 2.5 which is rounded to 3 losses. No addition is made to the Battalion Morale of the units in the hex. The owning player kills one step from one of the platoons in the hex. The remaining two step losses are split between the firing and targeted players. The targeted player applies his to another mounted infantry platoon (knowing full well what the firer will do with his step loss, he wants to mitigate his situation as best he can). The firer predictably uses his step loss to kill one of the halftracks (which takes one of the mounted platoons (sans a step) with it). The targeted player then goes on to make his Morale Check using the vaporized platoon's morale plus its dead steps.



11.2 The Crossfire Modifier

The modifier for Crossfire requires a bit more explanation than other table modifiers, so it gets this special rules section.

11.2a Requirements. For a fire resolution and its corresponding Morale Check to apply the Crossfire Modifiers, ALL of the following must apply:

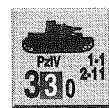
- The fire attack must be on the Area Fire Table.

- The fire attack must be from a simultaneous Suppressive Fire Action (SFA) from two or more units. (Fires in a single SFA which are not resolved simultaneously do not count.)

- The incoming fire must include at least two non-adjacent hexsides (see the diagram on this page). The firing player can only count one hex corner in his favor—if two hex corners are involved, one must favor the targeted player.

11.2b Apply the Morale Table Crossfire Modifier if the Area Fire Table result which generated the Morale Check was eligible for its Crossfire Modifier according to the above.

12.0 Point Fire Combat



Point fire combat represents the fire of precision weapons against relatively large individual targets (such as vehicles or AT Guns) where a kill results from a direct hit.

Resolve Point fires on the Point Fire Table.

**Procedure:**

Total the applicable modifiers from the lists above the Point Fire Table. The total of the modifiers (the Net Modifier row to use) can be either positive or negative. Subtract the Defender's Defense value from the Attacker's Attack value to determine the Firing Differential column to use.

Using the Point Fire Table, cross index the Net Modifier with the Firing Differential to find a list of three numbers. They are the kill rolls for Close, Nominal, and Long ranges respectively. Select the one that applies to the fire. If your kill roll is a "P" instead of a number, a kill is not possible and the shot was wasted.

Roll two dice. If the roll is equal to or greater than the kill roll, the target is killed and Button Up others in the hex (16.7). Otherwise, there is no effect.

12.1 Restrictions & Special Cases

12.1a Identify each firing unit and its target. A given target can be engaged by as many or as few firers as the player wants, given the rules about Suppressive Fire Actions and Overwatch.

12.1b The range printed on the front of a Point weapon counter is its "Nominal" range. The weapon range categories are Close (less than or equal to 1/2 printed range), Nominal (greater than 1/2 and less than or equal to the printed range), and Long (greater than the printed range and less than or equal to 2x the printed range).

12.1c Missed shots, against any target, have no effect at all. In a number of cases, the Point weapon unit is better off engaging its target by using the Area Fire Table.

12.1d Automatically destroy any Mounted and Towed units whose carrier is destroyed.

12.1e The firing player can selectively target Point Fires against towed units, and such fires do not affect the towing unit regardless of the result.

12.1f Point Fire attacks with a Firing Differential of -5 or less are allowed (if a player mistakenly declares such an attack), but have no possibility of a kill.

12.1g See also the effects of Buttoning Up, 16.7.

12.1h B-type targets which have a Morale value on their counter's front instead of a Defense Value are assumed to have a Defense value of Zero.

Example: Point Fire Combat

A Panther fires on a Fire Mode Sherman at range 8 in Open terrain. This is a long range shot for the Panther (whose nominal

range is 7). The following determine the Net Modifier: Open terrain +2, Target in Fire Mode -1, SFA fires +2, so the Net Modifier is +3. The Firing Differential is 5 (the Panther's Attack Rating) less 3 (the Sherman's Defense Rating) for a final differential of +2.

The cross index between the +3 Net Modifier and the +2 Firing Differential yields 22, 25, 51 of which the 51 applies to this combat because of the long range. The player rolls a 43 which is a miss and there is no effect on the Sherman.

The Sherman uses the Panther's fire as an Overwatch Trigger with which to return fire. Use the same Net Modifier (since the Panther, too, is in the Open in Fire Mode) but without the +2 for SFA fires so the Net Mod is now +1, and the Firing Differential is now -1 (the Sherman's attack is 3 (a short barreled 75mm gun) and the Panther's Defense is 4). The range for the Sherman is also Long.

The cross index this time gives 42, 52, 61 and use the 61 (for Long range). The player rolls two dice and manages to roll 62 which kills the Panther.

13.0 The Suppressive Fire Action

The Suppressive Fire Action (SFA) is the only non-Overwatch Fire method. Doing an SFA together is the only way for units in multiple hexes to engage a common target stack in one fire combat. To do an SFA, fulfill the various requirements below and announce the firers and the target. Mark any units firing an SFA with Fired Markers.

Each SFA fires require a single Target Hex. As long as you have units eligible to fire, you can continue to do SFA fires.

Design Note:

Players should be forewarned of the implications of firing SFAs. While the fire of an SFA is coordinated between different units, the tradeoff is that after firing the SFA the units are marked as Fired. That removes their ability to fire Overwatch for the rest of the turn. For those who fail to leave someone to cover the units firing SFAs and choose to fire many SFAs in the first Action Phase of the turn, remember you were told to be careful—don't come running to me if you have no one left to fire Overwatch when the enemy bolts across an open field to assault your units.

13.1 Restrictions on SFAs

13.1a A player can do SFAs only in his own Action Phase.

13.1b SFA firing units must fulfill the following:

- They must have been continually in Fire Mode since the beginning of the current Phase.
- They cannot already be marked with a Fired Marker. EXCEPTION: Fired Marked units **can** spot for any type of fire from Mortars.
- Unassigned units (6.3) **cannot** fire SFAs; they can only fire Overwatch Fires.

13.1c A given target can be engaged by any number of separate SFA attacks. After engaging one target hex (with any number of firers, a player could target a hex with a couple of Area Fire Attacks, several Point Fires per Point Target **before** announcing that he is done with the hex), the SFA provides an Overwatch Fire trigger to the enemy. After that trigger and any enemy fires, the phasing player can perform another SFA against the same or different targets. To restate, **No Trigger Occurs until** the firing player announces that he is **done** firing SFAs against a particular target hex.

Example: Multiple SFA Attacks.

To show the amount of fires a player could pour forth before allowing the enemy to have his Overwatch Trigger, a quick example is in order. As long as only one target hex is involved, the following is OK. The player fires three Area Fire SFAs at the hex, progressively bewildering the troops there, killing some. Not happy with the results, he fires two more SFAs at it. Now out of Area Firers, ten times in a row he selects a tank, fires Point Fires at a target in the hex, and then selects another tank and so on. When all of this is over, the targeted player gets his Overwatch trigger. The downside is that the firing player now has his entire army marked as Fired—and he did this to engage one hex.

13.1d Units in different stacks can combine their fires to do a SFA.

13.1e Suppressed units can freely join in on any SFA (or make their own) given their firepower modifications.

13.1f SFAs require no trigger.

13.1g A unit can conduct an AT Roll attack in addition to its regular fire SFA. Units are marked with a Fired Marker after they fire their regular SFA fires, not when they conduct AT Rolls.



13.1h After each SFA fire, mark all the units that fired with Fired Markers.

13.1i Only SFAs on the Area Fire Table allow the Crossfire Modifier to be applied.

14.0 Overwatch

Overwatch is this game system's approach to what is commonly called "Opportunity Fire" in other games. Overwatch Fire is a **provoked** action taken by units with an unblocked LOS to an Overwatch Trigger. An Overwatch Trigger (trigger, for short) is an event that draws enemy fire—such as the movement into a hex or enemy fires. A unit can fire more than one Overwatch Fire in a phase, provided the other conditions for firing are met.

Firing Overwatch is voluntary—no unit is ever forced to fire when an Overwatch Trigger occurs. These fires do not need to be **planned** in any way—eligible units which can see the trigger can take advantage of it.

Important: Handle all Overwatch Fires on a *single stack* basis. Units in two different stacks can never act on the same Overwatch Trigger. Once a trigger is spotted, conduct the Overwatch Fire exactly as any other fire in the game, and resolve it fully before continuing play. The firing player chooses which stack to fire and if he wants to use the trigger at all.

14.1 The Two Overwatch Cycles

There are two primary cycles of events that Overwatch Fires can follow in this game series. One is for Movement-based triggers. The other is for Fire-based triggers. Regardless of which cycle is in use, the cycle ends after the Overwatch Return Fire.

In 14.1a and 14.1b, Player A is the one whose Action Phase it is. Player B is that other guy.

14.1a Movement-based Overwatch Cycle. This cycle occurs the instant a unit moves into a hex.
Movement Overwatch Trigger (Player A)
Overwatch Fire (Player B)
Overwatch Return Fire (Player A)

14.1b Fire-based Overwatch Cycle. This cycle occurs when a player finishes firing an SFA.
Suppressive Fire Action announced as finished (Player A)
Overwatch Return Fire (Player B)

14.2 Overwatch Triggers

All Overwatch Fires require an Overwatch Trigger to occur. If there is no trigger or the trigger cannot be spotted according to the following, there can be no Overwatch Fires.

14.2a Events Generating Triggers. Two events trigger Overwatch: Movement and Fires. Triggers occur when A) an enemy unit enters a hex or B) when an enemy unit or stack fires. All triggers require an unblocked LOS to the event itself within the appropriate Spotting Range—for the Overwatching unit, or (in the case of Mortars) a spotter. If a stack moves into a hex or fires together, it generates only one trigger. AT Rolls, Assault-style Combats, and Artillery Missions never generate Overwatch Triggers.

14.2b LOS and Triggers. The location for all Overwatch Triggers is important. A Movement-based trigger's exact location is the **center of the hexside** through which the unit moved into the hex. Fire-Based triggers are visible if the LOS is unblocked to the hexsides surrounding the firing (not spotter) stack's hex along the line to the hex center. Triggers at one hex range are **always** visible, regardless of the trigger's location in the hex.

14.2c Movement-based Triggers. Movement triggers occur the **instant** an enemy unit enters a hex (after the unit is attacked by any Artillery Barrage Markers). Any Overwatch Fires against a unit moving occur **before** that unit changes Mode—regardless of the moving player's intention to switch Modes. Once the fire has been resolved, the moving units can switch Modes, or continue to move. A moving unit which draws Overwatch Fires can **never** use those fires as a trigger for its own Overwatch Fires.

The movement into Assault-style combat hexes, Mode change, SYRs, and mounting and dismounting are not Overwatch Triggers. The exit of a unit from an Overrun Combat generates a trigger.

14.2d Fire-based Triggers. These triggers happen whenever an SFA is finished, or a stack fires against a Movement-based Overwatch Trigger. When an SFA generates a Fire-based Overwatch Trigger, there exists one at each SFA firing hex, but the enemy can only select one hex as the trigger-generator to return fire against. In SFAs, no trigger occurs until the firing player announces that he is done firing SFAs at a given hex. Fires within Assault-style combats do not generate Overwatch Triggers.

14.2e Targets and Triggers. All triggers allow the attack of the Overwatch Firing Stack against any unit in the trigger's stack. All units in the stack are attacked anyway in Area Fires, but this means Point Fires can be directed against units in the hex which did not generate the trigger themselves.

Note: Remember that you must spot the firing Mortar unit in order to use its fire as a trigger. Being able to spot the Mortar unit's spotter has no effect.

14.3 Restrictions on Overwatch Fire Combat

14.3a Only units in Fire Mode and **NOT** Fired Marked, Paralyzed, or Suppressed can fire Overwatch. Units with a Fired Marker or in Move Mode **can** spot for Overwatch Fire from Mortars.

14.3b Units **can** make AT Rolls in response to Overwatch Triggers.

14.3c There is **no** exception to the inability of Suppressed and Paralyzed units to fire Overwatch.

14.3d A player **cannot** fire an Artillery Mission in response to an Overwatch Trigger.

15.0 AT Rolls

An "AT Roll" is the game's way of handling infantry small group assaults. Naturally, this combat method is dependent on the terrain available and the cover and concealment afforded.

Units can only use AT Roll attacks to destroy P-type and B-type targets at a range of one hex or less.

Important: A unit can make **one** AT Roll attack versus **one** target unit **per step** in the firing unit, but each target cannot be attacked more than once in a given fire. Units **can** perform their regular fire in **addition** to any AT Roll attacks they might make.

Procedure:

Cross index the target hex's terrain with the attack's range on the AT Roll Table to determine the base roll needed for a kill. Roll two dice for each target in the Target Hex—up to a maximum of one attack per attacking step. Modify each roll according to the table's modifiers. A modified roll greater than or equal to the table's kill number destroys the target. If the raw dice roll made for an AT Roll attack is 3 or less, destroy the attacking step.



15.1 Restrictions

15.1a Only Infantry-type units can make AT Rolls. Mode has no effect on a unit's ability to do so (this does not allow Move Mode units to do AT Rolls as Overwatch Fires). Paralyzed and Mounted units cannot make AT Rolls. Suppressed units can, but do so with a modifier. No unit is ever required to make an AT Roll attack.

15.1b An AT Roll attack can be part of an SFA or Overwatch. Regardless, the unit conducting the AT Roll **can** also fire normally at the same time. A unit can do both during an Assault-style combat sequence as well.

15.1c When a unit makes an AT Roll attack against a hex, roll separately for each P-type or B-type target attacked. A given infantry unit can attack *only* one hex with AT Rolls per fire, regardless of the number of steps involved.

15.1d AT Roll attacks can only be made in the attacking unit's hex or adjacent to it.

15.1e AT Roll attacks are not affected by any Artillery Attack Zones in which they might occur.

15.1f A RAW dice roll made in an AT Roll attack of 3 or less destroys the step making the attack. These losses do not cause Morale Checks. Only the one step of the unit actually making the attack is affected by this rule.

Example: AT Roll Attack

The player decides to do an AT Roll attack against an adjacent stack of five tanks with a platoon of two steps. The Target Hex is protective terrain. The target is covered with smoke from an earlier mortar fire. The terrain of the attack is that of the Target Hex (Protective). The base roll for an adjacent attack with protective terrain is 8. Of the existing modifiers, only the +1 for a target with smoke applies, so the attack will be successful if the player rolls a 7 or more. He rolls once for each of the two tanks the unit can attack (because he only has 2 steps to attack with), getting a 9, and 4. The final result is that one of the tanks is destroyed.

16.0 Morale

Morale effects represent the troops' covert or overt actions to refuse to continue dangerous operations.

16.0a All infantry and weapons units are at times subject to Morale Checks and their results. Vehicles and Carriers never make Morale Checks of their own. When a Morale Check is required, the entire stack checks Morale as one item and the result affects the entire stack—vehicles and carriers ignore Suppressed or Paralyzed results, but

must follow any SYR or Surrender results.

16.0b Units check Morale only when called for by the Area Fire Table result, or after every fire in Assault-style combat. Any Area Fire Table result other than No Effect requires the target stack to check Morale. Morale Checks never occur at any other time.

16.0c The Morale Rating of most units subject to Morale Effects is printed in white in a red box on the unit counter's front. It is a number ranging from zero (the best troops) to any number greater than zero. The greater the rating, the worse the troops are. Weapons units having a Point Defense value instead of a Morale Rating (such as AT Guns and Infantry Guns) have a Morale Rating of 3. On-map artillery units have a Morale Rating of 6.

16.0d Mark unit Morale conditions with Morale Markers. Assume all units under a Morale Marker to have the same Morale condition.

16.0e A unit's Morale condition is that unit's property alone. It is never transferred to other units.

16.0f Ignore results from the Area Fire Table calling for a Morale Check on units not subject to Morale Effects.

16.1 Battalion Morale

Battalion Morale is a measure of cumulative punishment. Step Loss markers in a Battalion Morale Box indicate Battalion Morale. The total of the Step Loss markers in a battalion's Battalion Morale Box is that battalion's Battalion Morale. Results from the Area Fire Table can cause additions to Battalion Morale. A Battalion Morale never becomes less than zero and can increase infinitely. Unless specified otherwise, all Battalion Morales begin at zero.

16.1a Only units belonging to a battalion with a Battalion Morale Box are subject to Battalion Morale.

16.1b All units in a battalion suffer the same Battalion Morale—regardless of their individual circumstances. One unit's Battalion Morale only affects another unit when a unit makes the Morale Check for a stack, otherwise the Battalion Morales of different battalions never affect one another.

16.1c Battalion Morale affects any of a battalion's units when they make Morale Checks.

16.1d Add any Battalion Morale addition incurred on a hex to **every** battalion represented in it. For instance, if units from two battalions are in a hex and the hex gets a +1 to the Battalion Morale result, each battalion suffers a +1.

16.1e Battalion Morale Reduction. Every

Turn during the Clean Up Phase, both players recover their Battalion Morales simultaneously. Roll one die separately for each battalion with a Battalion Morale. If the roll is equal to or less than the battalion's current Battalion Morale, reduce that Battalion Morale by 1. On any other result, there is no effect. Remember, no Battalion Morale ever becomes less than zero.

16.1f Converting Old Company Morales to Bn Morales. In older games where an at-start value for "Company Morale" is given do the following: Average the Company Morales of all the companies in the battalion (ignore companies which did not have Company Morale before), and divide the result by 5. That is the Battalion Morale at start. Use one of the old Company Morale Boxes as the Battalion Morale Box for each Battalion in the old games.

Design Note:

Unlike the Company Morale of earlier versions, Battalion Morale is a difficult thing to obtain and even harder to shake. Units will rarely have even small Battalion Morales (those with large ones can be written off...) and once a unit manages to obtain a Battalion Morale, it will be lugging it about for a long time!

16.2 Morale Checks

Make Morale Checks according to the following at the times listed in 16.0b.

Procedure:

Add the unit's Morale, its Battalion Morale, the number of steps the unit has lost, and any applicable modifiers above the table. The unit's Morale is multiplied by 2 if the Morale Check is the result of any sort of Assault-style Combat (EXCEPTION: Do not apply this multiplier for Morale Checks generated by Overruns in Partly Protective or Protective terrain). Find the column on top of the Morale Table that contains the resulting number. Roll two dice. Read down the final column to find the row containing the dice roll result. Read to the table's left to determine the result. Apply the result.

Example: Morale Check with Save Yourself Retreat (SYR)

After taking a step loss due to an Area Fire combat, a player has to make a Morale Check for his stack. The unit which took the step loss is an infantry platoon with a Morale of 4 and has now lost a total of three steps. It has a Battalion Morale of 1. The only modifier which applies is the +1 for being at Night. This gives a total of 9 (4 Morale + 3 Steps Lost + 1 Battalion Morale

+1 Night).

Find 9 along the top of the Morale Table and roll two dice (11..66). The player rolls a 36 which gives an SYR result.

Go to the SYR Table. Roll one die and add the Unit Morale, Battalion Morale, and the number of steps lost. The player rolls a 4 and adds a total of 8. This gives a 12 and a result of "Retreat 5 Hexes, -1 Step." The stack retreats five hexes and the player chooses to inflict the step loss on one of the other platoons in the hex.

16.2a Determining Which Unit Checks Morale for the Stack. The selection of which unit performs a stack's Morale Check is important. The chosen unit must have the "worst morale" in the hex. To determine the "worst morale unit", select the one that has the greatest total of raw unit morale and casualties. Ignore Battalion Morale values when determining the "worst morale" unit. Select the applicable unit **even if it died** (in which case, apply the total number of steps the unit has lost, less any due to carrier destruction) in the fire combat generating the check (unless it was the only unit in the hex; in that case, there would be no Morale Check).

If no unit in the hex is subject to Morale or all units in the hex were destroyed, make no check.



16.3 Suppression

Suppression is the most common fire combat effect on a unit. Suppression hampers a unit's ability to fire and move.

16.3a Suppressed units CANNOT...

...Move, change Mode (except for SYRs and 16.3c), breach mines, or mount/dismount,

...fire Overwatch,

...Spot for artillery or Mortar fires.

16.3b Suppressed units CAN...

...Fire SFAs,

...Make AT Roll attacks.

16.3c Units in Move Mode that become Suppressed automatically switch to Fire Mode. Units mounted in carriers ignore this result.

16.3d Additional Suppressed results have no further effect.

16.3e Suppressed units automatically recover to normal during each Clean Up Phase.



16.4 Paralysis

Paralysis is a more severe Morale effect than suppression.

16.4a Paralyzed units are unable to

move, change Mode (except for 16.4c), breach mines, mount/dismount, fire (except in one situation, see below), spot for artillery or mortar fires, or SYR. Essentially, they can do nothing.

16.4b Paralyzed units CAN fire once (as a Suppressed unit) during each Assault-style Combat against them. At no other time can they fire. Units can make this shot in addition to AT Roll attacks. If caught in a hex with an enemy unit (after making their one fire) during Assault or Consolidated Assault Combats (not in Overruns), destroy the Paralyzed units.

16.4c Units in Move Mode that become Paralyzed automatically switch to Fire Mode. Units mounted in carriers ignore this result.

16.4d Additional Paralyzed results on a stack already Paralyzed have no effect.

16.4e All Paralyzed units recover to Suppressed status during each Clean Up Phase.

16.4f Paralyzed units cannot choose to Flee at the beginning of an Assault Combat.

16.5 Save Yourself Retreats

A Save Yourself Retreat (SYR) is the result of the troops deciding that it is better to be elsewhere.

Procedure:

An SYR can begin in one of three ways: because of a Morale Table result; voluntarily during a friendly Action Phase (in place of regular movement, to avoid drawing Overwatch Fires); or units choosing to "flee" in an Assault Combat's Fight or Flee Segment. Resolve SYRs on the SYR Table. Roll one die and add the unit's Morale, Battalion Morale, and number of steps lost (just like the regular Morale Check, except the unit Morale is NOT x2, even in Assault-style Combat) (the same unit checks here as did for the Morale Result, or the player's choice when no Morale Result occurred). Read the result of the modified die roll off the SYR Table. The result will be the number of hexes the unit must retreat and possibly step losses. Execute the result.

16.5a Any unit subject to Morale Effects can be forced to SYR (or voluntarily conduct one). SYRs **always** affect the entire stack (except Paralyzed units). Only units which could roll for an SYR themselves are subject to the losses from the SYR Table—ignore any losses which would apply to units which could not roll on the SYR Table for themselves. Losses are inflicted on a per

stack basis, not per unit, and the owning playing inflicts these losses as he desires upon the units in the stack.

16.5b Units in either Mode can SYR. At the SYR's end, regardless of the unit's original mode, place the unit in Move Mode and remove any Fired Marker from it.

16.5c Suppressed units can do SYRs (and lose their Suppressed marker at the SYR's end). Paralyzed units ignore SYR results. Paralyzed units **cannot** SYR. Units with Fired Markers can only conduct involuntary SYRs.

16.5d SYR movement is always in hex terms, not Movement Points. A stack executing an SYR must move the exact number of hexes in the result and cannot split up along the way. SYRs must move through enemy-free terrain traversable in regular movement. If a unit is unable to retreat the required number of hexes for any reason, destroy it. (See also 16.5L.)

16.5e For all SYRs, the SYR's direction must be locally to the rear and towards protective terrain. No "doubling back" is allowed, and the retreat must be in a reasonably straight line. Units **must** end their retreat further from all enemy units than when they began the retreat.

16.5f No unit conducting an SYR ever generates an Overwatch Trigger, even if the unit moves adjacent to enemy units.

16.5g During a friendly Action Phase, the player can voluntarily choose to have any number of his SYR-eligible units do an SYR. Such an SYR is the unit's entire movement. The unit cannot have moved before the SYR. Handle voluntary SYRs in the same manner as involuntary SYRs in all respects—to include the requirement to move the entire stack. A unit can only do one voluntary SYR in a phase. Units which have fired an SFA cannot also conduct a voluntary SYR in the same phase.

16.5h A unit that does an SYR cannot move further in that phase. The SYR does not affect the unit in future phases.

16.5i Units crossing a minefield hex during an SYR **always** do so by force, even if there is a breach.

16.5j Destroy Tow-Only units (while not being towed), Mortar units, AT Guns, Infantry Guns, and On-Map Artillery units forced to conduct an SYR.

16.5k Units conducting SYRs are susceptible to attack by any Artillery Barrage Markers whose Attack Zones they enter, or move adjacent to, during their retreat. **Ignore** Suppressed, Paralyzed, and additional SYR results during these attacks—the stack either surrenders or keeps doing the original SYR.

16.5L SYR'ing Adjacent to the Enemy.

Destroy any unit which must enter a hex adjacent to any enemy unit during the course of an SYR. The only exception is the first hex of an SYR out of an Assault-style combat hex—there is no effect if that hex happens to be adjacent to enemy units (even those which were participating in the Assault-style combat). Also, IGNORE this rule during NIGHT turns—there is no effect for SYR'ing adjacent to enemy units during full night turns (the regular rule applies during twilight turns).

16.6 Surrender

The Surrender result on the Morale Table represents the complete collapse of resistance. Remove from play any stack that surrenders. Remove all units in such a hex, even if not subject to Morale results normally.



16.7 Buttoning Up

While not technically a Morale Result, Buttoning Up has been added to the effects which can be inflicted on tanks and other armored vehicles. Units subject to this rule include all P-type targets and any B-type target which is either a Tank, SP artillery Gun, Assault Gun, Tank Destroyer, Recon vehicle, half-track, or any other kind of Armored Personnel Carrier or vehicle. This rule does not affect Area-type targets, AT Guns, Infantry Guns, On-Map Artillery Guns, trucks, or wagons.

16.7a Inflicting a Buttoned Up Result. The applicable units in a hex automatically Button Up (and are marked with a Buttoned Up Marker) whenever any of the following occur:

- 1) An Area Fire result **greater** than a Morale Check (one which would require a loss) is applied against their hex.
- 2) An Artillery Barrage Marker's Attack Zone or Infantry Gun fire (100mm or larger) is applied to their hex causing a roll on the Artillery Point Fire Table—**regardless** of the roll's success.
- 3) A Point Fire attack results in a **kill** of some unit in their hex.
- 4) An Sortie Point Fire is made against their hex—even if the attack is unsuccessful.

16.7b Effects of Being Buttoned Up. A Buttoned Up vehicle or carrier suffers the following:

- 1) Their Area Firepower is x1/2.
- 2) They suffer modifiers on the Point Fire and AT Roll Tables.
- 3) They **CANNOT** spot for Artillery or Mortar Fires.
- 4) They **CAN** fire Overwatch, but do so with both modifiers and a Spotting Range restriction.

5) All hex MP costs for movement (hex and hexside MP costs) are **DOUBLED**. The costs to change mode and conduct Overruns or Consolidated Assaults remain the same.

6) Additional Buttoned Up results give no additional effects.

16.7c Removal of Buttoned Up Results.

All Buttoned Up Markers are removed automatically from both side's units during the Clean Up Phase at the end of each turn.

17.0 Artillery

Artillery Missions are fired during each player's Action Phase. Only the Phasing Player can fire Artillery Missions during a given Action Phase. The player can integrate Artillery Missions with all the other activities he can do in his Action Phase. Resolve each fire mission by announcing the Target Hex, Mission type, Spotter, if Fast Fire, and size of guns firing; making a roll on the Adjustment Table; and attacking all units within or adjacent to the Attack Zone of the Artillery Barrage.

17.0a Unless specified otherwise, artillery can hit targets anywhere on any map.

17.0b Good Shoot Artillery Barrage Markers remain on the map until the beginning of the owning player's next Action Phase (Bad Shoot Markers are removed at the end of the Phase in which they were fired) and attack any unit (of either side) their Attack Zones happen to land upon (to include the hexes adjacent to the Attack Zone proper). After attacking the units already within or adjacent to its Attack Zone, a Barrage Marker no longer affects those units unless they attempt to move from one Attack Zone Hex to another Attack Zone Hex or hex adjacent to such a hex. Furthermore, units within an existing Zone can fire normally, provided all LOS requirements are met.

17.0c Artillery Barrage Markers act as LOS blocks in their Attack Zone hexes—functioning in exactly the same way as if each Attack Zone hex had a Smoke Marker in it. Hexes adjacent to the Attack Zone do not block LOS.

17.0d Artillery fires cannot be cancelled after being announced.

17.1 Artillery Fires

Artillery Missions (except for any game specific requirements) never need to be plotted in advance. During a player's Action Phase, the phasing player merely announces

each Artillery Mission he wishes to perform and proceeds to execute it immediately. Ignore Called Fire Delays listed in older games.

One fire mission is the fires of a single artillery battery or battalion. Resolve each fire mission in its entirety before moving on with the phase. Every fire mission consists of the following:

- Announce Target Hex, Fires Type, Spotter, Round Size, and if it is a Fast Fire Mission.
- Place the Target Hex Marker in the desired Target Hex.
- Use the Adjustment Table to determine if a Good Shoot, Bad Shoot, No Shoot, or Bad Shoot with Scatter occurs.
- Replace the Target Hex Marker with the appropriate Barrage Marker.
- Resolve all fire combats within and adjacent to the Barrage Marker's Attack Zone.

17.1a A battery can execute **ONE** fire mission in a single turn. The number of guns in a battery has no effect on the battery's abilities, or its ammunition consumption.

17.1b A Battalion Fire Mission requires the fires of three batteries from the same artillery battalion. Being part of a Battalion Fire Mission uses up a battery's mission for the turn. For battalions with mixed gun types, use the smallest caliber for determining the firepower of the

Artillery Attack Zone and the largest caliber for determining the availability of Fast Fires.

17.1c Resolve Artillery Missions independently of any fires of regular units (an Artillery Mission cannot have its firepower attack strengths increased by the addition of other units, etc.).

17.2 Spotting

All artillery fire missions require a spotter with an unblocked LOS to the Target Hex (except for Illumination (Illum) Missions, see 17.7b). Identify the unit responsible for spotting the mission when it is announced.

17.2a Any unit-type, from any organization, can spot for any artillery mission.

17.2b Restrictions. The spotter **must** have an unblocked LOS to the Target Hex. The spotter **cannot** be Paralyzed, Suppressed, Buttoned Up, or within a Barrage Marker's Attack Zone. A spotter must be in Fire Mode and have been in that Mode since the beginning of the phase.

17.2c Illumination Missions do not need spotters.

17.3 Ammunition

Each scenario gives the ammunition available. Players might receive more later in the game (as reinforcements which arrive at the beginning of the Action Phase in time for use), but generally the at-start amount needs to last through the game. Ammunition is given in "Battery Fires" and each Battery Fire is the ammunition needed to fire one battery fully in order to generate a Battery Barrage Marker. Battery Fires are given as HE (High Explosive), Smoke, or Illum (Illumination) types. A single battery can fire **only one** type of Battery Fire per mission.

In older series games (2-01 through 2-05), ammunition was given differently than is used in the current rules. To play those games using these rules, divide the **HE** and **Smoke** ammo allotments by 4. The **Illum** allotments given remains the same.

17.3a Players must keep a running record of their remaining ammunition by type and caliber. Delete used ammunition the moment it is fired. A player can never use more total Battery Fires than he has available—either guns or ammo.

17.3b Each Fire mission can consist of only one ammunition type.

17.3c A Battery Barrage Marker costs 1 Battery Fire of ammunition. A Battalion Barrage Marker (and hence, mission) requires 3 Battery Fires of ammunition. Fast Fire Missions cost triple the usual number of Battery Fires for the size of unit firing.

17.4 Adjustment

The Adjustment of an artillery mission determines if an Artillery Mission "scatters" from the intended Target Hex, and whether it uses either Good or Bad Shoot attack values. Adjustment is performed on the Adjustment Table.

☛ Rocket Artillery always gives a Good Shoot and always scatters. The Adjustment Table is not used for Rocket fires.

17.4a The Adjustment Table. For regular missions, determine the range to the Target Hex from the spotter to get the Adjustment Table's range. Find the table applicable to that range. Roll two dice (11..66). Cross index the roll with the nationality of the firing unit. If a No Shoot occurs, return the ammunition to the player's pools, but the battery (s) which attempted to fire have used their one mission per turn up. If the mission Scatters, roll one die for direction, and another for distance. Move the Target Hex Marker to that hex and execute the

Artillery Mission there as a Bad Shoot. Otherwise, execute a Good or Bad shoot on the intended Target Hex.

17.5 Artillery Barrage Markers and Fires Resolution

Most Artillery Missions place an Artillery Barrage Marker (either a Battery or Battalion, depending on the mission's size and type). Artillery Barrage Markers come in two colors. Before play decide which player gets which color so that it is easy to determine which Barrage Markers to remove at the beginning of each Action Phase.

Rocket Artillery Missions do not place a Barrage Marker—they are resolved on the spot and nothing remains afterward. Smoke Missions are marked with a Level 2 Smoke Barrage Marker.

Artillery Barrage Markers indicate the center of the Artillery Mission's "Attack Zone". The size of the Attack Zone is dependent on the Barrage Marker's exact type. Also, Barrage Markers attack units which happen to be or move into hexes adjacent to their Attack Zone—this represents the "fuzzy edge" of the Fire Mission.

Artillery Barrage Markers from Good Shoot missions exist on the map (after attacking all units already within their Zones) **until** the very beginning of the next **friendly** Action Phase, when they are removed. While on the map, these markers **automatically attack** any unit which moves into or adjacent to their Attack Zone hexes (each time it enters such a hex) **AND** obstruct LOS throughout their Attack Zone (to include hexsides).

Important: Bad Shoot Barrage Markers are removed at the end of the same Action Phase in which they were fired. Good Shoot Barrage Markers remain on the map until the beginning of the same player's next Action Phase.

Each Zone hex attacks the units within it with the appropriate firepower according to the type of Artillery Barrage Marker and shoot type using the Area Fire Table and/or the Artillery Point Table. Also, each Zone attacks units which happen to be or which move adjacent to it with half firepower.

17.5a Battery Barrage Markers. These represent the fires of one battery. The Attack Zone of a Battery Barrage Marker only consists of the Target Hex itself.

17.5b Battalion Barrage Markers. These represent the fires of three batteries. The Attack Zone of a Battalion Barrage Marker

consists of the Target Hex and the six hexes immediately adjacent to it.

Design Note:

When looking at an Artillery Barrage Marker sitting on the map attacking units throughout the turn, remember that a Good Shoot barrage lasts for upwards of half the time of a turn (10-15 minutes) and the marker represents an automatic number of repeat missions.

17.6 Mission Execution

1. Marking the Target Hex



The firing player places the Target Hex marker in the Target Hex he chooses.

☛ For Rocket Artillery Missions always scatter the Target Hex Marker, roll one die for direction and another for distance. Move the Target Hex Marker to that hex and resolve the Rocket Fire there. Rocket Artillery will never hit the exact original Target Hex.

2. Adjustment

If this is an Illumination Mission, replace the Target Hex Marker with an Illum Marker and skip down to 5 below.

Determine the distance from the spotter to the Target Hex and use the Adjustment Table to determine the type of shoot. Scatter the Target Hex Marker if called for by the Adjustment Table.

☛ Rocket Artillery always gives a Good Shoot and the Adjustment Table is not used for Rocket Artillery missions.

3. Fire For Effect

If the mission consisted of Smoke ammunition, skip to 4 below (Smoke rounds do not generate fire attacks).

Attack every hex in or adjacent to the Attack Zone containing units (enemy or friendly) with the appropriate firepower of the Artillery Barrage Marker (Good vs. Bad Shoot, and caliber of weapon) using the Area Fire Table, and **then** the Artillery Point Fire Table (this table only affects inside the zone, not adjacent, see 18.0). Inside the Attack Zone, use the firepower directly off the Artillery Barrage Fire Values Chart. Hexes adjacent to the Attack Zone are attacked using half that value.

4. Smoke Placement

For a Smoke Mission, replace the Target Hex Marker with a Level 2 Smoke Barrage Marker.



5. Mission End

Proceed with the player's Action Phase as desired.

17.7 Special Mission Types

17.7a Rocket Artillery. Rocket Artillery must always scatter its Target Hex (see 17.6, section 1) and does not use the Adjustment Table (see 17.4) or place a Barrage Marker. Resolve all attacks immediately—Rocket Artillery **does not** 'influence' the map until the next Action Phase like regular artillery can.

For the first games in the series, here are the Rocket Artillery Zones (measured in hexes from the Target Hex) and Area Firepowers for each:

Bloody 110: The Nebelwerfer fires have an Attack Zone of 5 hexes (firepower 20).

Objective: Schmidt: None

Omaha: The LCT(R) fires have an Attack Zone of 8 hexes (firepower 30).

17.7b Smoke Missions. Artillery can fire Smoke missions by using Smoke ammunition. No special requirements exist; simply use Smoke ammo in place



of HE. Fire the mission normally. A Bad Shoot means nothing to a Smoke mission, however Smoke Missions will scatter if the

Adjustment Table calls for that result. Replace the Target Hex Marker with a Level 2 Smoke Barrage Marker immediately. Only batteries (never battalions) can fire Smoke Missions.

17.7c Illum Missions. Use Illum Missions to light the battlefield at night. These missions **do not** count as a battery's mission for the turn. To fire an Illum mission, place the Illum Marker directly into the desired Target Hex.



Do not use the Adjustment Table for Illum Missions. Illum can be fired into any hex on the map—visibility, spotters, and LOS has no effect on firing Illum.

17.7d Fast Fire Missions. Use these against priority targets. Only 122mm Guns or smaller can fire Fast Fire Missions. Announce the mission (at the moment of firing) to be a Fast Fire Mission. Expend triple the Battery Fires you normally would for the size of mission desired (3 Battery Fires for a Battery, 9 for a Battalion). Execute the mission as you would any other, **except** that the firepower of the Attack Zone is x2. On Map Guns cannot use Fast Fire Missions when they execute direct fires. All attacks made by the Attack Zone **even after** the initial burst are at the x2 firepower level.

18.0 Indirect Fire vs. Point Targets

Whenever an Artillery Barrage Marker is placed such that hexes containing P-type targets fall into its Attack Zone, use the Artillery Point Fire Table against them. **Important:** Only hexes inside the Attack Zone apply this table, hexes adjacent to such zones do not. Roll two dice (modified according to the table's modifiers) for each P-type target in each hex. Roll once per target. If the modified roll is greater than or equal to the table roll, destroy the target. Make this same attack roll (once per target per hex) whenever a moving P-type unit enters a Barrage Marker's Attack Zone (again, **not** the adjacent hexes).

18.0a Artillery of any caliber can destroy targets with any defense value using this table.

18.0b A missed roll on this table has no effect, except that units in the hex Button Up (see 16.7).

18.0c If Infantry Guns of 100mm or larger fire at a hex containing Point Targets, roll once per target using the Artillery Point Fire Table in addition to any Area Fire attack made against the hex.

19.0 Smoke

Smoke blocks LOS and gives a modifier on some tables.

19.1 Smoke Effects

19.1a Hexes with a Smoke Marker present an infinitely high LOS obstacle. Smoke Markers affect their entire hex and its hexsides. Multiple Smoke Markers in a hex give no additional effect. Any number of Smoke Markers can be in one hex at one time. Units can always see OUT OF (or INTO) a hex containing Smoke (for ANY purpose, even spotting and Overwatch trigger observation), BUT a unit can never see THROUGH such a hex.

19.1b Never place Smoke Markers in an all-sea hex.

19.1c Smoke has no effect on movement.

19.2 Smoke Reduction

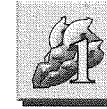
Remove all regular Smoke Markers and all Level 1 Smoke Barrage Markers in each Clean Up Phase. Then reduce all Level 2 Smoke Barrage Markers to Level 1 Smoke Barrage Markers.

19.3 Artillery Smoke

Artillery missions place Smoke Markers only when Smoke Missions are fired.



19.3a Each Smoke Mission generates one Level 2 Smoke Barrage Marker.



19.3b A Smoke Barrage Marker represents the same effect as having all hexes filled with regular Smoke Markers at or within the distance (in Hexes)

from the Smoke Barrage Marker **equal** to its Level. Therefore, a Level 2 Smoke Barrage Marker "smokes up" all hexes out to and including two hexes from the marker. A Level 1 Smoke Barrage Marker "smokes up" all hexes including and adjacent to the marker.

19.4 Other Weapons and Smoke

Instead of their regular fire, larger



Mortars (80mm+) and Infantry Guns (100mm+) can fire smoke. Firing smoke allows the player to place one regular Smoke Marker in the hex of his choosing (subject to scatter, see 19.4a) (for Mortars,

the hex must be spotted by an appropriate spotter; Infantry Guns must fire as direct-fire) within the range of the firing unit. These units **cannot** fire smoke in response to an Overwatch trigger.

19.4a Mortar & Infantry Gun Smoke Scatter. Whenever a player wants to use a Mortar or Infantry gun to place a Smoke Marker, he must do the following: Identify the desired hex. Roll one die. On a 4-6, place the Smoke Marker where it was intended. On a 2-3, scatter the Smoke into an adjacent hex using a scatter die roll. Finally, on a 1, do not place any Smoke, but the SFA of the firing unit **did** occur and it is still marked as Fired. These rolls are also listed on the Mortar & Infantry Gun Smoke Scatter Table.

Design Note:

At first glance this rule might seem a bit much over a little matter. It exists to correct for a degree of certainty players took advantage of and to account for both the occasionally ineffective smoke screen and the rather limited amount of smoke ammunition these units have with them. It also accounts for the now standard effect we put into our games—yes, you know the enemy is there, but the game won't let you take advantage of that information as if you really did. Thanks to Bob Runnicles, Nigel Roberts, and Simon Hoare for bringing this matter to my attention.

20.0 Movement

During a player's Action Phase, he can move all, some, or none of his units. A unit moves along a contiguous path of hexes (in any direction or set of directions) using its Movement Allowance to pay each hex's and hexside's Movement Point cost. A moving unit can generate Overwatch Triggers. If the enemy fires, the players immediately follow the Overwatch cycle for that trigger, and the unit can continue moving only after the cycle ends.

20.0a Only friendly units in Move Mode that are not Suppressed, Paralyzed, or marked with a Fired Marker can move. Each unit moves through the hex grid keeping track of its remaining Movement Allowance as it expends Movement Points according to the game's specific Terrain Effects on Movement Chart. Units can move individually or in stacks. Stacks can stack or split off at any time during their movement at no additional Movement Point cost.

20.0b A unit cannot expend more Movement Points than its Movement Allowance. **EXCEPTION:** If otherwise able to move, a unit can always move a single hex in an Action Phase (into non-prohibitive terrain) regardless of the Movement Point cost. If the owning player uses the above, the one hex moved must be the **ONLY** hex that unit enters during that Action Phase. This rule does not allow units to change to Move Mode **in addition** to moving into a hex costing more MPs than they can afford.

20.0c Units cannot "save" unused Movement Points from turn to turn or transfer them from unit to unit. The only time the movement of one friendly unit assists another is by the use of carriers and vehicles as transport.

20.0d A unit or stack can halt its movement at any time and continue later with whatever Movement Points it had remaining. Be careful in doing so, so as to avoid confusion.

20.0e Units can use an SYR to move during an Action Phase (given the rules in 16.5) but can do so only if they have not yet moved in the phase. A unit that does so cannot move later in that phase.

20.0f A player can move his units as he sees fit as he follows their Op Sheet or unassigned unit instructions. Players should keep in mind that they should not violate the letter **OR** the **SPIRIT** of the instructions.

20.0g Units marked **TOW ONLY (TO)** instead of a Movement Allowance cannot move under their own power (even one hex) and must be towed. If they are forced to move by themselves, destroy them. These

units have an assumed Movement Allowance of 2 for Mode Change and for proportioning movement with respect to carriers.

20.0h Units cannot enter the same hex as enemy units, except in Assault-style Combat. Destroy units forced to violate this rule.

20.0i Units can do an Assault-style Combat as a "stack" only if the stack existed at the Action Phase's beginning. Whether operating as a stack or individually, units must maintain their own Movement Allowances and points spent. Stacks can break up at any time during their movement. There is no Movement Point cost to stack or unstack.

20.0j Units that fire an SFA cannot move afterward—regular movement or voluntary SYR—and, conversely, units that move cannot fire an SFA later in the same phase. Involuntary SYRs are allowed.

20.0k See also the effects of Buttoning Up, 16.7.

20.1 Terrain Effects on Movement

Terrain affects movement by the Movement Point cost of various hex and hexside features as given on the Terrain Effects on Movement Chart. Each game has its own Terrain Effects on Movement Chart and the series itself has a Basic Terrain Effects on Movement Chart (given in the Charts and Tables Booklet). Use the Basic Terrain Effects on Movement Chart when playing the games **Bloody 110**, **Objective: Schmidt**, and **Omaha**. A hex's Movement Point cost is that of the hex plus any hexside feature crossed to enter it.

20.1a Certain features, such as buildings, are not listed on the Terrain Effects on Movement Chart. These have no effect on movement.

20.1b Elevation Changes. All units **must** pay +1 MP for each hex they enter that has a different center dot elevation than the one they came from—regardless of whether the change is up or down. In other words, if, as the unit moves from center dot to center dot, it must cross one or more contour lines, add the +1 MP cost. Multiple contour lines give no additional effect. Rule 20.1d applies here as well. Count contour lines which run through the center dot of the next hex to be moved into.

20.1c Bottlenecks. Bottlenecks are features, such as bridges, that force units to cross hexsides one at a time. All units must cross Bottleneck hexsides one at a time—never as a stack. Any number can cross during a turn, but they must do so one at a

time. Units being towed or riding as passengers can cross a Bottleneck with their transporter. Each game might specify Bottleneck features. In addition, bridges, Roads (and road-like features, like tracks and Railroads), and Minefield Breaches are **ALWAYS** Bottlenecks when units move using them.

20.1d Units using Roads and Road-like features (trails, etc.) to move, ignore the Movement Point costs of the other terrain features in the hex or hexside. This only applies to units following the road's path. Moving along a road makes a unit vulnerable to negative modifiers during Overwatch Fires. Units can move paying the non-road costs of hexes (moving off-road) so as to avoid the penalties associated with moving on the road—they then are not eligible for the benefits, either.

20.1e Certain hexes and hexsides are prohibited. No unit can enter prohibited hexes or cross prohibited hexsides. Destroy units forced to do so.

20.1f If more than one terrain type (each with different MP costs) exists within a hex, apply only the most costly. Add the cost of hexside features a unit must cross to enter the hex to the most expensive terrain in the hex to determine the hex's total Movement Point cost. 20.1d might negate all or part of this rule depending on the terrain of the hex involved.

20.1g A hex's terrain cost is the same regardless of the direction from which a unit enters (given that hexside features can be different and that roads might negate in some directions).

20.1h Slow Go Terrain and Blocks. Slow Go Terrain and Blocks are no longer used.

20.1i Woods and Forest Features. Forests and woods are not whole-hex features, but sometimes occupy only a part of a hex. Consider a hex to be forest (or woods, as appropriate) for movement & combat if **any** of the hex is covered by the symbol. The actual location of the symbol is given for LOS effects.

20.1j Contour Lines and Vehicle Movement. No vehicle or carrier can enter a hex containing **two or more** contour lines. Rule 20.1d negates this.

21.0 Minefields

Use Minefields to prevent enemy movements into an area or to channel them into an area you want him to enter—a kill zone. Place minefields on the map either as part of the game's set up or whenever a new Prepared Defense Op Sheet implements.





21.0a Once emplaced, Minefields attack both sides in the same manner. There are no friendly Minefields.

21.0b Minefields attack either on the Area Fire Table (see 21.2 or 21.3, depending on the crossing type) or by a straight dice roll, depending on target type of the unit crossing the Minefield. Against an Area or B-type target moving under its own power, use the Area Fire Table. Against a P-type target, use the straight dice roll (a roll of 8 or more on two dice destroys the vehicle; roll for each vehicle separately). Only the Stacking modifier applies to the Area Fire Table roll. No other modifiers apply to the Area Fire Table, and none of them apply to the straight roll.

21.0c Ignore Suppressed or Paralyzed results given by a Minefield attack; apply all other Morale Table results normally.

21.0d Regardless of whether a unit attempts to cross a minefield by force or by breaching, resolve Overwatch Fires against that unit **before** it enters the Minefield Hex. This Overwatch Fire applies even if the unit starts adjacent to the hex. The trigger is located on the hexside entering the Minefield. Apply all the 'moving in a minefield' modifiers to the Overwatch Fire and use the terrain of the unit's current hex (not the Minefield's). No further Overwatch Trigger occurs when the unit actually enters the Minefield hex.

21.0e Dummy mines are no longer used in the series.

21.1 Laying Mines

Lay mines before the game begins (if given in the scenario's set up) or whenever a Prepared Defense Op Sheet (never a Hasty Defense one) implements. When laying mines before play begins, you cannot place them in any hex in which your opponent can set up, if your side sets up first.

When a Prepared Defense Op Sheet implements, the player can place one Minefield hex for every two infantry platoons on the Op Sheet (no rounding allowed, each Minefield hex **MUST** have two platoons as parents). Place minefields the instant the Op Sheet implements (during the Command Phase) anywhere at or within 4 hexes of each of the two platoons which generated the Minefield (provided the hex is **also** at least 5 hexes away from any enemy unit).

21.2 Crossing By Force

To Cross by Force, announce the attempt and pay the cost of the Minefield hex +2

MPs. Apply Overwatch Fires as per 21.0d. Attack the units moving into the hex with the 8+ straight roll for each P-type target in the hex, and then attack the Area and B-type targets in the hex with a firepower of 18 (modified for stacking only).

The player can attempt to cross any enemy Minefield by force. SYR units **must** always cross by force.

21.3 Breaching

To Breach a minefield, move adjacent to the Minefield and announce the breach attempt. Apply Overwatch Fires as per 21.0d. If still able to move, the unit must then spend the MP cost to get into the Minefield hex +3 MPs (rule 20.0b does not apply here). After paying that cost, the Mines attack as in 21.2. The attack, however, is done with a firepower of 9. The unit does not leave the hex adjacent to the Minefield until completing the breach (after the attack, flip the Mine Marker to its Breached side), and then it can continue to move with any remaining MPs it has.

21.3a Only infantry units in Move Mode can breach Minefields. Mounted, Suppressed, and Paralyzed units cannot breach Minefields.

21.3b Place the Breach Marker in the hex with the cleared path running from the hexside the unit breached to that directly opposite it. This breached path can be changed only by rebreaching the hex from another hexside. A hex can only have one cleared path.

21.3c No unit can end its movement in a Minefield Breach. If a unit becomes Suppressed or Paralyzed while crossing a breach (because of Overwatch Fires), it must move back to the hex it entered from and **then** become Suppressed or Paralyzed. No unit can enter Fire Mode in a breach hex. Units which do not have enough MPs to cross the breach and enter the hex on the other side cannot attempt to cross the breach or enter the breach hex.

21.3d Units moving by an SYR can never use a Minefield breach. They must cross by force.

22.0 Assault Combat

The player can conduct Assault Combats at any time during his Action Phase. Resolve each of these combats in its entirety before moving on. These combats affect only the units within the resolution hex. Every Assault Combat must end with one side or the other alone in the resolution hex.

Assault Combats do not require any

additional MP costs, except that the attacker must have enough MPs left when the assault is announced to enter the defending hex.

Resolve any attacks by Artillery Barrage Markers against the moving attacking units before carrying out any Assault-style Combat.

Procedure:

The attacking stack moves adjacent to the Defender and the players resolve any Overwatch and Artillery Barrage Marker fires. The Attacker announces his intention to do an Assault Combat. The Defender must then decide either to fight or to flee. If the Defender chooses to flee, all his units must do an SYR.

If the Defender stands his ground, place the attacking units in the target hex (resolve any artillery Attack Zone fires before continuing), first the Defender fires, then the attacker. As each side fires, the other must take the combat result **AND** make a Morale Check (even if the Area Fire Table result does not call for it) before moving to the next fire. In each new combat round, use the same firing order.

Combat rounds continue until one side or the other is alone in the hex.

22.0a Only Move Mode **infantry** units (NOT MGs, other weapons units, vehicles, or carriers) that are not Suppressed or Paralyzed and that have enough MPs left to enter the Defender's hex can attack in Assault Combat.

22.0b Move Mode units fire normally in an Assault with the exception of towed units and Move Mode Mortars which cannot fire at all.

22.0c Paralyzed units can fire (as a Suppressed unit) once per Assault Combat. If, after that one fire and its Morale Check, the enemy is still in the hex with them, destroy the Paralyzed unit. The presence of other non-paralyzed units in the hex does not stop this from happening.

22.0d The phasing player can Assault a hex as many times as he has the units to do so. He can make these Assaults in any order with respect to other actions and fires.

22.0e Mounted units cannot conduct Assault Combat as the Attacker. Mounted units in a hex against which the other player announces an Assault can dismount to receive the attack. Towed units cannot take advantage of this rule. Mounted Defenders can fire and accept the combat mounted, but cannot conduct AT Roll attacks and are automatically destroyed if their carrier is destroyed.

22.0f Area Fires in an Assault Combat hex only affect the enemy—even Mortar

fires. Calculate the stacking modifier for each side separately.

22.0g In Assault Combat, use the terrain of the Defender's hex and ignore any hexside features. Both sides are considered to be in the same hex.

22.0h In each combat round, a unit can conduct **both** AT rolls and regular fire. Otherwise, each unit gets to shoot once per round. All Area Fires must be consolidated into one shot per round and make all available AT Rolls.

22.0i Fired markers have no effect on Assault Combats.

22.0j The attacking units **must** switch to Fire Mode at the instant of becoming Suppressed or at the beginning of the second combat round. Also, the Attacker can voluntarily switch to Fire Mode at the end of the first round of combat if there will be no second round (he won). The Defender can only change mode when becoming Suppressed or Paralyzed.

22.0k After resolving an Assault Combat, the Attacker (if still otherwise able to do so) can continue to move the units which made the Assault with any MPs they happen to have remaining.

22.1 Ending Assault Combats

Assault Combat rounds continue until one side or the other ends up alone in the hex. The following rules handle the situations that arise during Assault Combat execution.

22.1a If the Attacking stack suffers a Paralyzed result, execute an SYR with the attacking units. The combat ends immediately.

22.1b If the Attacking stack gets a Suppressed result, place a Suppressed Marker, switch the attacking units to Fire Mode, and continue the combat.

22.1c At the end of any combat round (both side's fires and Morale Checks), the Attacker can decide to give up with all or some of his units. The attacking units must conduct an SYR to leave the combat hex. Once the **Defender** decides to fight, he cannot later voluntarily end the combat—only the Attacker has this option.

22.1d If the defending units are (or become) Paralyzed, they get one shot as a Suppressed unit in the next combat round. If the Attacker is still in the hex after that fire's resolution, destroy the Paralyzed units.

22.1e If the Defender becomes Suppressed, place a Suppressed Marker, switch any defending units from Move Mode to Fire Mode, and continue the fight.

22.1f If either side Surrenders or is destroyed, end the combat.

23.0 Overrun Combat

Overrun Combat is the vehicular version of Assault. Effectively, the vehicles drive through the hex with guns blazing and exit the hex immediately. These combats end after one round—instead of the multiple rounds involved in an Assault or Consolidated Assault.

Procedure:

The attacking units enter the Target Hex paying the hex's cost +3 MPs. The Defender fires first, followed by the Attacker. As each side fires, the other **MUST** make a Morale Check (if there are eligible units on that side) even if the table result does not call for it, before moving on.

After both sides fire, the attacking units must exit into any adjacent hex.

23.0a Only vehicles and carriers (including any passengers) in Move Mode with enough MPs to pay for the Defender's hex plus 3 MPs can conduct Overrun attacks. Overrun singly or in stacks (given 20.0i). Units of both sides can fire in Move Mode, including mounted units (towed units cannot fire).

23.0b In Overrun Combat, use the terrain of the Defender's hex. Ignore any hexside feature the attacking units crossed to get into that hex.

23.0c A player can conduct Overruns at any time in his own Action Phase. Any number of overruns can be conducted against a single hex in one phase.

23.0d The attacking units do not pay additional MPs to enter the exit hex (that is part of the +3 cost) but that hex must be free of enemy units and may not be prohibited terrain. An attacking force cannot exit from the Overrun Target Hex directly into another one. **Exiting** an Overrun hex **generates** a Movement-based Overwatch Trigger. The Overrun itself does not.

23.0e Paralyzed units can fire as Suppressed units. They are not destroyed as in other Assault-style Combats.

23.0f Fired markers have no effect on Overrun Combats.

23.0g After resolving an Overrun Combat, the Attacker (if still otherwise able to do so) can continue to move the units which made the Overrun with any MPs they happen to have remaining.

23.0h Do not apply the x2 multiplier to unit morale during a Morale Check generated by an Overrun in Partly Protective or Protective terrain.

24.0 Consolidated Assault

A Consolidated Assault (CA) is one in which the player combines an Assault with an Overrun—an example would be to ride into the enemy hex mounted on tanks and then dismount to assault.

✪ With the exception of the Dismount segment, the first stage of the CA sequence is the same as an Overrun, and the following stages (to include the multiple rounds of combat) are the same as an Assault Combat. Regardless of events, there is **never** a Defender Fight or Flee Decision Segment in the CA sequence.

24.0a Along with the units listed in 23.0a, only Move Mode Infantry units can conduct a CA, but they can be mounted on any vehicle or carrier—even trucks. Towed units cannot be part of a CA as the Attacker. Alternatively, the infantry units can move under their own power as part of a stack of vehicles to enter a CA.

24.0b To execute a CA requires **both** a vehicle or carrier **AND** at least one infantry unit. A player cannot decide to launch a CA with just infantry or vehicles. If either element is removed from the Attacker's force during the assault, finish the assault like this: If only Infantry is left, finish as a regular Assault Combat; If only vehicles are left, finish as an Overrun.

24.0c The vehicles or carriers involved in a CA **do not** need to leave the hex immediately as in Overruns. Instead, they participate in as many rounds as the attacking player wants—they can also voluntarily leave the hex (as in 22.1c) after any round of combat.

24.0d Combat rounds continue in a CA until the combat ends according to the same conditions as those that end an Assault (see 22.1). Exception: Continue as an Overrun if the CA becomes an Overrun according to 24.0b.

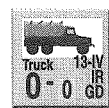
24.0e In CAs, use the terrain of the Defender's hex. Ignore any hexside features of that hex.

24.0f Other than the above, the special rules in 22.0, 22.1, and 23.0 apply to CAs as well.

25.0 Special Units

25.1 Carriers

Carriers are vehicles designed to transport other units. Trucks, wagons, and half-tracks are the usual carriers. A White box around the silhouette



identifies a carrier. Each carrier unit represents the number of vehicles required to make up a platoon-sized portage capacity. Consider a unit mounted (or towed) if the carrier's counter is on top of it.

While a passenger, a unit expends MPs in proportion to the carrier's MA. For example, if a carrier with a MA of 18 expends a third (6 points), the transported unit with an MA of 6 expends that fraction also (2 points).

☉ For simplicity, in the following rules "mounting" refers to all the operations of mounting, dismounting, hitching, or unhitching.

25.1a All carriers can carry up to 5 steps **OR** tow up to two towable (AT Guns, On-Map Artillery, Mortars marked Tow Only, and Infantry Guns) units. These limits are mutually exclusive: units that tow cannot carry at the same time or vice versa. Units which can be "carried" are Infantry, MG, and Mortar (that are not marked Tow Only) units.

25.1b Mounting costs the carrier 3 MPs and the mounting unit 1 MP. Units must be in Move Mode to mount and remain so while mounted. Suppressed or Paralyzed units cannot voluntarily mount or dismount.

25.1c Mounted units can fire only in Assault-style Combat. Such units cannot make AT Roll attacks. Units being towed and mounted Mortar units cannot fire at all.

25.1d If a carrier is destroyed, automatically destroy any units it might be carrying or towing.

25.1e Vehicles as Carriers. Players can use tanks and other vehicles as makeshift carriers. The vehicle capacity is 2 steps or one towed unit—these are also mutually exclusive. More than one vehicle can move as a stack to carry platoon sized units. The vehicle can fire using this rule (as can the regular carriers above). The remaining rules above also apply in these cases.

25.2 Mortars

Mortars are indirect fire Area Fire weapons (shown by a red circle around their range—meaning no LOS is required from the Mortar to the target, but from an appropriate spotter to the target instead). All Mortar platoons have two steps and are subject to Morale Effects.

25.2a Mortars do not require an unblocked LOS to the target from their own hex. They must, however, have an appropriate spotter that does. The spotter

must be from the same next-higher-echelon as the Mortar itself—the same company (in the case of Company Mortars), same battalion (in the case of Battalion Mortar Platoons or Heavy Weapons Companies), or the same regiment (in the case of Regimental Heavy Weapons Companies or Battalions). Buttoned Up, Suppressed or Paralyzed units cannot spot for Mortars. Mode has **no effect** on a unit's ability to spot for Mortars.

25.2b Mortars are Area Fire weapons that are affected by the range of their spotter to the target hex. **Important:** Mortars can fire only **ONCE** per Action Phase (for a total of twice in a game turn). A Mortar cannot fire to obtain its "once per phase" in violation of the effects of Fired Markers and the like. Mortars involved in an Assault-style combat can fire once (provided they had not already used their one shot for the phase) and then attempt to live through future combat rounds without firing. Mortars can fire Overwatch Fires provided the spotter can spot the trigger.

25.2c Instead of regular fire, a Mortar can fire one Smoke or Illum Marker. Only 80mm or larger Mortars can fire these. Illum can be fired into any hex in range—visibility and LOS has no effect on firing Illum by Mortar. Smoke requires the target hex to be in range and spotted by an appropriate spotter. Smoke and Illum **cannot** be fired in response to an Overwatch trigger. Identify the hex to attempt to place Smoke with the Mortar and then see 19.4a to apply scatter.

25.2d Unless Paralyzed or Suppressed, Mortars can self-spot.

25.2e Mortars can move by themselves or be carried by carriers. Large Mortars (marked as Tow Only) cannot move by themselves and must be towed.

25.2f Even in Assault-style Combat, Move Mode Mortars **CANNOT** fire. Fire Mode mortars **can** fire once in these combats (if they haven't already shot their one shot for the phase, in which case, they couldn't fire at all) and their fires only affect enemy units.

25.3 Anti-Tank (AT) Guns

AT Guns are B-type targets and direct-fire Point firers. They have one step and have an assumed Morale of 3 (when no Morale Rating is given on the counter).

25.4 Infantry Guns

Infantry Guns are B-type targets and direct-fire Area Firers. They have one step and have an assumed Morale of 3 (when no Morale Rating is given on the counter).

25.4a Instead of regular fire, an Infantry Gun can fire one Smoke Marker to any hex in range with an unblocked LOS to the gun (subject to scatter, see 19.4a). Only 100mm or larger Infantry Guns can fire Smoke but **cannot** do so as Overwatch Fire.

25.4b If Infantry Guns of 100mm or larger fire at a hex containing Point Targets, roll once per target using the Artillery Point Fire Table in addition to any Area Fire attack made against the hex.

25.5 On-Map Artillery

Most games will restrict artillery to being off-map, but sometimes the situation will require these units to be on the map. On-map artillery functions like its off-map cousin in all functions except the following:

25.5a On-map artillery can direct fire. If any gun does so, the **whole battery** cannot fire regular artillery missions in the same turn—the inverse is also true. The on-map artillery unit must have no fewer than 2 guns remaining in play in order to be able to fire regular artillery missions.

25.5b All direct fires require an LOS from the firing unit to the target—On-map artillery is no exception. On-map artillery can **never** fire like Mortars. Given 25.5a, On-map artillery can participate in normal artillery missions using spotters. On-map artillery can fire SFAs or Overwatch.

25.5c For each gun that fires directly, expend one HE Battery Fire and place one Battery Barrage Marker on the Target Hex. The Battery Barrage Marker then attacks using the usual rules on the Area Fire Table (Good Shoot strength) and/or the Artillery Point Fire Table. On-map artillery never uses the regular Point Fire Table.

25.5d On-map artillery cannot fire Smoke or Illum in direct fire mode.

25.5e To fire regular artillery missions, all the battery's guns must be in Fire Mode and must not have fired Direct Fires in the current turn.

25.5f On-map guns have one step and an assumed Morale of 6. Suppressed or Paralyzed on-map guns cannot fire.

25.5g On-map Guns cannot use Fast Fire Missions when firing Direct Fires.

26.0 Aircraft

When aircraft are available, they are given as "sorties." A sortie is the attack of one aircraft against one target unit or hex. In earlier games, sorties represented an aircraft making a number of "runs" against the map. To play those games using these rules, consider each run for an aircraft as a separate sortie. Therefore, an old game air mission that allows two aircraft to make three Area attacks would convert into six separate sorties.

Resolve all aircraft fires in the Aircraft Fire Phase. Execute all available sorties before passing play to the enemy. Any number of the available sorties can be directed against a single hex, provided they are all placed on the map beforehand and are resolved independently.

The number of available sorties is determined by a die roll. The player selects the ordinance type and target hex when he executes his sorties. In games beginning with **Hunters From the Sky**, players have a marker for each possible available sortie. When a player is going to resolve his sorties, place all the markers on the hexes they are to hit and resolve them all after placement. Once placed, a sortie cannot be moved to another hex.

26.1 Sorties

26.1a Sorties use their Area (or strafe) ability to attack using the Area Fire Table. The sortie's Point ability is a dice roll to kill P-type or B-type targets. These abilities cannot be combined in one sortie. The player must announce which ability the sortie is to use when he resolves the attack and forfeits the other ability when he does so.

26.1b Resolve the Area attacks in the usual way—modify according to only those modifiers that apply to sorties. The straight Point kill roll requires a roll on two dice. Modify the roll according to the Sortie Point Fire Modifications Chart. If the modified roll is greater than or equal to the kill number, destroy the target. Any other roll has no effect, except that it will cause the units affected by 16.7 to Button Up.

26.1c On any turn in which one or more sorties are available, the player uses them all in the Aircraft Fire Phase. He picks each target hex and no ground spotter is needed.

26.1d In **Matanikau**, do not roll on the Sortie Successful Attack Table for each sortie. This effect has already been worked into the way that game handles its sorties.

26.2 Aircraft Sortie Resolution

Resolve each sortie as follows:

- Place all the side's available sorties for the turn.
- For each sortie, follow the remaining steps after placement:
 - Identify the sortie to be resolved, its type and weapon load
 - Roll one die on the Sortie Successful Attack Table. If the roll is within the range specified on the table, execute the attack. Otherwise no attack is made.
 - Execute the attack, if any. If more than one Sortie is directed against a hex, each must be resolved independently.

27.0 Night

The difficulty of military operations at night is impossible to describe adequately.

Dusk and Dawn are the turns just before and after real night begins. In these turns, the maximum visibility is limited. Dawn and Dusk turns do not qualify as **either** Night **or** Daytime, so the following are true: the Night rules and modifiers **do not** apply, and sorties cannot be used. Illum cannot be used during these turns.

27.1 Night Effects

27.1a The maximum number of weighted turns an Op Sheet can accrue at night is 2.

27.1b Night missions must be tightly controlled by their Op Sheets. Players must use much more precise routes and other control measures.

27.1c Visibility at night is two hexes.

27.1d Night turns represent a full hour. Even so, attempt to recover Battalion Morale only on **even** night turns (2000, 2200, 2400, etc.).

27.1e Morale Checks at night suffer additional modifiers. Artillery Adjustment is always conducted on the longest range table. Illum-lighted areas **do not** negate these.

27.1f Area, Point, and AT Roll combats are modified at night—even artillery fire resolutions are modified.



27.2 Illumination (Illum)

Illum rounds provide battlefield illumination.

27.2a Each Illum Battery Fire and each Illum Mortar shot generates one Illum Marker. See 17.7c and 25.2b for details.

27.2b Each Illum Marker generates a lighted area with a 5 hex radius around its

location. This lighted area acts as a spot of daylight and negates the night effects (except for Morale). During Dawn and Dusk Turns Illum Markers have **no effect** on visibility.

27.2c Remove all Illum Markers on the map during each Clean Up Phase.

Version 3.1 Designer's Notes

After numerous suggestions and comments by many players of version 3.0 rules in the games **GD'40** and **Matanikau**, I decided to pull out the stops and make the changes players were asking for—as well as some of my own—in order to make the game play quicker and easier than that given in version 3.0.

The artillery system has been heavily revamped and integrated into the Action Phase. This eliminates both the need to plot missions and as well as a number of rules regarding spotting. The system is as clean as it gets and can now be integrated directly into your tactical actions. Beware of the effects of dumping artillery barrages on your objectives—unless you are willing to chase into your own barrages, you might protect the enemy from your assaults!

Battalion Morale (instead of Company Morales) means less bookkeeping and an effect that, I think, is in the correct proportion when compared to unit morale and casualties. This made for a more sensitive Morale Table and a bigger difference between good and poor units. Battalion Morales make up the least important of the triumverate which makes up morale—these are, in order of importance: Casualties, Unit Morale, and Battalion Morale.

Spotting Ranges allow a better look at the "empty battlefield" effect and dispenses with the old marking of overwatch firing units with Fired Markers. A marked unit risked getting "rushed" by attackers who knew they were safe. The same is still true of Suppressed units, but then that is the purpose of suppression (to allow freer movement of your own troops) and you have to **earn** it. The result works very well.

Buttoned Up adds a new dimension to armor engagements and, I think, adds just the right spice to simulate those actions well.

I am thankful for the amount of feedback version 3.0 got and I look forward to your comments on 3.1, but keep in mind that the door to further official system change is closed except to error correction. The **TCS** rules are done.



Chart of Common Graphic Symbols and their Use

Symbol	Name	Description of Use and Remarks
	Lateral Boundary ...for a Battalion ...for a Company	Defines the limit of operations between adjacent units.
	Line of Departure Phase Line (PL Fish)	Designates the line at which operations begin: the jump-off point. Phase Lines are used to control the actions of several units. They can be used to coordinate the units, and to define different phases of the operation.
	Unit Location (here a Battalion)	Used to mark a unit's location on the map.
	Objective in this case, OBJ Green	Denotes the area to be taken by an attack or held by a defense. Obtainment of the objective is how operations succeed.
	Axis of Advance, in this case, Axis Red	Denotes the general course of movement of the assigned units. Units are free to move anywhere within the bounds of the axis of advance.
	Direction of Advance	Gives the exact path the movement must follow. This control measure is much more restrictive than the axis of advance as the units must take exactly the path under the arrow.
	Area to be screened by Smoke	Denotes the use of smoke. A good idea is to record the time to use it with the symbol—such as "Fire when advance reaches PL Cod Piece."

Welcome to The Gamers and Total Game Support !!! *We're Here to Help!*

1. Rules Help.

We are usually available to answer your rules questions, one on one, by phone most business days (and frequently during off hours).

Call (217) 896-2145.

If we aren't there, leave word on the answering machine and we'll get back to you as soon as we can. That's a promise.

2. On-Line Help.

We are on GEnie. If you are, you can find us in Category 4, topic 43, page 805. I check in most days and will be able to answer your questions.

E-mail is welcome and can reach us at the address of THE-GAMERS.

3. Mail and Fax

We will be happy to answer your letter and Fax questions, too. We turn them around as soon as possible. I'll Fax a response directly to the number you give. Mailed questions are answered in as much depth as I can think of (phone questions are easier to handle in that regard, as we get to go back and forth with you) and we do not require things like SASEs or Yes/No format.

Fax: (217) 896-2880

Write: The Gamers, Inc.
500 W. 4th Street
Homer, IL 61849

4. Your Input is Important!

While we attempt to maintain the continuity of our series rules—to eliminate repetitive rules learning—we do allow them to develop further after publication. The rules remain stable, not static. We do not publish games and then forget them! Refinement depends heavily on the active participation of the players of our games and feedback has an effect on what we do and how we do it.

5. We Don't Make Empty Promises, Either!

If you are new to The Gamers, but not new to wargaming, you are probably saying to yourself "Yeah, right. I've been lied to by the best!" We can't change things others have done. We can, however, live up to our own standards and promises. Ask anyone who has dealt with us directly before, or try us on any of the above. We'll be happy to surprise you!

The Gamers

Welcome to the
Best Kept Secret in
Wargaming!!!

Tactical Combat Series:

A Frozen Hell

©2000. The Gamers, Inc. All Rights Reserved.

Game Design: Alan R. Wambold

Series Design: Dean N. Essig

Graphic Design & Game Development:

Dean N. Essig

Map Logo Design: Jeff Hill

Production: Sara Essig

Playtesters: Anders Fager, Chris Marachel, Markku Nieminen, Peter Soper, Ric Walters

Proofing: Perry Andrus

Special Thanks:

1) LTC Kai P. Vainio, Assistant Defense, Military, Naval & Air Attache; Embassy of Finland.

2) COL Pekka Kurenmaa, Director, Finnish Institute of Military Science.

...for their generous assistance to the research for this game.

Counter Errata

The Finnish 5/2/JR 16 company was printed with eight infantry platoons. Four of these are actually 5/2/JR 16, the other four should be marked as 6/2/JR 16. Replacements will become available with the 2001 Repl Countersheet.

The Box

Yes, I slipped...it is Tolvajärvi, not Tolvajari. The reindeer are for color only. :-)

Introduction

A **Frozen Hell** simulates a series of battles fought at Tolvajärvi, Finland between 8 and 12 December 1939 between the Finnish Task Force Pajari and the Russian 139th Rifle Division. The 139th was attempting to turn the north flank of the Finnish 4th Corps which was defending north-east of Lake Ladoga. Since the invasion on 30 Nov 39, the 139th steadily advanced against light opposition, but on 8 Dec the initial Finnish forces were reinforced and halted their retreat at Tolvajärvi determined to make a stand. In three battles over the next five days, Task Force Pajari stopped and then drove back the Russian invaders.

Time Scale

This game uses a 30 minute per turn scale for both day and night. This is due to the amount of night action and the relatively difficult operations in the day-time. Combined, this made a similar time scale for night and day appropriate. Other than this time change, all rules apply normally.

1.0 Terrain and Map Notes

1.1 Woods

Woods hexes are those with even the smallest amount of the woods symbol in them. LOS blockage is according to the actual symbol location.

1.2 Forest

Forest hexes are those with 100% coverage of the woods symbol within the hex.

1.3 Swamps

Regardless of the amount of Swamp symbol in the hex, the hex is considered to be Swamp. Forest symbol in a swamp hex is only for LOS purposes.

1.4 Lake Hexes

All lakes are outlined in blue and any hex containing or within the boundary is considered Lake hexes. Any hex containing **both** Woods and lake boundary is considered a Lake Hex. Lakes are Open Terrain for all purposes except the following:

1.4a During any daytime turn, Finnish fires against any Russian unit in a Lake Hex receive a +1 shift on the Area Fire Table.

1.4b Holes in the Ice. Place a "Holes in the Ice" Marker in any target hex (good or bad shoot) of 122mm or larger artillery fires. Holes in the Ice have the following effects and **do not** block LOS.

a) No vehicle, artillery piece or AT gun unit can enter a Holes in the Ice hex except along a road. Those not on a road but in such a hex when the marker is created are destroyed.

b) Other units can enter such a hex at a cost of 3 MPs.

c) Remove all Holes in the Ice markers at the next time the weather is Deep Freeze.

Page	Item
1	Introduction Time Scale 1.0 Terrain and Map Notes
2	2.0 Finnish Special Rules
3	3.0 Russian Special Rules
4	4.0 General Special Rules 5.0 Command and Control
5	6.0 General Victory Conditions 7.0 Set Up Notes 8.0 Scenarios 8.1 The 609th Checks In
6	8.2 Kivisalmen Cookout 8.3 Belyayev's Attack
7	8.4 The Sausage War 8.5 Iced!
8-25	Op Sheets
26	8.6 Talvela and Pajari's Attack 8.7 Head On Collision
27	8.8 Hotel Hell 8.9 Combined Scenario
28	8.10 Island Hopping 8.11 The Battle of Tolvajärvi
29	Abbreviations and Finnish Terms
	Counter Manifest
30	Historical Notes
32	Designer's Notes

A Complete Copy of A Frozen Hell Includes:

1x Box
1x TCS Series Rulebook (v3.1)
1x Game Specific Rulebook
2x Dice (one red, one white)
2x 22x 34" Map
3x 280-counter countersheets
1x Registration Card
Assorted Advertising Flyers (which our collaters love to hate...)

If you are missing something, contact us. If you have something extra, Merry Christmas!

1.5 Buildings and the Hotel

Due to their limited size and number, these provide cover **only** for troops actually inside them. Units in their hex but not marked as inside the building/hotel use the terrain of the rest of the hex instead.

1.5a Up to seven steps can be inside a building. Up to 21 steps can be inside the Hotel (an exception to the normal TCS stacking rules). Mark the units inside each with the appropriate "inside" counter. Only Area target units can be inside these structures. Units inside the structure can fire normally (exception: mortars cannot fire while inside).

1.5b During his Action Phase, the player can freely reorganize the hex (who is inside, who is out), and such reorganization does not generate overwatch fire triggers.

1.6 Bridges

Units in a bridge hex are considered to be on the bridge unless the bridge is destroyed, in which case they are in a Lake Hex.

Bridges do not block LOS.

1.6a Bridge Blowing by Artillery If any artillery Good Shoot target hex is placed on a bridge hex, roll one die. On a 6, the bridge is destroyed, otherwise no effect. Mark it as such and it can never be repaired.

1.6b Bridge Blowing by Units To blow a bridge, a unit (any infantry type) must be adjacent to the bridge (not on it!). Once per the unit's Action Phase (as desired), or as the result of a Movement Overwatch Trigger (which might be several times per turn), roll one die. If the resulting modified roll is 5 or more, the bridge is destroyed and can never be repaired.

Modify the roll with the following:

- +2 if the rolling unit is Eng Plt/JR 16
- -1 if there are enemy units on the bridge.

Any unit on the bridge at the moment it is blown are destroyed (no Battalion Morale addition for this).

1.7 Trees Down

Roll one die for each HE artillery barrage (any size of gun or unit). On a 5 or 6, place one Trees Down Marker in the Target Hex of the barrage (on any other roll, there is no effect).

A Trees Down Marker **doubles** the hex's Terrain Cost for Movement. There is no combat effect.

A hex can only have one Trees Down marker in it (don't roll again for a hex that already has one in it). The markers cannot be moved or "fixed" later in the game.

1.8 The Fire Tower

Any unit in the Fire Tower (B43.24) receives a special spotting benefit, but no unit can execute fire combat itself as if it were atop the tower (there is only room there for an FO, a radioman, and their equipment—not a platoon of riflemen!). The Fire Tower spotter has a clear LOS to any hex on the map. No unit can try to shoot out the guys in the tower directly. The unit required to be in the hex to use the tower can be engaged normally and that unit must be in that hex (regardless of its condition) to retain the spotter.

***Design Note:** It may seem odd that the Fire Tower has a clear LOS everywhere on the map as many will quickly point out that there are some blind spots behind hills and the ever present forest canopy to deal with. Remember you are seeing the limited effect of a simple observer who can spot artillery from atop the tower (not massed area fires from there!). This means different things to each side: If the Finns own the tower, they'll be shooting artillery at targets right under their nose (relatively speaking). If the Russians have the tower, they'll be observing at extended range (low chance of a good shoot) and will have to deal with their permission to fire roll (3.1b). Yes, they might see the snow lifted up over a Finnish column behind that hill, but their chances of successfully engaging the target are very limited.*

1.9 Elevation & Line of Sight

Each contour line is 10 meters. The lake shore boundary is the 170 m contour line.

1.10 Mines

Neither side can use minefields in this game.

1.11 AT Roll Modifiers

There are none.

***Design Note:** The Finns were noted for their gutsy approach to close-in destruction of enemy armor. This compensates for the limited personal AT weapons available (not to mention the "lightness" of the Russian armor they face). In the Russian case, there is no Finnish armor to worry about.*

2.0 Finnish Special Rules

2.1 Artillery

Use the Commonwealth/German line for Finnish artillery spotting (line 2).

2.2 Artillery Ammo Replenishment

Each game day at 0600 turn, add the following:

76mm: HE: 35, Smoke: 1, Illum: 1

Additionally, the following is added to the Finnish Ammunition Pool when 7/KTR 6 and 8/KTR 6 activate as reinforcements (a one-time addition):

76mm: HE: 40, Smoke: 2, Illum: 2

2.3 Ski Troops

These units are designated with a White Arrow on their counter's Move Mode side (instead of the usual red/yellow one).

Ski units get a 2 MP movement bonus provided they do not enter any hexes in which they must cross a contour line moving up hill. If they enter any such hex, they do not get the bonus for that phase.

The Ski troops cannot use this movement bonus in a phase in which they attack in Assault Combat.

Do not figure this bonus in when determining costs for switching mode.

Regardless of whether the bonus applies or not, Ski Troops always get the reduced terrain costs for Open and Lake hexes.

2.4 Lieutenant Colonel Pajari

LTC Pajari exerted considerable personal influence on this battle.

2.4a Pajari has no combat ability, never takes step losses, is always in Move Mode (with the printed MA of 8). His movement (by itself) does not trigger Overwatch fire.

2.4b When a Finnish Morale Check occurs at or within three hexes of Pajari, it gets an additional modifier of -1. If the stack is actually in Pajari's hex, they get a -3. The modifiers are listed on the counter.

2.4c All units of the Provisional Company (Prov/TF-P) that start the Action Phase at or within three hexes of Pajari can move and fight anywhere on the map without reference to Op Sheets or orders. Furthermore, the Finnish player can instantly implement one Op Sheet (size two or less) per calendar game day, during any Command Planning Phase in which all the units to be included on the Op Sheet are

at or within three hexes of Pajari.

2.4d Pajari can be assigned to an Op Sheet. If this is done, reduce the Command Prep Rating to 0 for that Op Sheet. Remove Pajari from play when the op sheet is draw up (he and the units involved can be anywhere on the map at that point). When the Op Sheet is completed or otherwise removed from play, return Pajari instantly to any hex containing a Finnish unit.

2.4e Combat Effects on Pajari. If the units in his hex are destroyed in Assault combat, he is removed from play (captured, killed or wounded). If the units in his hex are destroyed for any other reason, he automatically displaces to any Finnish unit's hex.

2.5 Field Kitchens

The two Field Kitchens have no combat ability and a limited ability to move.

2.5a The Field Kitchens cannot move or set up within three hexes of one another. They can only move on the 1000 turn of each day. During that turn, the Kitchens can be relocated to anywhere along the Primary Road between A1.17 to A21.10, inclusive. This move (any distance) is allowed if it can be done from their starting position without leaving the road or moving adjacent or through Russian units.

2.5b Anytime a Russian unit moves at or within 2 hexes of a Field Kitchen, pick it up and put it into the Field Kitchen's hex. If there is a Finnish unit in that hex, the Finn automatically displaces to the nearest Finnish occupied hex. Up to 40 steps can be "sucked into" the Field Kitchen's hex. Place the Field Kitchen on top of the Russian units in its hex (it acts as a Paralyzed Marker at this point). Units that would have been "sucked in" but are beyond the 40 step mark are placed adjacent to the Field Kitchen and marked with a Suppressed Marker. During the next Russian Clean Up Phase, remove the Kitchen from play and place a regular Paralyzed Marker on the Russian units (the adjacent Suppressed Russians recover to normal at that point).

2.6 The Provisional Company

The Provisional Company is a special reinforcement that arrives the Command Planning Phase the turn after a Russian unit enters any hex of the Primary Road between A1.17 and A21.10, inclusive. At that point, the Finnish player places the four platoons, one per hex, with or adjacent to Pajari, any Finnish artillery gun, and/or the Field Kitchens. The platoons cannot deploy in any hex containing Russian units. If they are unable to deploy that turn, they can deploy in the next game turn. The Provisional Company remains in play until eliminated.

2.7 Units that do not have Battalion Morale

Two units normally subject to Battalion Morale do not record Battalion Morale in this game. They are the Provisional Company and the one company of 3/JR 37. They are not subject to Battalion Morale, nor do they cause other units to suffer battalion morale.

2.8 Raids

The Finnish player can designate up to three raids each night at 2000. Each Raid must have its own Op Sheet and that Op Sheet is instantly accepted when drawn up. A raid can only have one organic battalion involved. The raid force's orders can only involve moving to and attacking a location, followed by an immediate withdrawal to the location where the mission launched. If the raid's objective has not been accomplished by dawn, the raid fails and the raiding force must return.

3.0 Russian Special Rules

3.1 Artillery

Use the Soviet line for artillery spotting (line 4).

3.1a The 354th Artillery Regiment. If a Finnish unit is inside the 354 Artillery Rgt Security Zone line (southeast corner of Map B) at the start of any game turn, remove the 354th and any remaining 122mm and 152mm ammo from play permanently.

3.1b Artillery Fire Permission Roll. Each time the Russian player wants to fire a battalion of artillery, roll one die—on a 5-6, the battalion fires. On a 1-4, the battalion cannot fire that turn. Make one check per battalion per turn. You can check more than one battalion per desired target, though each battalion cannot check more than once, and those that succeed must fire.

3.1c Forward Observers. Each Soviet artillery battalion comes with one Forward Observer. Only the FO associated with each battalion can observe fires of that battalion. Each Soviet battalion can only fire missions that are either self-spotted (by the gun units themselves) or by this one FO.

The FO is a one-step unit like any other unit. It can be killed normally and cannot be replaced if killed. The Soviet player can set up the FOs of available artillery battalions at the start of any turn (they do not start any scenario set up on the

map unless the Soviet player chooses to do so) with any Soviet unit. FOs can be placed on the map and pulled off (by stacking with any Soviet unit) any number of times in the game. Remove FOs during any Soviet Clean Up Phase in which they are stacked with one of their batteries. FOs are never forced to enter or leave the map. At its fastest, an FO can be pulled off in this Soviet player turn and reappear in the next Soviet player turn (the FO cannot be pulled and replaced in the same phase).

Without either self-spotting or their FO, Soviet artillery cannot fire.

EXCEPTION: Fires from the 354th Artillery Regiment can be spotted by any Battalion FO.

3.2 Artillery Ammo Replenishment

Each game day at 0600 turn, add the following:

76mm: HE: 100, Smoke: 5, Illum: 2

Plus, if the 354th is in play, also at 0600:

122mm: HE: 60, Smoke: 3, Illum: 3

152mm: HE: 20, Illum: 1

The following is added to the Russian Ammunition Pool when each Battalion of the 47th Howitzer Regiment activates as a reinforcement (a one-time addition):

76mm: HE: 100, Smoke: 6, Illum: 2

Additionally, the following is added to the Russian Ammunition Pool when each battalion of the 354th Artillery Regiment activates as a reinforcement (a one-time addition):

122mm: HE: 100, Smoke: 5, Illum: 6

152mm: HE: 30, Illum: 1

3.3 Russian Mortars

The 50mm Mortars cannot fire Smoke or Illum. Mortar fires can be spotted by any FO, but there must be an FO to spot (Exception: Mortars can always self-spot.)

3.4 The 139th Tank Battalion

There are two types of tank unit counters in this game: HQ Tanks and Platoons (3 tanks each). In each case, the values on the counter are those of one tank. The HQ tanks function normally, while the platoons are subject to the following:

3.4a The three tanks in a platoon can fire at the same or different targets. If the platoon moves, none of the tanks can fire. If any of the tanks fire, the platoon cannot move.

3.4b Record losses to these platoons using the usual step loss markers.

3.4c During each Command Planning Phase mark each Tank Platoon that has lost two of its tanks **and** is **not** stacked with its HQ tank with "Withdraw" marker and it must withdraw so as to be within the 354th Artillery Security Zone. It cannot re-enter normal play until the marker is removed. Remove the marker in any Command Planning Phase in which the tank starts stacked with its HQ tank.

3.4d No HQ tank can be destroyed in a hex if other (non-HQ) tanks are stacked with it. In other words, the HQ tank can only take the last tank loss in the hex.

3.5 Bonfires

During the Command Planning Phase of each Night Turn, the Russian player must mark each stack of unassigned Russian units (which are not in a building/hotel hex) with a Bonfire Marker. A Bonfire Marker illuminates its hex (but no others) and remains on the map until the first Twilight Turn. Units under a Bonfire Marker cannot move until the marker is removed or they implement an Op Sheet (and, no, the Bonfire cannot move).

3.5a Whenever a Russian Bonfire Stack is assaulted as part of an Ambush roll (see 4.2b), remove the Bonfire and mark them with a Panic Marker. Roll one die for each such stack during each Russian Clean Up Phase, remove the Panic Marker if the roll is a 6, otherwise the marker remains. While Panic Marked, those Russian units must fire Overwatch against **any** unit that moves adjacent to them (Russian or Finnish).

3.5b Remove all remaining Panic Markers in the Russian Command Phase of the first Twilight turn

***Design Note:** Only the Russians must use bonfires. The Finns were equipped with excellent tents with wood burning stoves that allowed them to sleep comfortably at -30 degrees C. The Russians had no such equipment. (...and I didn't even bring up the Finnish saunas.)*

4.0 General Special Rules

4.1 Weather

Roll two dice each hour to determine the weather conditions for that hour. Apply the modifier from the previous turn's weather to the roll. Use the visibility maximum allowed by the weather determined for the coming hour.

There are no additional movement effects for the different snow amounts (there is already plenty on the ground).

4.2 Ambush

Movement-based Overwatch is not automatic when a unit moves adjacent to an enemy unit (or units) by entering a hex that is Swamp and/or Forest. To fire Overwatch, the player must secure permission according to the following table. The roll is required for each such potential trigger (there is no ability to **not** roll to avoid a potential ambush). Make a roll on this table, even if not called for above, when a stack attacks in an Assault Combat from a Swamp and/or Forest hex (only to see if an Ambush occurs).

Make only one roll, regardless of the number of stacks adjacent to the target (the result applies to all). Roll one die modified by the below.

4.2b Ambush. If the roll above indicates an Ambush is possible, the moving units can immediately enter one of the enemy hexes that made this roll and start an Assault Combat. If more than one such hex is available, the moving player can only choose one. The player is not required to make the ambush assault.

If the player chooses to do the ambush, follow the normal Assault Combat sequence, with the following changes:

- 1) The Attacker fires first, then the Defender.
- 2) The Attacker's firepower is x3.
- 3) The Defender's firepower is x1/6 (round up)

Ambush Table

Roll	Result
0 or less	No Overwatch, Ambush possible.
1 to 3	No Overwatch, No Ambush
4 or more	Overwatch allowed, No Ambush

Die roll Modifiers

-1	Fog/Mist, Lt Snow
-2	Hvy Snow
-2	Night: Rolling stack in Illum, moving stack is not
+2	Night: Rolling stack is not in Illum, moving stack is
-1	Other than the above two night cases
-2	Moving unit is part of a Finnish Raid force

Rolling Unit's Op Sheet Status

+2	Prep Defense
+1	Hasty Defense
+0	Attack
-1	Move
-2	Unassigned

4.3 Mines

Mines are not used here.

5.0 Command and Control

5.1 Command Prep Ratings

Finnish: 2
Russian: 3

5.2 Russian Op Sheet Restrictions

The Russian player can have no more than 3 Implemented Attack Op Sheets at any one time. No Russian Attack Op Sheet can include more than three battalions.

5.3 Night Operations

Only Attack Op Sheet that move in hexes which are on or adjacent to Road (any kind), Buildings, or Lake are allowed at night. Attack Op Sheets which cannot be followed given that constraint fail. Movement at night according to a Move Op Sheet is not constrained by hex type as above.

When assigned to conduct a raid (see 2.8), Finnish units ignore the above.

5.4 Higher Intentions

5.4a Finnish Commander's Intent. Pajari was to halt the Russian advance on Korpiselkä and then switch to an offensive to retake the road-net around Suojärvi (about 40 miles east of Tolvajärvi by road).

5.4b Russian Commander's Intent. Belyayev was to drive west along the Tolvajärvi road to Korpiselkä (18 miles west) in order to threaten the rear of the Finnish 4th Corps.

6.0 General Victory Conditions

6.1 Sudden Death Victory

If at any time during any two map scenario either player fulfills his Sudden Death Victory conditions **and** has more infantry platoons (regardless of step losses they might have) than the other player, the game instantly ends and the player wins a Massive Victory.

6.1a Finnish Sudden Death Victory.

The Finns must occupy B62.09 and be able to trace a Line of Communication (6.1c) to A1.17.

6.1b Russian Sudden Death Victory.

The Russians must occupy A1.17 and trace a Line of Communication to B62.09.

6.1c Line of Communication. The LOC must be traced exclusively along Primary or Secondary Roads. No enemy unit can be situated in such a way as to place direct fires on the LOC (if one or more can, it is blocked). Indirect fires (mortars, artillery) do not block the LOC.

6.2 Victory Conditions

Each scenario has its own victory conditions. The following applies to all scenarios.

6.2a All the specified minimum conditions must be met. If neither side fulfills its conditions, the result is a draw.

6.2b Eliminated Units. Units forced to leave the map are not considered eliminated. Artillery units count each gun lost. Units eliminated before the scenario begins do not count as eliminated.

6.3 Control of Islands

Some victory conditions require the player to control islands (usually Kottisaari). A player can "control" an island in one of two ways:

- 1) Be the only player with units on the island.
- 2) Have twice the number of steps on the island as the other player.

If neither of these are the case, neither player controls the island (even if one player was the "last to pass through" and such).

7.0 Set Up Notes

7.0a The Finns always set up first. Russians always set up second and cannot set up adjacent to any Finnish unit.

7.0b Battalion Morale start at Zero, unless stated otherwise.

7.0c Some scenarios list units as having a "Casualty Level" of I, II, or III. Roll for each such company on the tables on the map to determine pre-game losses. The owning player removes the steps in any way he desires.

8.0 Scenarios

8.1 The 609th Checks In

On the afternoon of December 8th, 1/JR 16 and 8/JR 37 attempted to hold the Kivisalmi crossing against the advancing 609th Rifle Regiment long enough for 3/JR 16 to dig-in along the west shore of the Tolvajärvi and Myllyjärvi.

General Information:

First Turn: 1100 8 Dec

Last Turn: 1630 8 Dec

Game Length: 12 turns

Map Area: A & B (all)

Finnish Information:

Set Up:

w/i 6 B32.32: 1/JR 16

w/i 1 3 B35.29: 8/3/JR 37

w/i 2 A14.15 (along road): 3/JR 16,

LTC Pajari

w/i 8 B16.31, west of 18xx (inclusive):

PPP 7

w/i 3 B10.32: ErP 112 (do not use MG/ErP 112)

w/i 2 A27.01: 5/KTR 12

A44.03: 9/KTR 13

Artillery Available: 5/KTR 12, 9/KTR 13 available

Artillery Ammo: 76mm: 30 HE, 2 Smoke, 2 Illum

Reinforcements:

1600 A1.17: 4/2/JR 16 (move to A28.08)

Implemented Op Sheets? Yes

Historical Orders:

8/3/JR 37 is in a hasty defense of the Kivisalmi Bridge. 1/JR 16 is in a hasty defense of the approaches to Hevosalmi. 3/JR 16 is to move to A28.08.

Special Rules:

PPP 7's companies are at Casualty Level II. ErP 112's are at Level III.

Russian Information:

Set Up:

w/i 4 B41.21: 1/609

Any road hex between B46.12 and B51.07 (inclusive): 2/609

Artillery Available: None at start

Reinforcements:

1100 B62.09: 3/609, Mtr/609 (move to B42.20)

1200 B62.09: 1/47, 2/47 (move to B50.08)

1300 B62.09: 1/364 (attack to take Kotisaari)

1400 B62.09: 2/364 (move to B50.08)

1500 B62.09: 3/364, Mtr/364 (move to B57.08)

Implemented Op Sheets? Yes

Historical Orders:

1/609 and 2/609 are to attack so as to extend the Russian line of communication (6.1c) as far west as possible before nightfall.

Special Rules:

Subject one from all Russian Morale ratings (i.e. make them all one better).

Victory

The side holding the Kivisalmi Bridge at the end of play wins.

8.2 Kivisalmen Cookout

In order to lift his troop's spirits by making an aggressive move, Pajari lead part of JR 16 across the ice of Tolvajärvi to raid the Russians encamped on the Kivisalmen Kangas. This raid was coordinated with PPP 7's feint attack on Kotisaari.

General Information:

First Turn: 0000 9 Dec

Last Turn: 0430 9 Dec

Game Length: 10 turns

Map Area: Map B (east of 1.xx, west of 46.xx, north of xx.01, south of xx.30, inclusive)

Finnish Information:

Set Up:

w/i 1 B16.10: 4/2/JR 16, 9/3/JR 16, Pajari

w/i 1 B14.17, B14.20, B16.24: One company of PPP 7 in each

Artillery Available: None

Reinforcements: None

Implemented Op Sheets? Yes

Historical Orders:

JR 16 is to attack 2/364 and return to the west shore of Tolvajärvi before twilight.

PPP 7 is to attack Kotisaari

Special Rules:

Each of PPP 7's companies are at Casualty Level III.

Russian Information:

Set Up:

Anywhere on Kotisaari: 1/364

Any Road hex w/i 2 of B42.20: 2/364

Artillery Available: None

Reinforcements: None

Implemented Op Sheets? Yes

Historical Orders:

1/364 is in a Hasty defense of Kotisaari.

2/364 has no orders and has built Bonfires.

Special Rules:

The Bridge at B37.26 has been destroyed.

Victory

The Finns win if they destroy 15 or more Russian steps.

The Russians win if the Finns destroy 10 or fewer Russian steps

Any other result is a draw.

8.3 Belyayev's Attack

After resting his troops for two days, Belyayev launched two wide flanking moves aimed at getting in the rear of Pajari's main defense line and to cut the road between Tolvajärvi and Korpiselkä.

General Information:

First Turn: 2200 10 Dec

Last Turn: 1030 11 Dec

Game Length: 26 Turns

Map Area: A & B (all)

Finnish Information:

Set Up:

w/i 4 A31.05 (but not in A34.07 or A35.07): 5/2/JR 16

A35.11, A37.13, A37.15, A39.17: 6/2/JR 16 (one platoon in each hex)

w/i 2 A33.11: MG/2/JR 16

w/i 3 A32.03: MG/1/JR 16

w/i 3 A29.08: 1/1/JR 16, 4/2/JR 16

w/i 1 A28.08: AT/JR 16, JR 16 Rgt

Troops (Eng Plt)

A32.03: one Mortar Platoon of JR 16 Rgt Troops

w/i 2 B14.31: two Mortar Platoons of JR 16 Rgt Troops

w/i 1 A29.01: 3/ErP 112

w/i 3 B14.32: 7/3/JR 16

w/i 3 B12.28: 8/3/JR 16

w/i 3 B12.22: 9/3/JR 16

w/i 2 B14.24: three MG from MG/3/JR 16

w/i 2 B16.32: three MG from MG/3/JR 16

A18.10: LTC Pajari

A21.10: one Field Kitchen

A14.15: one Field Kitchen

w/i 3 A14.15: 7/KTR 6, 8/KTR 6

w/i 3 A32.03: 5/KTR 12, 9/KTR 13

Artillery Available:

7/KTR 6, 8/KTR 6, 5/KTR 12 and 9/KTR 13 are available at start.

Artillery Ammo:

76mm: 40 HE, 2 Smoke, 2 Illum

Reinforcements: None

Implemented Op Sheets? Yes

Historical Orders:

MG/1/JR 16, 5/2/JR 16, 6/2/JR 16, MG/2/JR 16, 7/3/JR 16, 8/3/JR 16, 9/3/JR 16,

MG/3/JR 16 and 3/ErP 112 are in

prepared defense.

1/1/JR 16 and 4/2/JR 16 are in reserve.

All other units have a hasty defense.

Special Rules: None

Russian Information:

Set Up:

Any hex on Kotisaari: 1/364

w/i 3 B39.20: 2/364

On or adjacent to the road from B48.10 to B52.06 (inclusive): 3/364 with or adjacent to any 364th unit:

Mtr/364

B26.26, B25.26, B25.24: 2/47 (one battery in each hex)

B38.21, B42.22, B48.12: 3/47 (one battery in each hex)

B20.18, B24.18: 1/139 AT (one gun in each hex)

B25.11, B33.11: 2/139 AT (one gun in each hex)

w/i 6 B32.32: 1/609

w/i 1 A36.08: 7/3/609

A40.13, A41.08, A41.10: 8/3/609 (at least one platoon in each hex)

w/i 1 A41.07: 9/3/609

with any 3/609 unit: MG/3/609

A45.14, A48.12, A46.07: 4/2/609 (at least one platoon in each hex)

w/i 3 A51.10: 5/2/609

w/i 2 A48.05: 6/2/609

w/i 6 A45.03: Mtr/609

A43.04, A46.01, B30.34: 1/47 (one battery in each hex)

On the trail between A22.18 and A23.23 and/or A16.20 and A16.24 (inclusive): 1/718

w/i 6 A40.30: 2/718

w/i 6 A50.20: 3/718

Artillery Available:

47 and 354 Artillery Rgts are available at start.

Artillery Ammo:

76mm: 100 HE, 5 Smoke, 2 Illum

122mm: 50 HE, 2 Smoke, 1 Illum

152mm: 15 HE, 1 Smoke, 1 Illum

Reinforcements: None

Implemented Op Sheets? Yes

Historical Orders:

1/364 and 609 Rgt are in prepared defenses.

2/364 is to attack the Finns in Tolvajärvi by crossing the lake south of Kotisaari.

1/718 is to attack the Finnish rear area in the vicinity of Luikkamökki.

2/718 and 3/718 are in a hasty defense.

Special Rules:

1/609 is at Casualty Level III

2/609 at Casualty Level II

2/364 at Casualty Level I

The bridges at A34.07 and B37.26 have been destroyed.

Victory

The Russians win if they occupy the primary road west of Tolvajärvi at the end of play.

8.4 The Sausage War

1 Bn, 718 Rifle Regiment has conducted a night march around the north end of Hirvasjärvi and is poised to strike the rear area of Task Force Pajari. Wafting through the forest is the smell of the Finnish freshly cooked dinner—and that smell urges the Russians on.

General Information:

First Turn: 2200, 10 Dec

Last Turn: 0530, 11 Dec

Game Length: 16 Turns

Map Area: Map A, west of 37.xx, inclusive

Finnish Information:

Set Up:

w/i 4 A31.05 (but not in A34.07 or A35.07): 5/2/JR 16

w/i 4 A34.13: 6/2/JR 16

w/i 2 A33.11: MG/2/JR 16

w/i 3 A32.03: MG/1/JR 16

w/i 3 A29.08: 1/1/JR 16, 4/2/JR 16

w/i 1 A28.08: AT/JR 16, JR 16 Rgt Troops (Eng Plt)

A32.03: JR 16 Rgt Troops (one mortar platoon)

A18.10: LTC Pajari

A21.10: E 1/JR 16 Field Kitchen

A14.15: E 2/JR 16 Field Kitchen

w/i 3 A14.15: 7/KTR 6, 8/KTR 6

w/i 3 A32.03: 5/KTR 12, 9/KTR 13

Artillery Available: 7/KTR 6 and 8/KTR 6 are available. 5/KTR 12 and 9/KTR 13 are also available but must follow the special rule below.

Artillery Ammo:

76mm: 20 HE, 1 Smoke, 2 Illum

Reinforcements: None

Implemented Op Sheets? Yes

Historical Orders:

MG/1/JR 16, 5/2/JR 16, 6/2/JR 16, and MG/2/JR 16 are in prepared defenses. 1/1/JR 16 and 4/2/JR 16 are in reserve.

Special Rules:

5/KTR 12 and 9/KTR 13 cannot move after set up. These two batteries can only fire direct fires and only at hexes at or within 3 hexes of their location.

Russian Information:

Set Up:

any trail hex between A22.18 and A23.23 OR any trail hex A16.20 and A16.24 (inclusive): 1/718

w/i 1 A36.08: 7/3/609, MG/3/609

Artillery Available: 1/47 and 354

Artillery are available.

Artillery Ammo:

76mm: 25 HE, 2 Smoke, 2 Illum

122mm: 15 HE, 1 Smoke, 2 Illum

152mm: 5 HE, 1 Illum

Reinforcements: None

Implemented Op Sheets? Yes

Historical Orders:

3/609 is in a prepared defense. 1/718 is to attack the Finnish rear area in the vicinity of Lutikkamökki.

Bridges Destroyed: A34.07

Victory

Finnish Victory: Eliminate 10 Russian units or more

Draw: Neither player achieves his victory conditions or both achieve the same level.

Russian Victory: Control any road hex between A14.15 and A21.10 (inclusive)

8.5 Iced!

As a battalion of the 364th Regiment crossed the ice to attack Tolvajärvi from the south, Lt Eero Kivela took part of JR 16 to intercept them before they cross the lake.

General Information:

First Turn: 0100 11 Dec

Last Turn: 0830 11 Dec

Game Length: 16 Turns

Map Area: Map B west of B37.xx, inclusive

Finnish Information:

Set Up:

w/i 3 B14.32: 7/3/JR 16

w/i 3 B12.28: 8/3/JR 16

w/i 3 B12.22: 9/3/JR 16

w/i 2 B14.24: 3x MG from MG/3/JR 16

w/i 2 B16.32: 3x MG from MG/3/JR 16

w/i B14.31: 2x Mortars from JR 16 Rgt Troops

Artillery Available: 5/KTR 12, 9/KTR 13 are available

Artillery Ammo:

76mm: 20 HE, 1 Smoke, 2 Illum

Reinforcements:

None

Implemented Op Sheets? Yes

Historical Orders:

All are in Prepared Defense but three platoons of 9/3/JR 16 can be placed into Reserve.

Special Rules:

None

Russian Information:

Set Up:

Any hex on Kotisaari: 1/364

in hexrow B37.xx, w/i 3 B37.20: 2/364 with or adjacent to any of the 364 above: Mtr/364

One AT each in B20.18 and B24.18: 1/139 AT

One AT each in B25.11 and B33.11: 2/139 AT

B37.20: One Battery of 3/47

w/i 6 B32.32: 1/609

B30.34: One Battery of 1/47

B26.26, B25.26 and B25.24: One Battery of 2/47 in each hex

Artillery Available: 2/47 (all), 3/47 (one battery), and 354 Artillery Rgt are available at start. 1/47 (one battery) is available with restrictions (see the special rules below).

Artillery Ammo:

76mm: 40 HE, 2 Smoke, 1 Illum

122mm: 16 HE, 1 Smoke, 1 Illum

152mm: 5 HE, 1 Illum

Reinforcements:

None

Implemented Op Sheets? Yes

Historical Orders:

1/364 and 1/609 are in a Prepared Defense. 2/364 has orders to attack the Finns in Tolvajäri after crossing the lake south of Kottisaari.

Special Rules:

The companies of 1/609 are at Casualty Level III and those of 2/364 are at Level I. The battery from 1/47 cannot execute indirect fire missions and can only do direct fire attacks on units at or within three hexes of the battery.

Bridges Destroyed: B37.26

Victory

The Russians win if they control at least 3 building hexes of Tolvajärvi and hex B13.33.

OP SHEET

A Frozen Hell

Time:

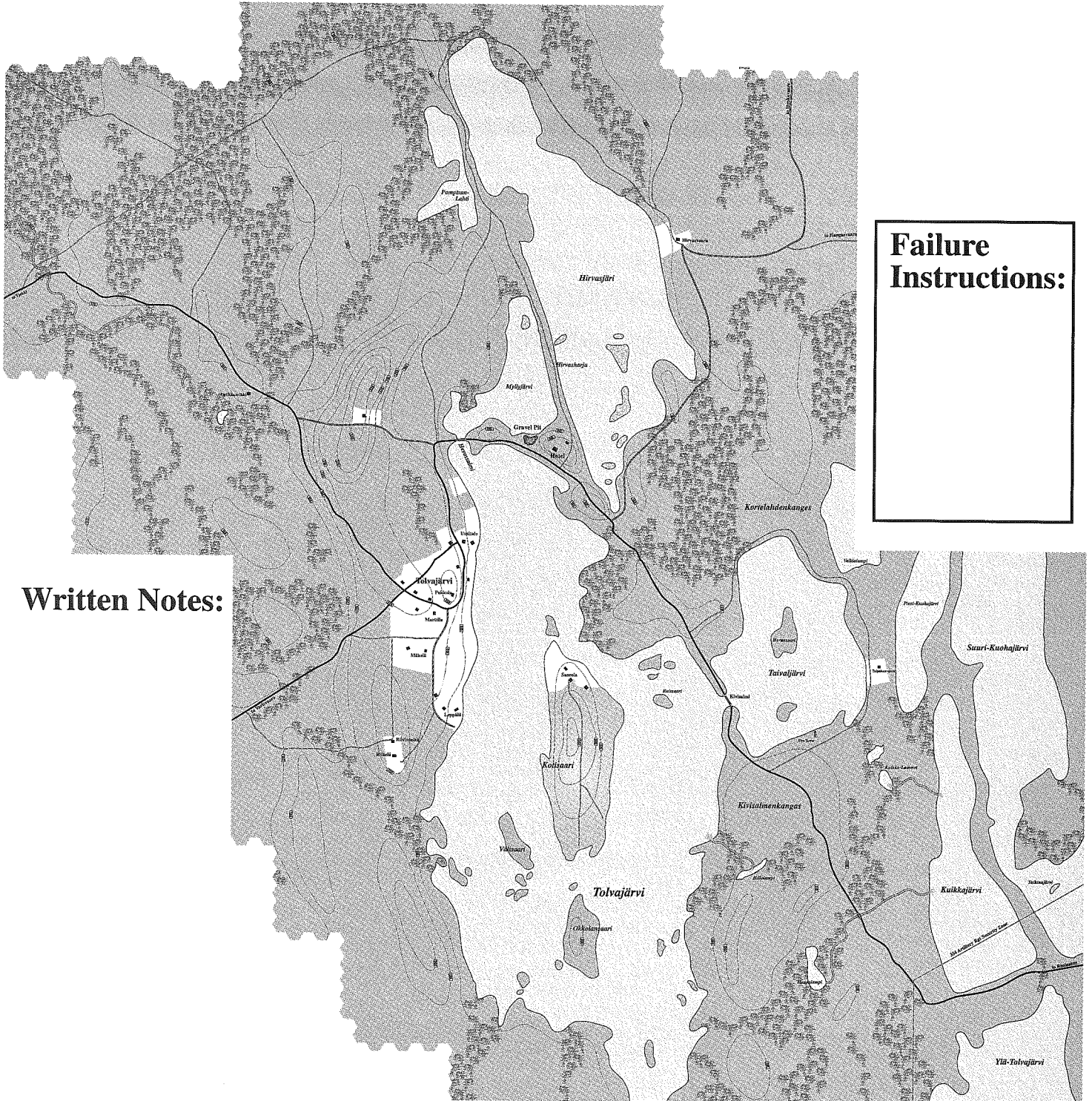
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

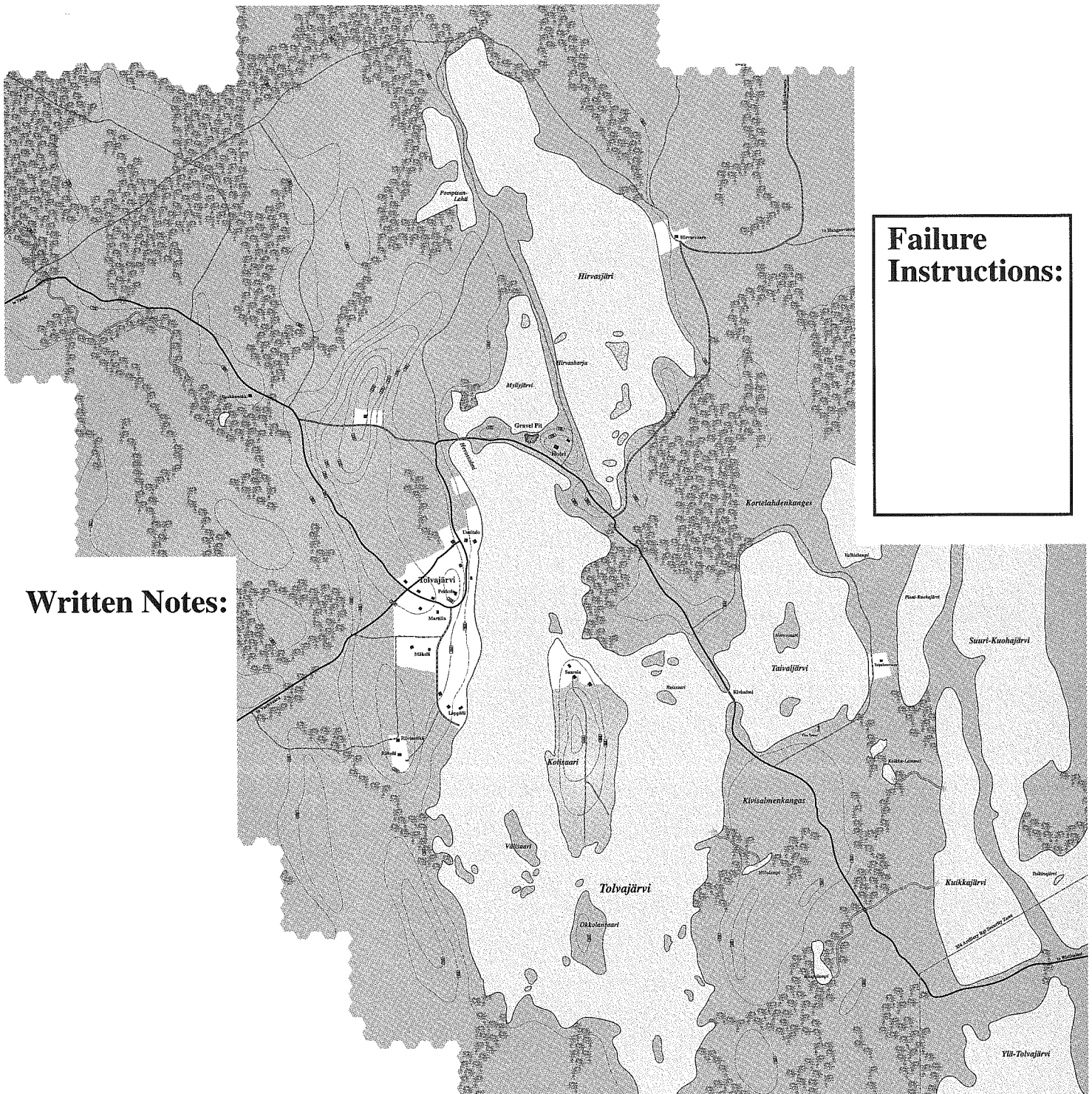
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:

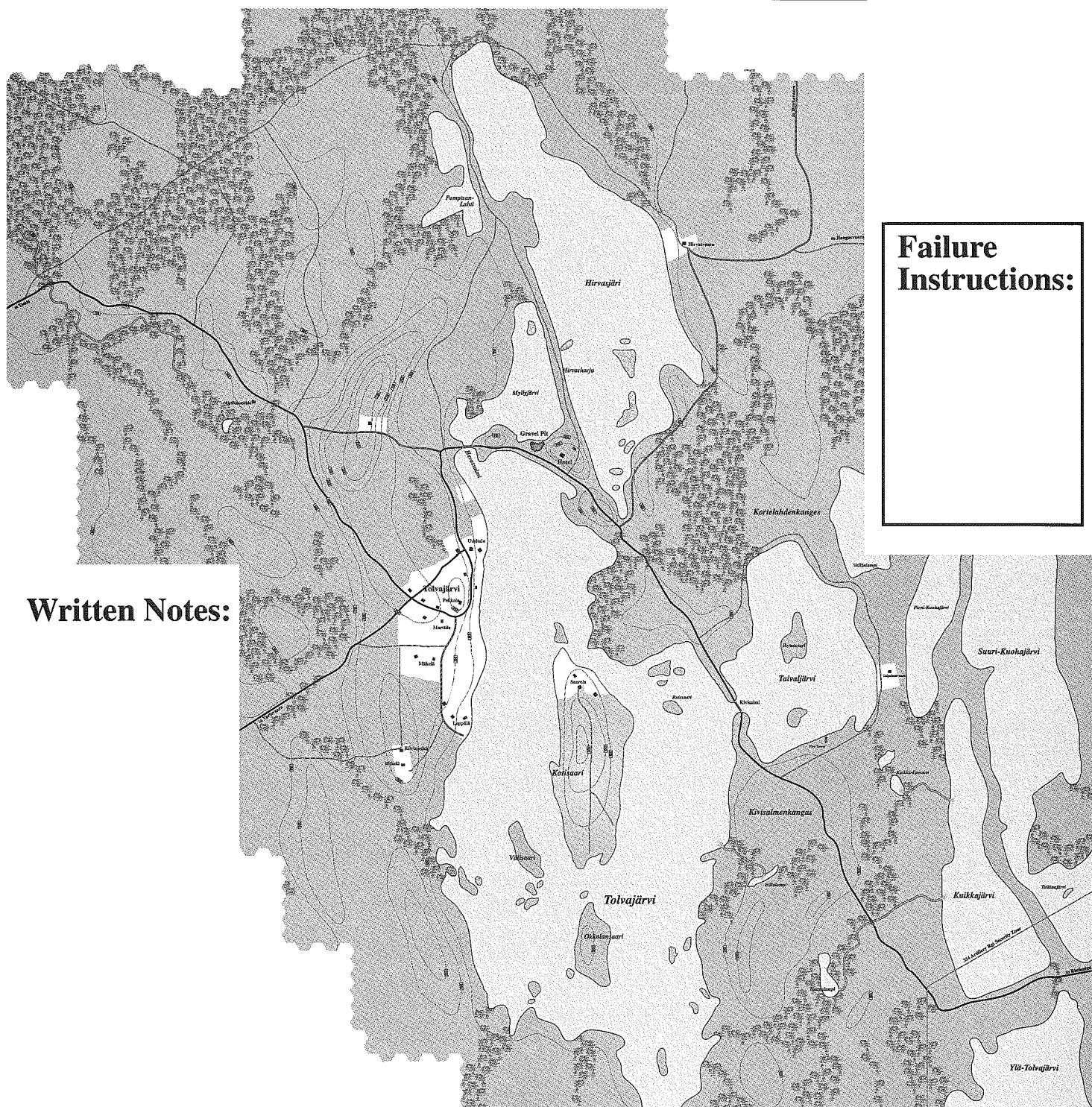


Size:

Task Organization:

Failure Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

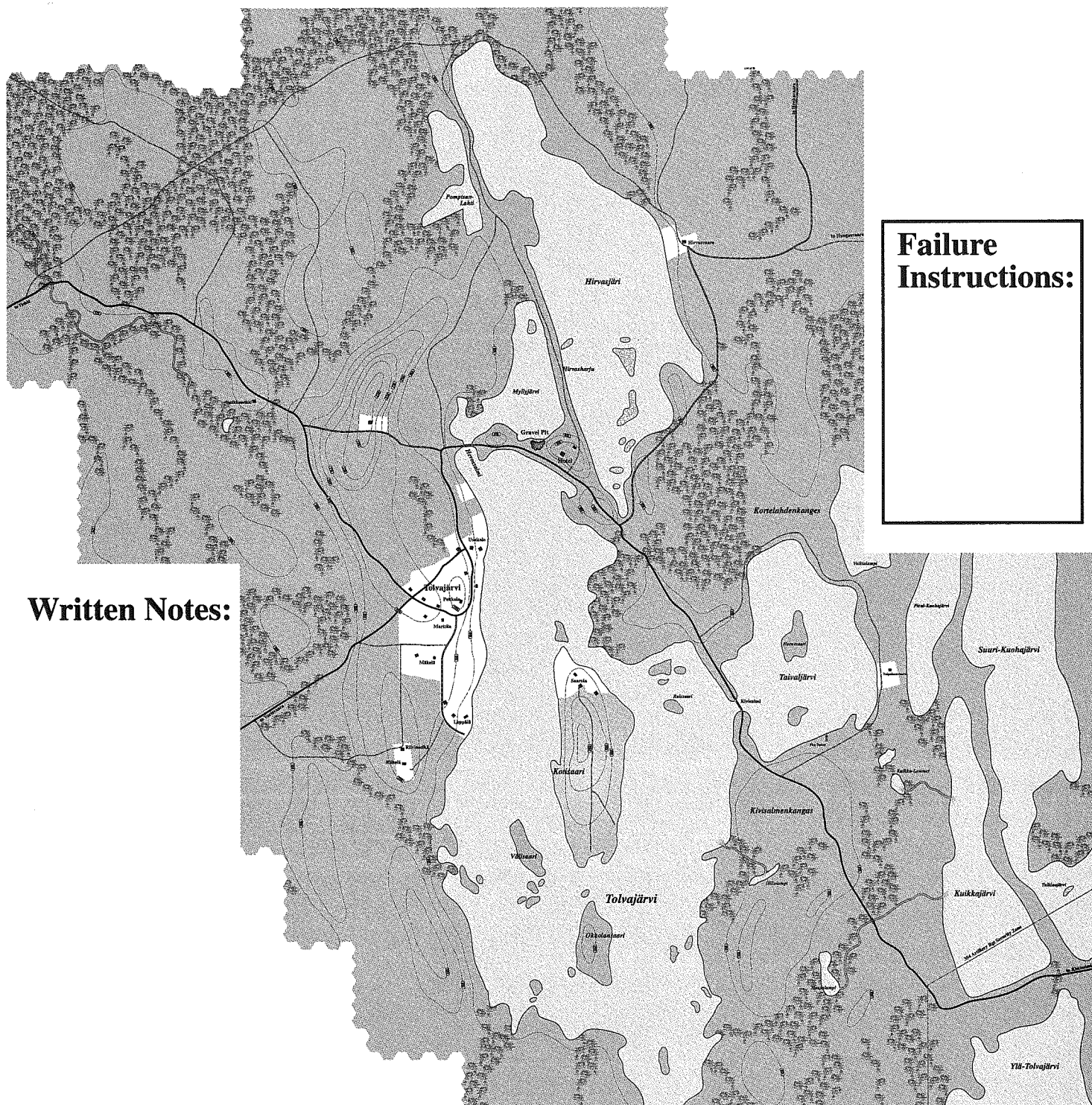
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

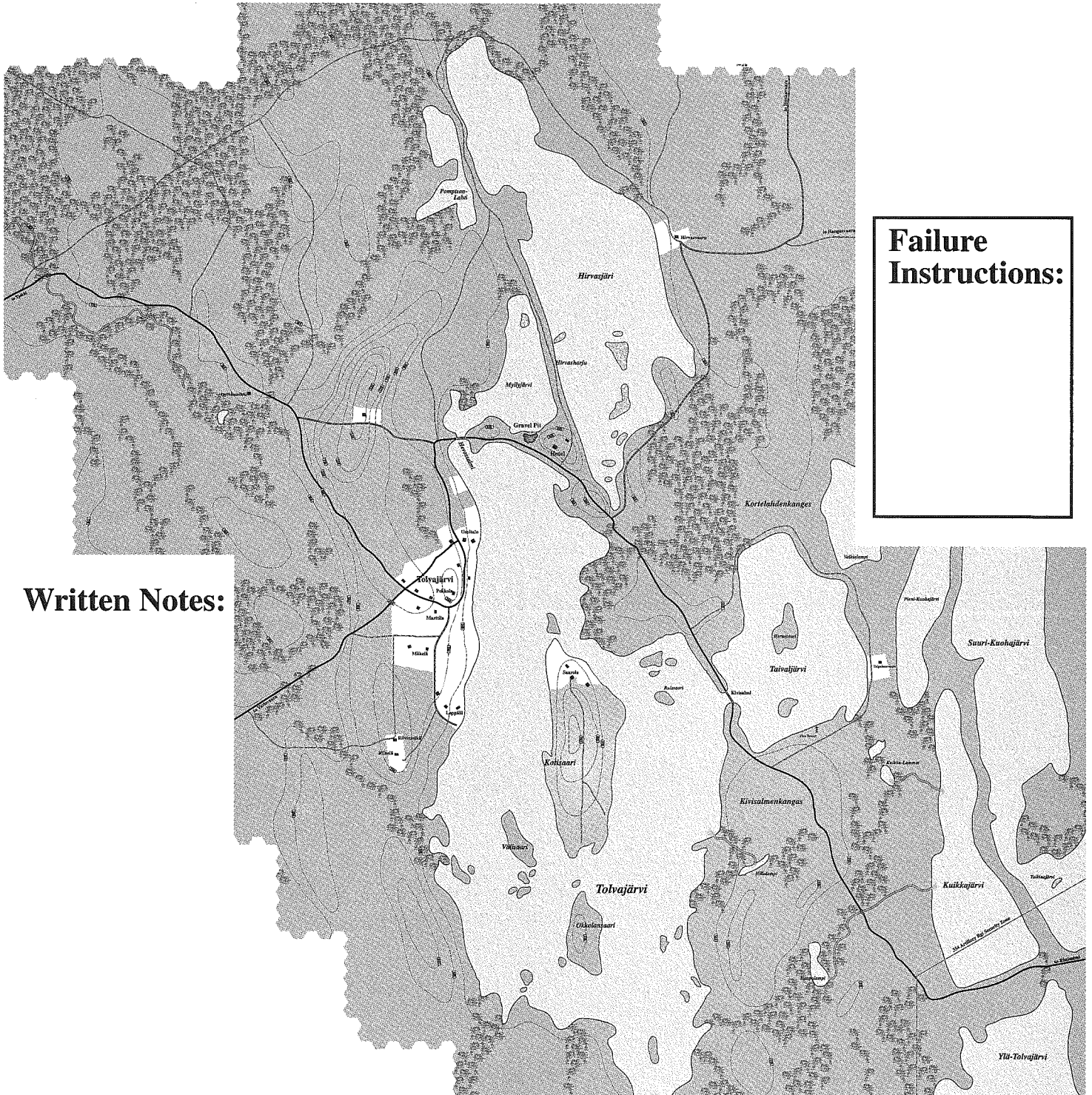
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



Size:

Task Organization:

Failure Instructions:

Failure Instructions:

Written Notes:

OP SHEET

A Frozen Hell

Time:

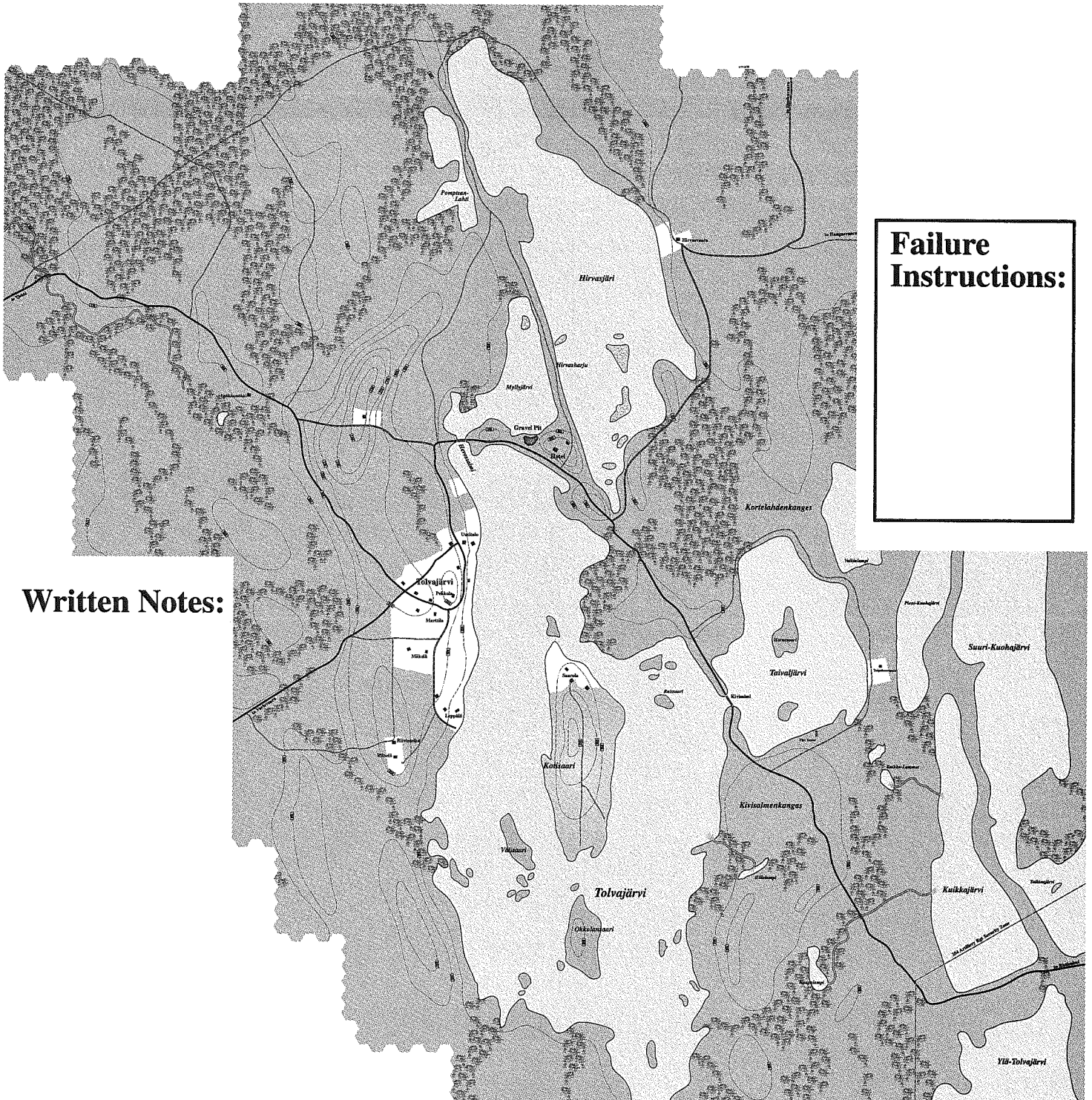
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

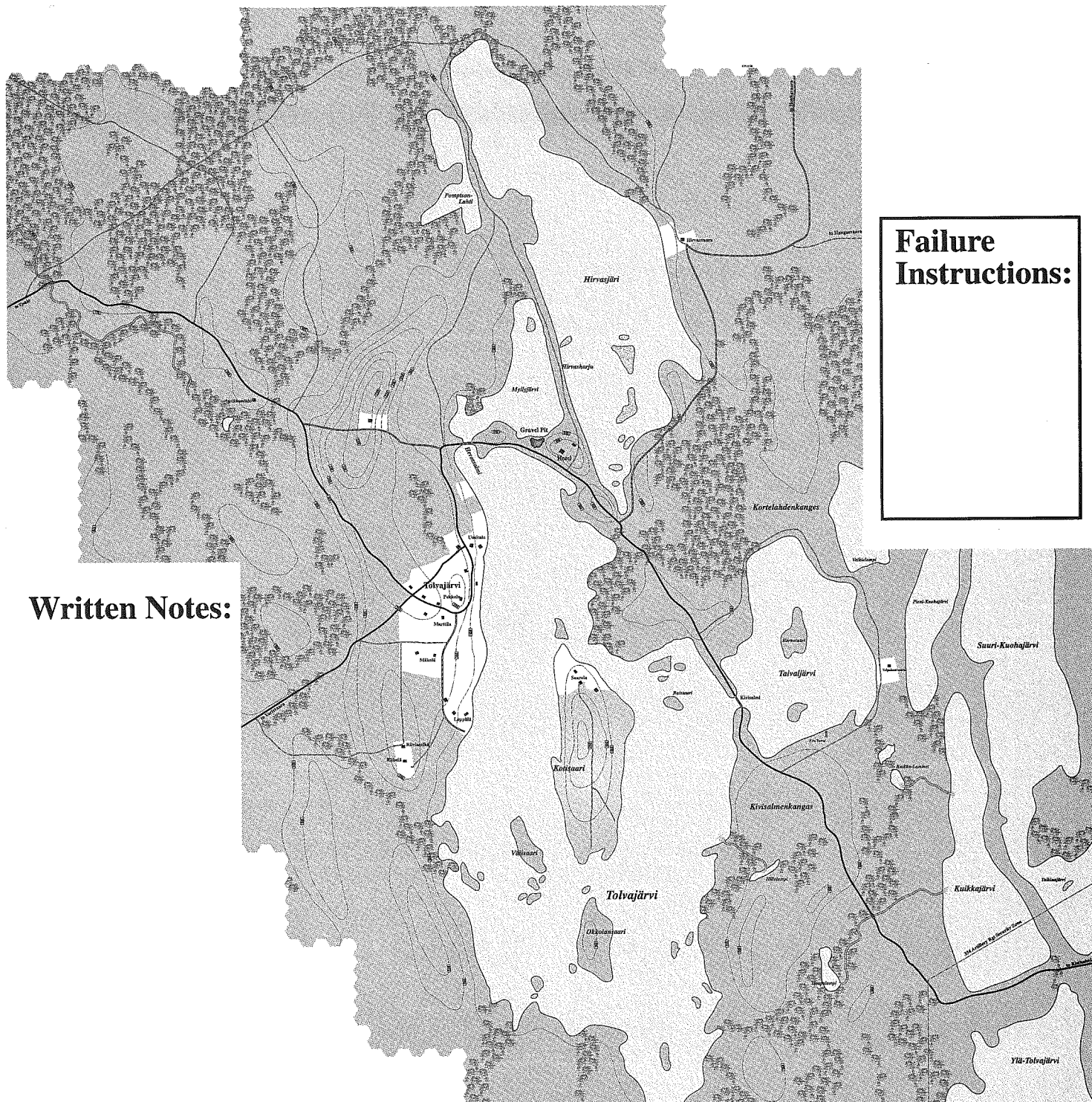
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

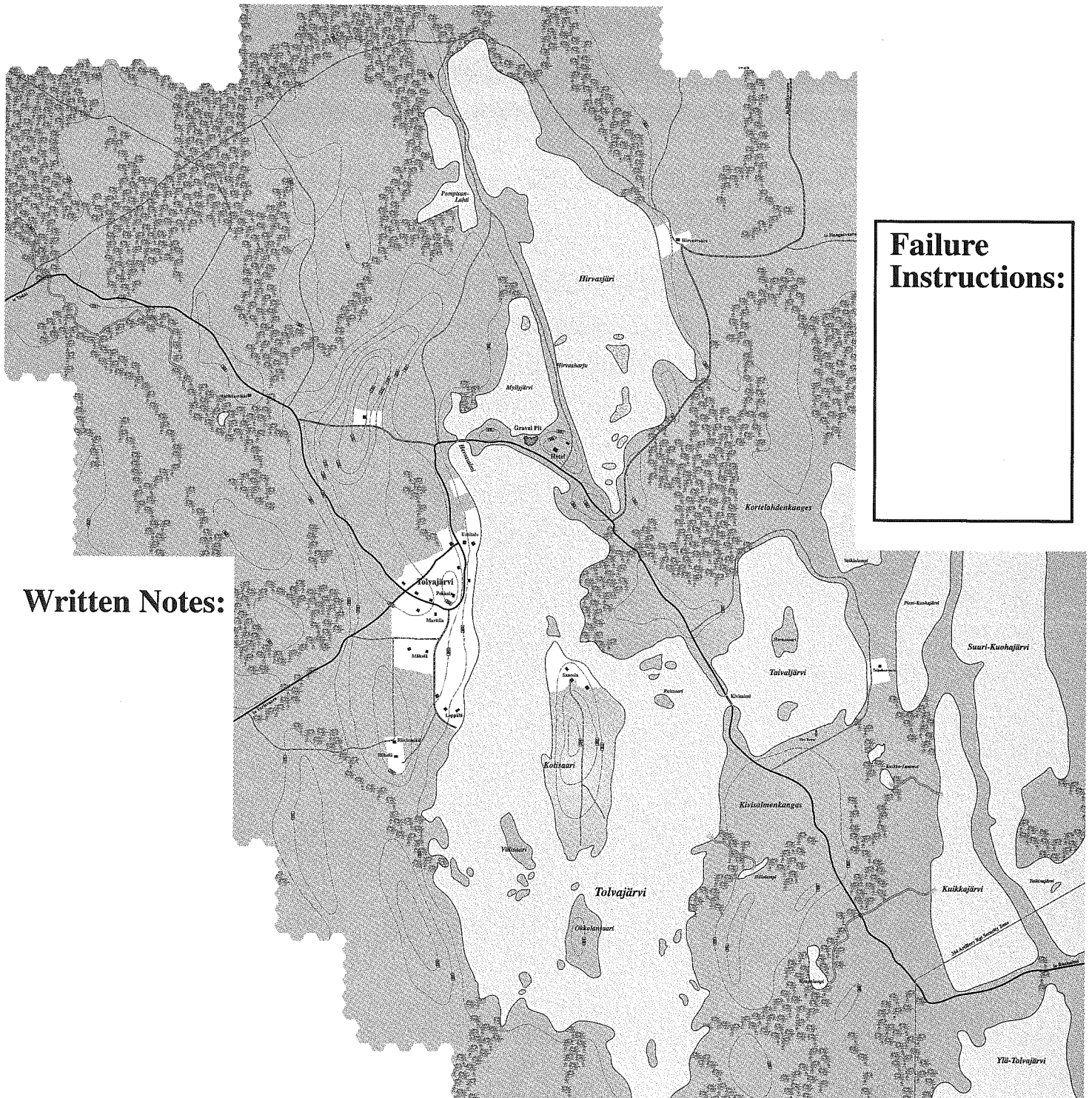
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

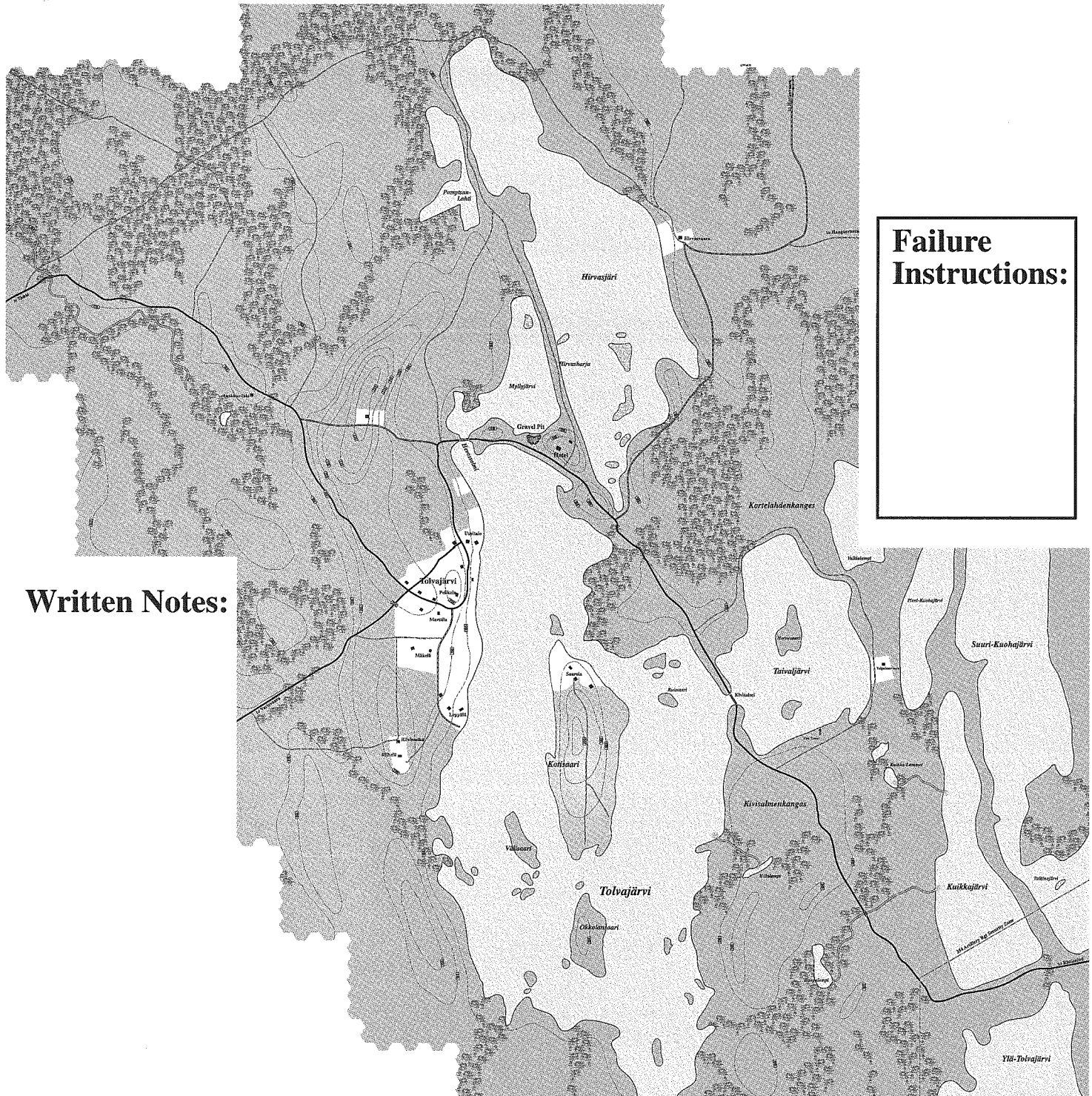
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

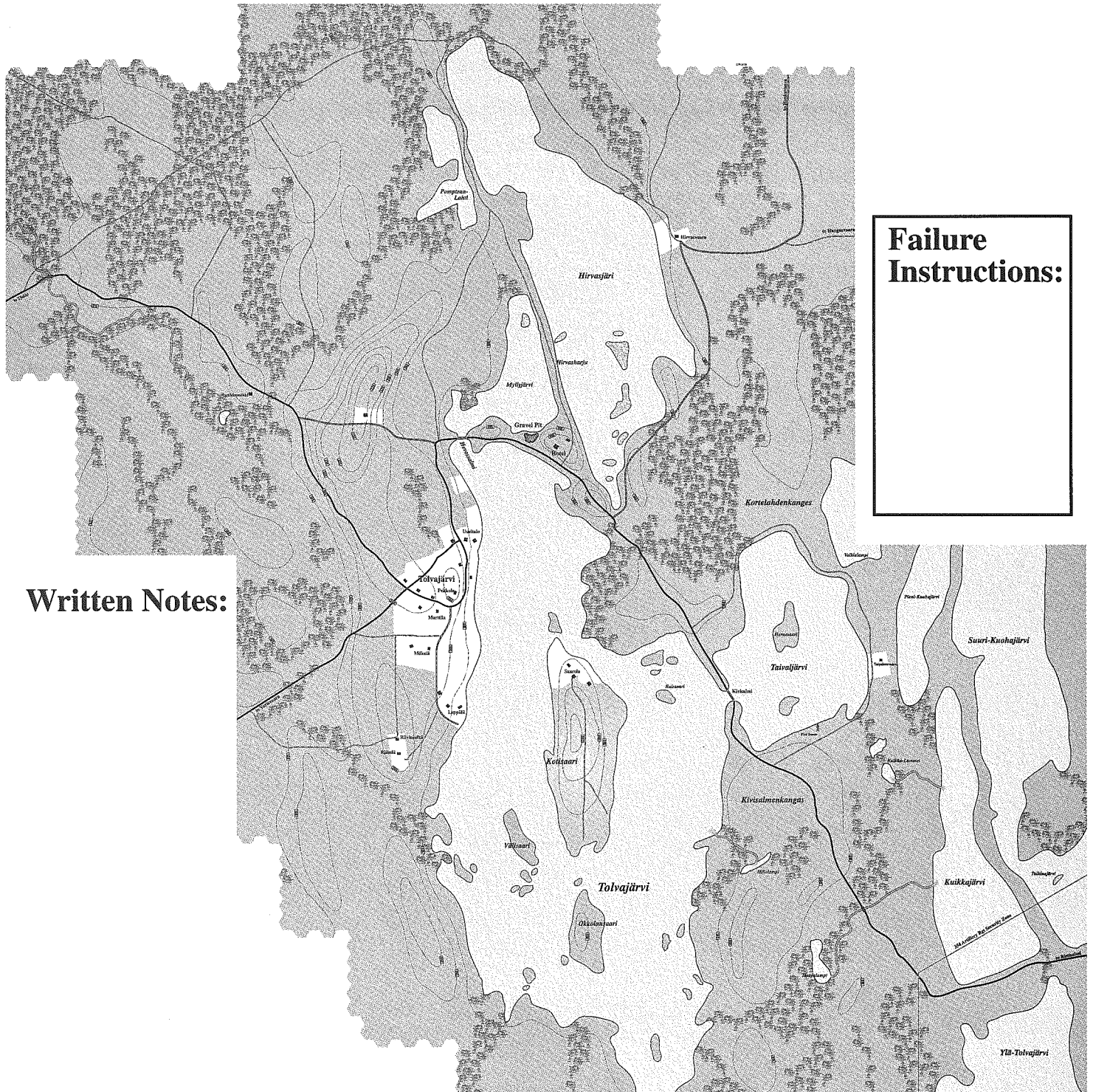
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

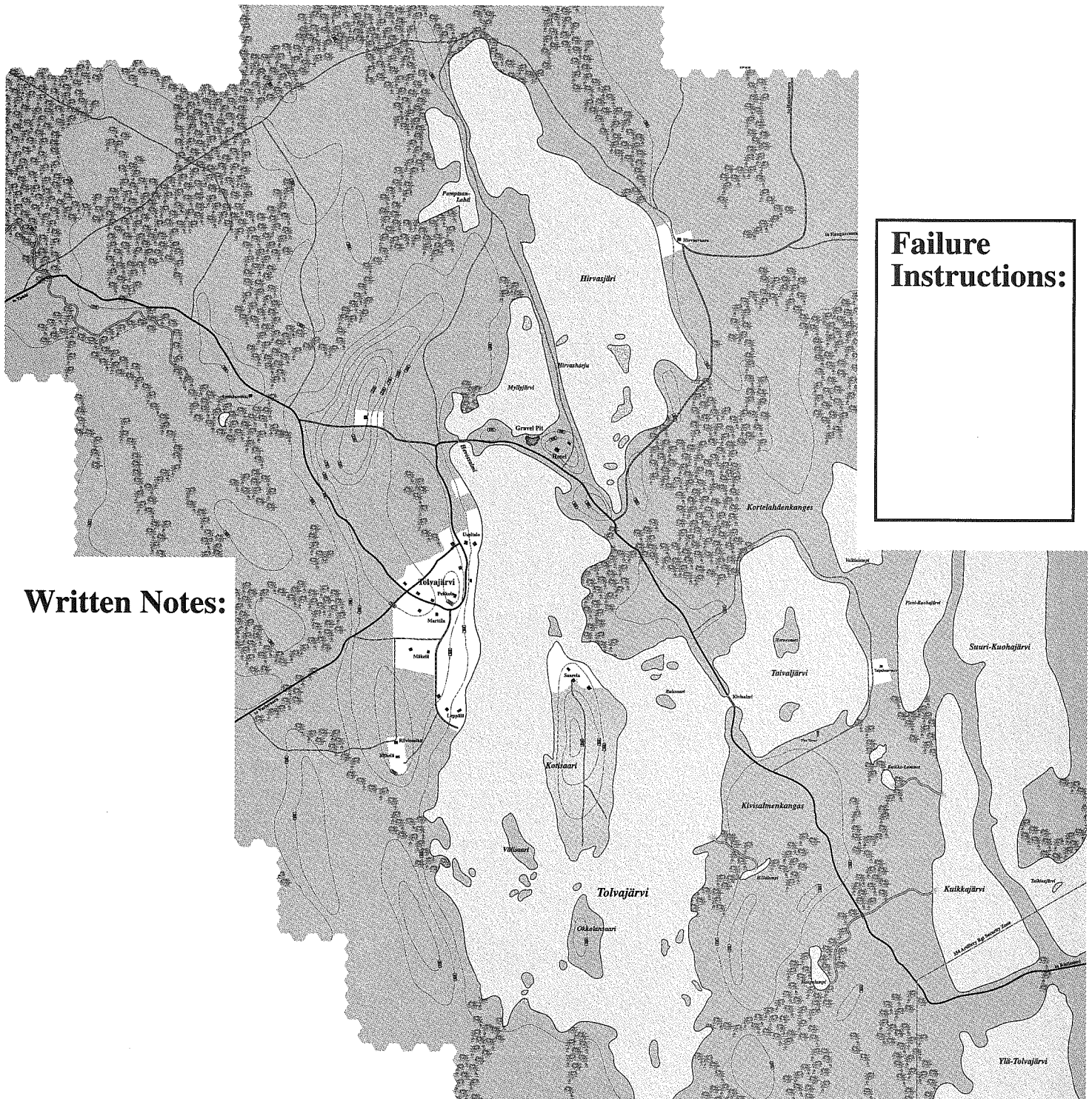
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

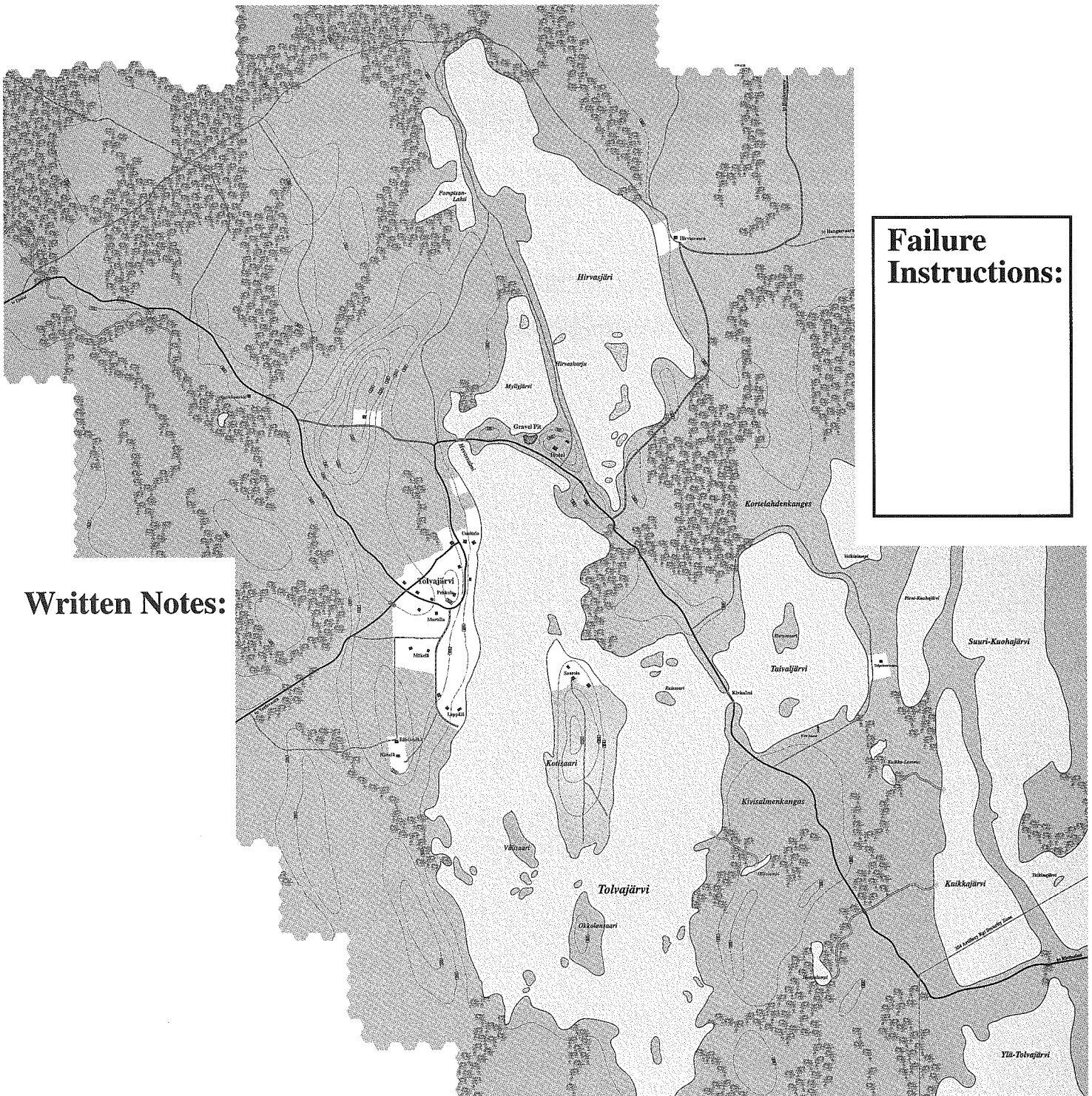
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

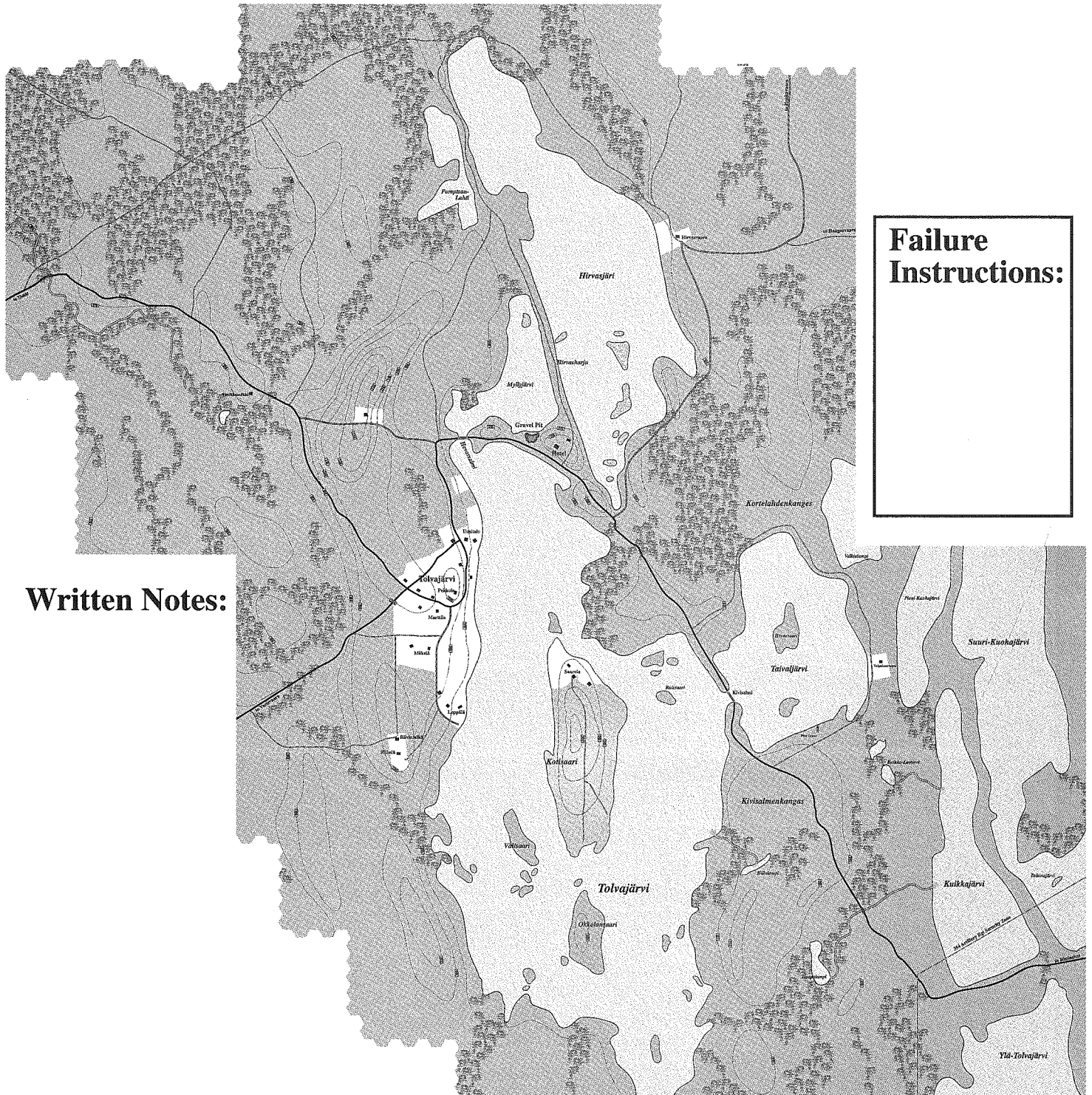
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

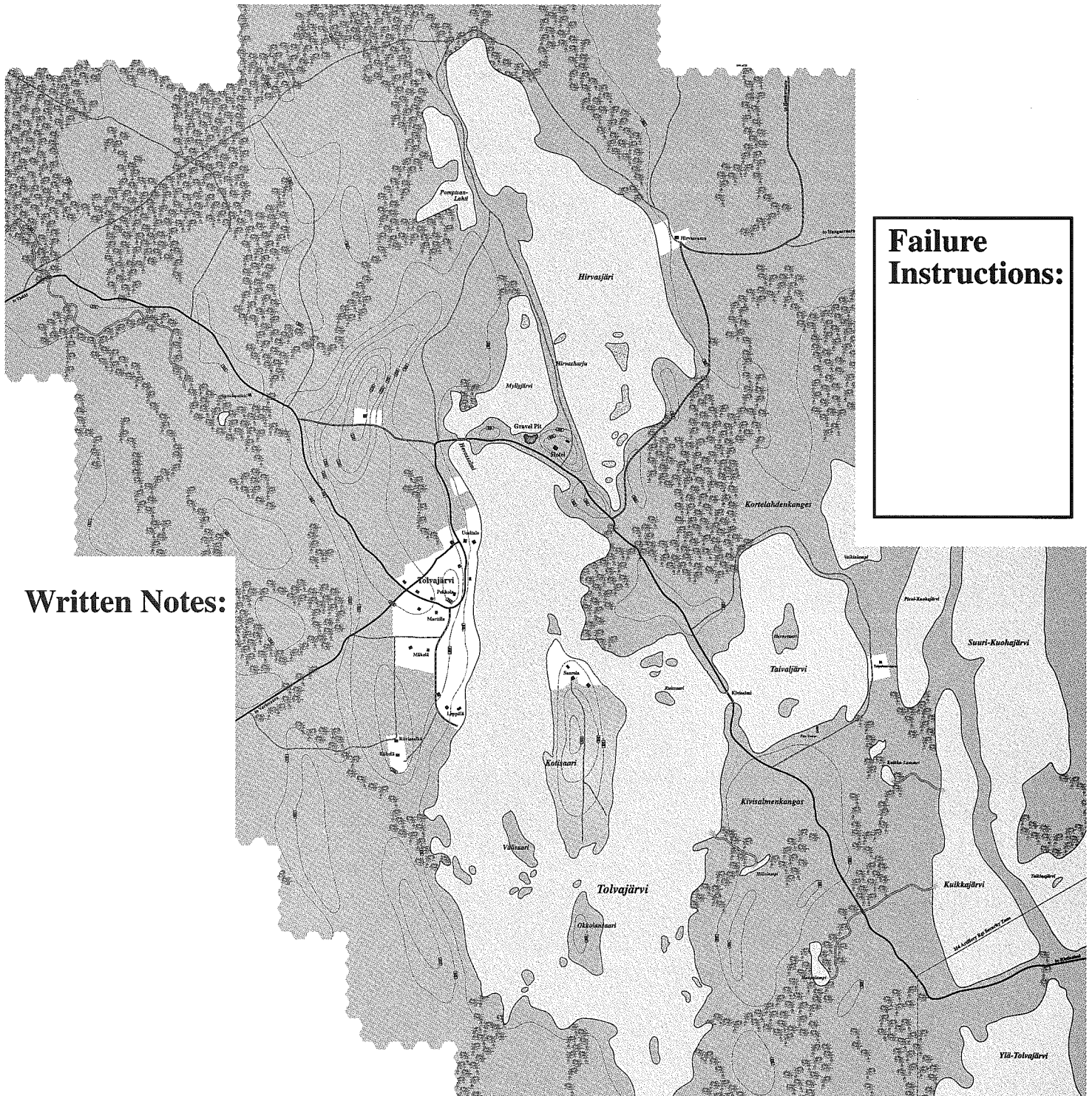
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

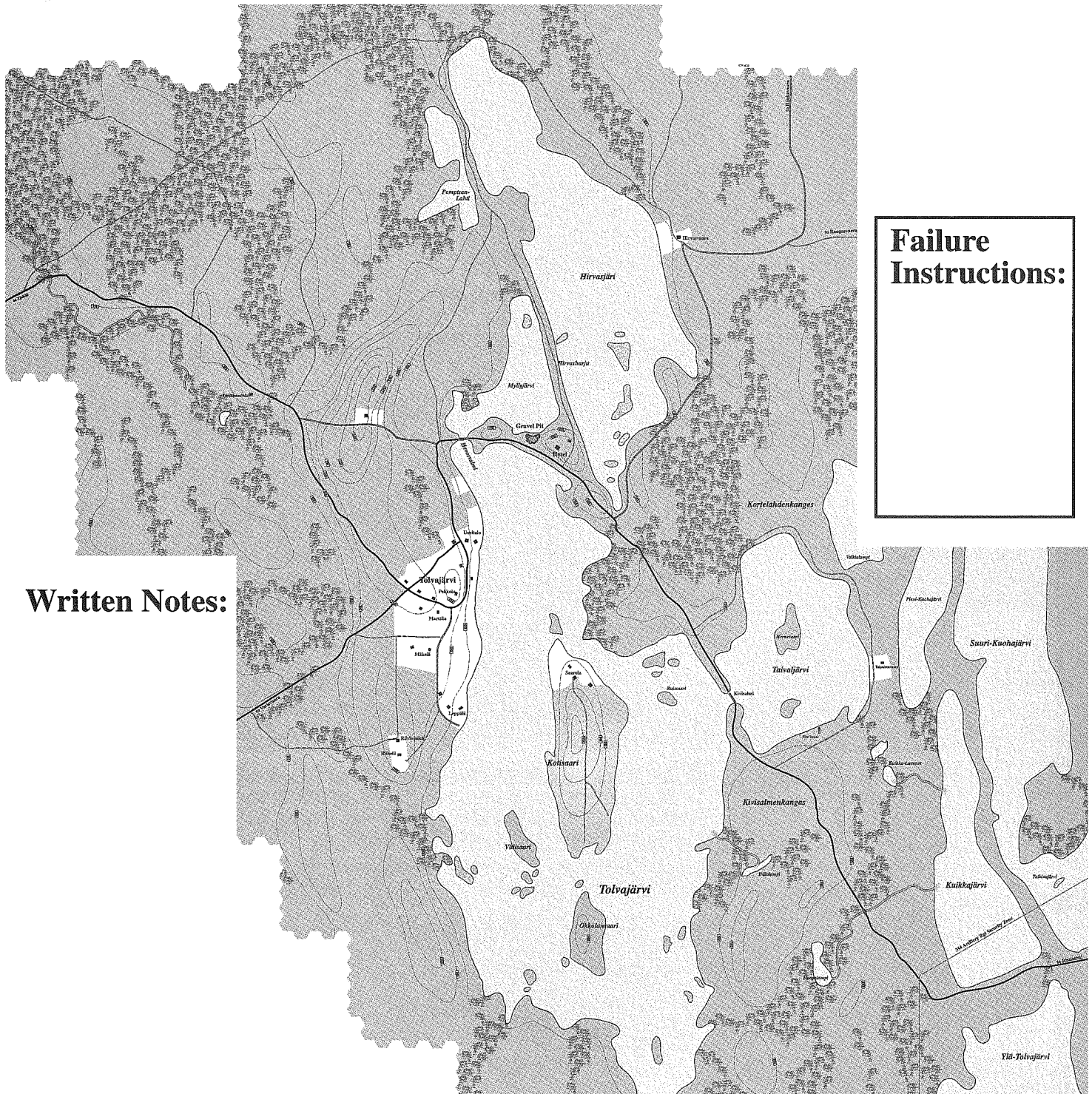
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



OP SHEET

A Frozen Hell

Time:

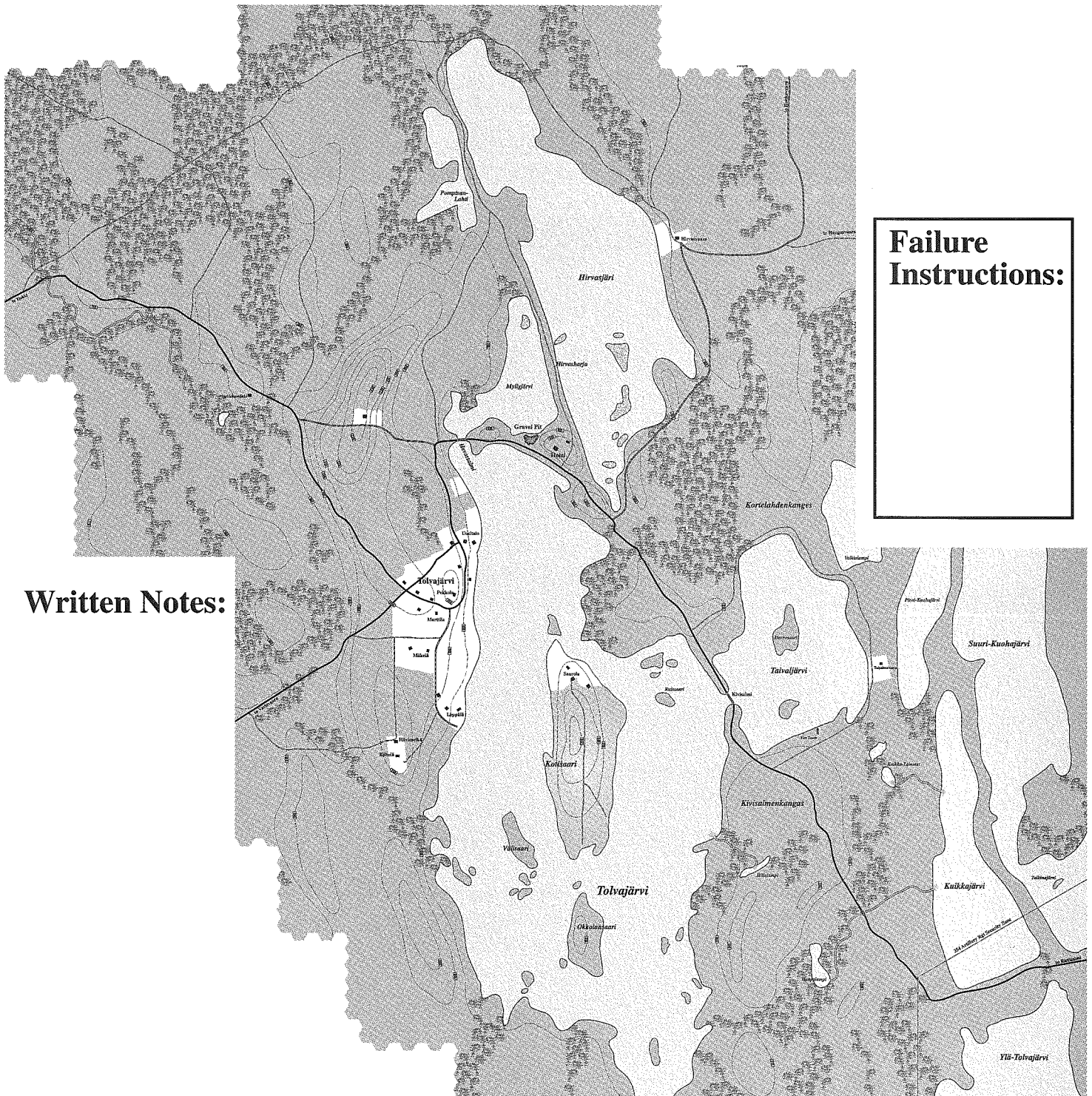
Type:

Size:

Task
Organization:

Failure
Instructions:

Written Notes:



8.6 Talvela and Pajari's Attack

Originally scheduled for the 11th, the Finnish counterattack was postponed until the 12th to give the troops who fought to repel the Russian attack of the 10th time to rest.

General Information:

First Turn: 0800 12 Dec

Last Turn: 1700 12 Dec

Game Length: 19 turns

Map Area: A & B (all)

Finnish Information:

Set Up:

w/i 1 A26.24: 2/1/JR 16

w/i 1 A23.24: 3/1/JR 16

w/i 1 A28.20: 1/ErP 9

w/i 1 A29.24: 2/ErP 9

w/i 1 A28.22: 3/ErP 9

w/i 3 A32.03: MG/1/JR 16

w/i 1 A30.06: 4/2/JR 16

w/i 1 A29.07: 5/2/JR 16

w/i 1 A30.09: 6/2/JR 16

w/i 2 A33.11: MG/2/JR 16

w/i 1 A29.11: 7/3/JR 16

A32.03: One Mortar from JR 16

B14.31: Two Mortar from JR 16

w/i 1 A23.10: 2/ErP 10

w/i 1 A23.08: 3/ErP 10

w/i 1 A29.01: 3/ErP 112

A34.01: MG/ErP 112

w/i 3 A17.12: PPP 7

w/i 2 A31.02: 8/3/JR 37

B26.01: One platoon 1/ErP 10

w/i 1 B15.08: Remainder of 1/ErP 10

w/i 1 B14.17: 1/ErP 112

w/i 1 B12.17: 2/ErP 112

w/i 1 B12.27: 8/3/JR 16

w/i 1 B12.22: 9/3/JR 16

w/i 2 B14.24: Three MGs from MG/3/JR 16

w/i 2 B16.32: Three MGs from MG/3/JR 16

A1.17: 7/KTR 6

A2.17: 8/KTR 6

A14.15: 5/KTR 12

A15.15: 9/KTR 13

A21.10: E 2/JR 16 Field Kitchen

Artillery Available: 7/KTR 6, 8/KTR 6, 5/KTR 12, and 9/KTR 13

Artillery Ammo:

76mm: 40 HE, 4 Smoke, 2 Illum

Reinforcements:

1030: 1/1/JR 16, Obuhoff A1.17 move to A21.10

Implemented Op Sheets? Yes

Historical Orders: 2/1/JR 16, 3/1/JR 16, and ErP 9 have orders to cross the north end of Hirvasjärvi and attack down the trail to Hirvasvaara. 4/2/JR 16, 5/2/JR 16, and 6/2/JR 16 have orders to attack and capture the Hotel. MG/2/JR 16, 8/3/JR 37, 3/ErP 112, and MG/ErP 112 are in prepared defenses. 1/ErP 112, and 2/ErP 112 are to attack Kotisaari and Kivisalmenkangas. One platoon of 1/ErP 10 (B26.01) is to attack 2/364; the rest of 1/ErP 10 is in a prepared defense.

Special Rules: None

Russian Information:

Set Up:

w/i 2 A50.20: 1/718

w/i 4 A38.34: 2/718, 3/718

with any 718 unit: Mtr/718

w/i 1 A36.08: 7/3/609

A40.13, A41.08, A41.10: One platoon in each hex from 8/3/609, MG and Mortar with any platoon

w/i 1 A41.07: 9/3/609

with any 3/609 unit: MG/3/609

A45.14, A48.12, A46.07: One platoon in each hex from 4/2/609, MG and Mortar with any platoon

w/i 3 A51.10: 5/2/609

w/i 2 A48.05: 6/2/609

with any 2/609 unit: MG/2/609

w/i 6 B32.32: 1/609

w/i 6 A45.03: Mtr/609

A43.04, A46.01, B30.34: 1/47, one battery in each hex

anywhere on Kotisaari: 1/364

on or adjacent to the road from B47.11 to B49.09 inclusive: 2/364

w/i 6 B40.20: 3/364

with any 364 unit: Mtr/364

B20.18, B24.18: 1/139 AT, one gun in each hex

B25.11, B33.11: 2/139 AT, one gun in each hex

B26.26, B25.26, B25.24: 2/47, one battery in each hex

B37.20, B42.22, B48.12: 3/47, one battery in each hex

Artillery Available: 47, and 354 available.

Artillery Ammo:

76mm: 100 HE, 5 Smoke, 2 Illum

122mm: 50 HE, 3 Smoke, 1 Illum

152mm: 16 HE, 1 Illum

Reinforcements:

0930: 139 Tank Bn B62.09 move to A47.01

Implemented Op Sheets? Yes

Historical Orders: 1/718, 2/718 are to attack the Finnish left flank advancing south along the trails west of Hirvasjärvi. 3/718 is in a hasty defense. 3/609 and one company each from 1/609 and 2/609 are in prepared defense. The remainder of 1/609 and 2/609 are in reserve. 1/364 is in a prepared defense. 139 AT is in a hasty defense of the Russian left flank. 3/364 is in a hasty defense of Kivisalmenkangas.

Special Rules:

The companies of 2/364, 1/609, and 1/718 are at Casualty Level III. The companies of 2/609 are at Casualty Level II.

Bridges Destroyed: A34.07 and B37.26

Victory

The Finns win if they capture Hirvasvaara, Kivisalmenkangas, and the Hotel. Any other result is a Russian win.

8.7 Head On Collision

Major Malkamäki's attack force was to have crossed Hirvasjärvi before dawn, but were delayed by their cross-country march to Pomptsanlahti. By coincidence, Belyayev had launched an attack with the 718 Rifle Regiment that was now rounding the north end of Hirvasjärvi on a collision course with Malkamäki.

General Information:

First Turn: 0800 12 Dec

Last Turn: 1330 12 Dec

Game Length: 12 Turns

Map Area: Map A inside the box created by A19.35 to A19.15 to A62.15 to A62.30

Finnish Information:

Set Up:

w/i 1 A26.24: 2/1/JR 16

w/i 1 A23.24: 3/1/JR 16

w/i 1 A28.20: 1/ErP 9

w/i 1 A29.24: 2/ErP 9

w/i 1 A28.22: 3/ErP 9

Artillery Available: None at start

Artillery Ammo: None at start

Reinforcements:

1130: One platoon from 1/1/JR 16, 9/KTR 13 arrive at A23.15.

Add the following ammo: 76mm: 10 HE, 2 Smoke.

1230: Remainder of 1/1/JR 16 at A23.15

Implemented Op Sheets? Yes

Historical Orders:

The Finns are to cross the north end of Hirvasjärvi via Pomptsan-Lahti and attack down the trail to Hirvasvaara.

Russian Information:

Set Up:

w/i 2 A50.20: 1/718

w/i 4 A38.24: 2/718, 3/718

with or adjacent to any of the above:
Mtr/718

Artillery Available: 3/47 Howitzer Bn and 1/354, 2/354 Artillery Bns available

Artillery Ammo:

76mm: 25 HE, 2 Smoke

122mm: 10 HE, 1 Smoke

152mm: 4 HE

Reinforcements:

1030: 5/2/609 arrive at A52.15

Implemented Op Sheets? Yes

Historical Orders:

2/718 and 3/718 are to attack by advancing south along the trails west of Hirvasjärvi. 1/718 is in a hasty defense of Hirvasvaara.

Special Rules:

1/718 is at Casualty Level III, 5/2/609 is at Casualty Level II.

Victory

The Finns win if they control Hirvasvaara and prevent the Russians from exiting more than 3 w/i 4 A33.15
The Russians win if they control Hirvasvaara and exit more than three units w/i 4 A33.15.
All other results are a draw.

8.8 Hotel Hell

With both Finnish flank attacks failing, the assault on the Russian positions at the Hotel would decide the battle.

General Information:

First Turn: 0800 12 Dec

Last Turn: 1630 12 Dec

Game Length: 18

Map Area: Map A South of Axx.18 (inclusive)

Finnish Information:

Set Up:

w/i 3 A32.03: MG/1/JR 16

w/i 1 A30.06: 4/2/JR 16

w/i 1 A29.07: 5/2/JR 16

w/i 1 A30.09: 6/2/JR 16

w/i 2 A33.11: MG/2/JR 16

w/i 1 A29.11: 7/3/JR 16

A32.03: One Mortar from JR 16 Rgt Troops

w/i 1 A23.10: 2/ErP 10

w/i 1 A23.08: 3/ErP 10

w/i 3 A17.12: PPP 7

A1.17: 7/ KTR 6

A2.16: 8/KTR 6

A14.14: 5/KTR 12

A15.16: 9/KTR 13

A21.10: E 1/JR 16 Field Kitchen

A14.15: E 2/JR 16 Field Kitchen

Artillery Available: 7/KTR 6, 8/KTR 6, 5/KTR 12, 9/KTR 13

Artillery Ammo:

76mm: 40 HE, 3 Smoke

Reinforcements:

1000: withdraw 5/KTR 12

1030: withdraw 9/KTR 13

Implemented Op Sheets? Yes

Historical Orders:

4/2/JR 16, 5/2/JR 16, and 6/2/JR 16 are to attack and capture the Hotel. All remaining units are in prepared defenses.

Russian Information:

Set Up:

A45.14, A48.12, and A46.07: One infantry platoon in each from 4/2/609. MG and Mortar with any platoon.

w/i 3 A51.10: 5/2/609

w/i 2 A48.05: 6/2/609

with any of the above: Mtr/609

A43.04, A46.01: One battery of 1/47 in each

Artillery Available: 1/47 and 354 are available

Artillery Ammo:

76mm: 50 HE, 4 Smoke

122mm: 40 HE, 2 Smoke

152mm: 20 HE, 1 Smoke

Reinforcements:

1030: withdraw 5/2/609

1100: 139 Tank Bn arrives at A47.01

Implemented Op Sheets? Yes

Historical Orders:

5/2/609 and 6/2/609 are to move to the Hotel and Gravel Pit and establish a Hasty Defense and can attack the Finns to secure these if needed. 4/2/609 is in reserve, all other units are in a prepared defense.

Special Rules:

2/609 is at Casualty Level II.

The Bridge at A34.07 has been destroyed.

Victory

Whoever controls the hotel at the end of play, wins.

8.9 Combined Scenario

This scenario combines both 8.7 and 8.8 and uses all of Map A.

General Information:

First Turn: 0800 12 Dec

Last Turn: 1630 12 Dec

Game Length: 18

Map Area: Map A (all)

Finnish Information:

Set Up, Artillery, Artillery Ammo, Orders, Special Rules: Combine 8.7 and 8.8

Reinforcements:

1000: withdraw 5/KTR 12

1030: 1/1/JR 16 arrives at A1.17

Russian Information:

Set Up, Artillery, Artillery Ammo, Orders, Special Rules: Combine 8.7 and 8.8

Reinforcements:

1100: 139 Tank Bn arrives at A47.01

Victory

The side controlling Hirvasvaara and the Hotel wins. Any other result is a draw.

8.10 Island Hopping

Captain A.V. Kanerva, commanding ErP 112, launches his assault on Kottisaari right on time. Unfortunately, his intended support (9/3/JR 16) hasn't received any orders.

Kanerva will have to go it alone all afternoon.

General Information:

First Turn: 0800 12 Dec

Last Turn: 1530 12 Dec

Game Length: 16 Turns

Map Area: Map B (all)

Finnish Information:

Set Up:

B26.01: One platoon 1/ErP 10

w/i **1 B15.08:** remainder 1/ErP 10

w/i **1 B14.17:** 1/ErP 112

w/i **1 B12.17:** 2/ErP 112

w/i **1 B12.27:** 8/3/JR 16

w/i **1 B12.22:** 9/3/JR 16

w/i **2 B14.24:** 3x MG from MG/3/JR 16

w/i **2 B16.32:** 3x MG from MG/3/JR 16

B14.31, B15.32: one Mortar from JR 16 Rgt Troops in each

Artillery Available: 5/KTR 12 becomes available at 1030

Artillery Ammo:

76mm: 15 HE, 1 Smoke

Reinforcements:

1200: 8/3/JR 37, 3/ErP 112, MG/ErP 112 arrive on the north map edge w/i 3 B13.35

Implemented Op Sheets? Yes

Historical Orders:

3/JR 16 is in a prepared defense. 1/ErP 112 and 2/ErP 112 are to attack Kotisaari and Kivisalmenkangas. One platoon of 1/ErP 10 (B26.01) is to attack 2/364, the rest of 1/ErP 10 is in a prepared defense.

Russian Information:

Set Up:

anywhere on Kotisaari: 1/364

w/i **1 of the road running from B47.11 to B49.09:** 2/364

w/i **2 B37.23:** One company of 3/364

w/i **1 of the road running from B41.20 to B43.19:** remainder of 3/364

with any 364 unit: Mtr/364

B20.18, B24.18: One AT from 1/139 AT in each hex

B25.11, B33.11: One AT from 2/139 AT in each

B37.20, B42.22, B48.12: One battery

from 3/47 in each

w/i **6 B32.32 (not on any island):** 1/609

B30.34: One battery of 1/47

B26.26, B25.26, B25.24: One battery from 2/47 in each

Artillery Available: 1/47, 2/47, 3/47 and 354 Artillery Rgt are available at start.

Artillery Ammo:

76mm: 100 HE, 5 Smoke

122mm: 25 HE, 2 Smoke

152mm: 15 HE

Reinforcements: None

Implemented Op Sheets? Yes

Historical Orders:

One company of 1/609 is in a prepared defense. The remainder of 1/609 is in reserve. 1/364 is in a prepared defense. 139 AT is in a hasty defense of the Russian left flank. 3/364 is in a hasty defense of Kivisalmenkangas.

Special Rules:

2/364 and 1/609 are at Casualty Level III.

The bridge at B37.26 has been destroyed.

Victory

The Finns win if they control both Kotisaari and Kivisalmi Bridge at the end of play.

The Russians win if the Finns do not control either.

Any other combination is a draw.

8.11 The Battle of Tolvajärvi

This is the whole frozen banana...

General Information:

First Turn: 1100 8 Dec

Last Turn: 1730 12 Dec

Game Length: 99 Turns

Map Area: A & B (all)

Finnish Information:

Set Up, Artillery, Op Sheets, Orders, and Special Rules: As per 8.1

Reinforcements:

8 Dec:

1600: 4/2/JR 16 at A1.17

9 Dec:

0200: 5/2/JR 16, 6/2/JR 16, MG/2/JR 16 at A1.17

1000: JR 16 Troops (Eng Plt, 3x 81mm Mortar, 2x Field Kitchens) at A1.17.

(Field Kitchen deploy anywhere along A1.17 to A21.10 inclusive.)

10 Dec:

1000: JR 16 Troops (2x 37mm AT), 7/KTR 6, 8/KTR 6 at A1.17 Arty Ammo added as per 2.2

11 Dec:

1100: 1/ErP 10 enter w/i 3 B23.01

1500: MG/ErP 112 place with any ErP 112 unit

1900: ErP 9 at A1.17

2300: 2/ErP 10, 3/ErP 10 at A1.17

12 Dec:

1030: Obuhoff at A1.17

Russian Information:

Set Up, Artillery, Op Sheets, Orders, and Special Rules: As per 8.1

Reinforcements:

8 Dec:

1100: 3/609, Mtr/609 at B62.09

1200: 1/47, 2/47 at B62.09 Arty Ammo added as per 3.2.

1300: 1/364 at B62.09

1400: 2/364 at B62.09

1500: 3/364, Mtr/364 at B62.09

1800: 3/47, 139 AT at B62.09 Arty Ammo added as per 3.2.

9 Dec:

0600: 1/718 at A58.30

1000: 2/718 at A62.20, 354 Artillery

Available. Arty Ammo added as per 3.2.

1400: 3/718, Mtr/718 at A62.20

12 Dec:

0930: 139 Tank Bn at B62.09

Victory

The player who holds Kotisaari, and the Hotel or meets his sudden death conditions wins. Any other result is a draw.

Abbreviations & Finnish Terms

AT	Antitank Gun
Bde	Brigade
Bn	Battalion
Btry	Battery
Co	Company
ErP	Erillinen Pataljoona (Independent Bn)
-harju	ridge
I or Inf	Infantry
-lahti	bay
-lammet	small lakes
-lampi	small lake
-järvi	lake
-joki	river
JR	Jalkaväkirykmentti (Infantry Rgt)
-kangas	moor or heath
KTR	Kenttätykistörykmentti (Field Artillery Rgt)
LTC	Lieutenant Colonel
M or Mort	Mortar
MG	Machine Gun
MG	Major General
PPP	Polkupyöräpataljoona (Bicycle Bn)
Rgt	Regiment
-saari	island
-salmi	strait
-vaara	hill

Counter Manifest

Finnish Forces

- Pajari Leader
- E1/JR 16 Field Kitchen
- E2/JR 16 Field Kitchen
- Prov/TF-P Inf Co (4x Inf Plt)
- Obuhoff AT Unit (1x 37mm AT)
- JR 16 Regimental Troops (1x Eng Plt, 2x 37mm AT Guns, 3x 81mm Mortar Plt)
- 1/1/JR 16 Inf Co (4x Inf Plt)
- 2/1/JR 16 Inf Co (4x Inf Plt)
- 3/1/JR 16 Inf Co (4x Inf Plt)
- MG/1/JR 16 MG Co (6x MG Sec)
- 4/2/JR 16 Inf Co (4x Inf Plt)
- 5/2/JR 16 Inf Co (4x Inf Plt)
- 6/2/JR 16 Inf Co (4x Inf Plt) (mistakenly marked as 5/2/JR 16 on the counters)
- MG/2/JR 16 MG Co (6x MG Sec)
- 7/3/JR 16 Inf Co (4x Inf Plt)
- 8/3/JR 16 Inf Co (4x Inf Plt)
- 9/3/JR 16 Inf Co (4x Inf Plt)
- MG/3/JR 16 MG Co (6x MG Sec)
- 8/3/JR 37 Inf Co (4x Inf Plt)
- 1/ErP 9 (4x Inf Plt)
- 2/ErP 9 (4x Inf Plt)
- 3/ErP 9 (4x Inf Plt)
- 1/ErP 10 (4x Inf Plt)
- 2/ErP 10 (4x Inf Plt)
- 3/ErP 10 (4x Inf Plt)
- 1/ErP 112 (4x Inf Plt)
- 2/ErP 112 (4x Inf Plt)
- 3/ErP 112 (4x Inf Plt)
- MG/ErP 112 (1x MG Sec)
- 1/PPP 7 (4x Inf Plt)
- 2/PPP 7 (4x Inf Plt)
- 3/PPP 7 (4x Inf Plt)

- 7/KTR 6 (4x 76mm Howitzers)
- 8/KTR 6 (4x 76mm Howitzers)
- 5/KTR 12 (4x 76mm Howitzers)
- 9/KTR 13 (4x 76mm Howitzers)

Russian Forces

- 1/1/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 2/1/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 3/1/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/1/364 MG Co (4x MG Sec)
- 4/2/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 5/2/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 6/2/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/2/364 MG Co (4x MG Sec)
- 7/3/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 8/3/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 9/3/364 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/3/364 MG Co (4x MG Sec)
- Mtr/364 Mortar Co (1x FO, 1x 82mm Mortar, 1x 120mm Mortar)
- 1/1/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 2/1/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 3/1/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/1/609 MG Co (4x MG Sec)
- 4/2/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 5/2/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 6/2/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/2/609 MG Co (4x MG Sec)
- 7/3/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 8/3/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 9/3/609 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/3/609 MG Co (4x MG Sec)
- Mtr/609 Mortar Co (1x FO, 1x 82mm Mortar, 1x 120mm Mortar)
- 1/1/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 2/1/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 3/1/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/1/718 MG Co (4x MG Sec)
- 4/2/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 5/2/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 6/2/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/2/718 MG Co (4x MG Sec)
- 7/3/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 8/3/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- 9/3/718 Inf Co (1x SMG Plt, 2x Inf Plt, 1x MG Sec, 1x 50mm Mortar)
- MG/3/718 MG Co (4x MG Sec)
- Mtr/718 Mortar Co (1x FO, 1x 82mm Mortar, 1x 120mm Mortar)
- 1/47 Artillery Bn (1x FO, 4x 76mm Arty Battery)
- 2/47 Artillery Bn (1x FO, 4x 76mm Arty Battery)
- 3/47 Artillery Bn (1x FO, 4x 76mm Arty Battery)
- 1/139 AT Co (2x 45mm AT)
- 2/139 AT Co (2x 45mm AT)
- 139 Tank Bn
 - Bn HQ (1x T-26)
 - 1/139 Tank Co (1x T-26 HQ Tank, 3x T-26 Tank Plts)
 - 2/139 Tank Co (1x T-26 HQ Tank, 3x T-26 Tank Plts)
 - 3/139 Tank Co (1x T-26 HQ Tank, 3x T-26 Tank Plts)

Historical Notes

The Opposing Forces

The 139th Rifle Division was raised in September, 1939 from Belorussians living in the Smolensk area. It was originally part of the Orel Military District, but entrained in November at Kozel'sk and transported to the Russo-Finnish border. During this campaign, its commander was Brigade Commander Belyayev as part of the 1st Independent Infantry Corps, 8th Army.

When the war began, its mission was to advance west along the main Tolvajärvi road to Korpiselkä and then south to cut the railroad at Värtsilä. This would place the division in the rear of the Finn 4th Corps, astride their line of communications. North of the 139th, the 155th Rifle Division was supposed to advance at the same time along the Ilomantsi Road, but its overly cautious advance would not pose as great a threat as the 139th's.

The only force available to oppose the 139th was a task force of 4,200 men commanded by LTC Räsänen. The task force was composed of ErP 10, a battery of 76mm guns, and the Obuhoff platoon. Soon to arrive were PPP 7, ErP 112, and part of JR 37. Field Replacement Battalion 13 was originally part of the task force but was sent to Task Force A at Ilomantsi before the battle began. These two task forces were the covering screen of the Finnish 4th Corps under MG Juho Heiskanen. The corps' mission was to secure the frontier north of Lake Ladoga in order to prevent the Russians from working around the lake into the rear of the Mannerheim Line.

30 November 1939

The 139th crossed the Finnish border near Suojärvi and advanced along the main Tolvajärvi road. The only force the Finns had in position to oppose this advance was ErP 10 under Major V. Paloheimo and two 1890-vintage field guns.

Belyayev's cautious advance slowly maneuvered ErP 10 out of position and Paloheimo retreated.

1 December 1939

Paloheimo continued to retreat to avoid attempts to encircle his small force while Belyayev quickly followed. The Russians maneuvered against the flanks while they launched a frontal assault. While the Finns had repulsed the frontal assault, they continued to give ground to avoid being encircled.

During this retreat, the Finns blew a dam on the west shore of Suojärvi to flood

the Tolvajärvi road. The icy water froze rapidly and it wasn't long before the Finns were withdrawing again with the Russians on their heels. Paloheimo's force retreated through the night and joined the rest of Task Force Räsänen behind the Aittojoki.

2 December 1939

Joining Task Force Räsänen at Aittojoki was ErP 112 a hastily thrown together force of rear area troops, who would soon prove themselves to be the crack troops of Task Force Räsänen. At the same time, PPP 7 became available as a reserve. As the snow was not yet very deep, PPP 7 could still use their bicycles, but they would soon trade them for skis.

The Russians, for their part, took it easy on the 2nd after the exertions of the day before and Belyayev merely moved up to the Finnish defenses.

During the day, Colonel Paavo Talvela (serving on the War Material Council) heard about the loss of the Suojärvi positions. He immediately went to see his friend, the Finnish commander-in-chief, Marshal Carl Gustav Mannerheim. Talvela was familiar with the area Task Force Räsänen occupied as he had led a battalion in that area during the Finnish Civil War (1917-1918) and later conducted map exercises at the Finnish War College on the defense of the area. Talvela petitioned Mannerheim to give him command of the Tolvajärvi sector and to release JR 16 from reserve to reinforce Task Force Räsänen.

Though not unsympathetic to Talvela's request Mannerheim had other fronts to worry about and only limited reserves to use. First, he would see if Task Force Räsänen could recover the situation on his own. Orders were issued for Räsänen to retake the roadblock at Salonjärvi the next day.

3 December 1939

Task Force Räsänen's attack took the 139th by surprise and Belyayev fell back to the east shore of Salonjärvi. Here he counterattacked with his tank battalion driving up the main road while part of the division crossed Salonjärvi to the south of the Finns. The tanks brought the Finnish attack to a halt, but ErP 112 was able to intercept the Russians crossing the lake and force them back under the cover the forest. Task Force Räsänen disengaged and returned to their lines on the Aittojoki.

4 December 1939

Having positioned his troops in the night, Belyayev launched a hard pre-dawn attack. After three hours of costly frontal

assaults, the 139th finally broke into the rear of PPP 7. Major Saarva was seriously wounded and rumor spread that he was dead. PPP 7 collapsed and routed to the rear. The rest of the Finns followed in disorder.

Task Force Räsänen checked its retreat upon reaching Ägläjärv where it spent the afternoon regrouping and digging in. Räsänen established his HQ well to the rear at Tolvajärvi.

The Russians, disorganized by victory, did not pursue.

5 December 1939

Prodded by Mannerheim, Räsänen again attempts to counterattack to stall Belyayev. PPP 7 was placed forward in an exposed position to act as bait. If the Russians took it and advance, ErP 112 would move to support PPP 7 and ErP 10 was to attack the Russian flank. As it turned out, the plan worked up to a point. The Russians took the bait and drove forward. PPP 7 held for 15 minutes, the flank attack never got underway, and ErP 112 ended up covering another retreat. The Finns abandoned Ägläjärv to the Russians.

Mannerheim decided to commit JR 16 to the Tolvajärvi front around noon that day. It and a battery of 76mm guns were to travel by rail to Värtsilä. He also replaced the 4th Corps commander with MG Hägglund and sent for Talvela to give him command.

6 December 1939 (Finnish Independence Day)

Talvela arrived at the Marshal's HQ at 0400 to find him still at work. Mannerheim combined Task Force A and Task Force Räsänen into a single group and gave command to Talvela.

At the front, the day passed quietly as the Finns established their positions at the Ristisalmi bridges. Belyayev advanced the main body of the 139th up the road while sending the 718 Rifle Regiment on the road running north from Ägläjärv. This road eventually connected to trails leading behind the Finnish positions to rejoin the main road at the Hotel on Hirvasharju.

JR 16 and the guns arrived from Värtsilä. Shortly after he arrived, LTC Aaro Pajari, commander of JR 16, received a call from Talvela who was still at Mannerheim's HQ. Talvela asked Pajari, another veteran of the Civil War battles in the area, to drive to Tolvajärvi, assess the situation, and to report back. Pajari arrived at Tolvajärvi at 2200 to find Task Force Räsänen demoralized and exhausted.

7 December 1939

Talvela arrived at Värtsilä where Pajari briefed him on the situation. They decided a stand would be made on the west shore of Tolvajärvi as there was no better terrain east of there. At dawn, Task Force Räsänen was deployed as follows: 3/ErP 10 was at Haukivaara to delay the advancing 718 Rifle Regiment along with the newly released ErP 9. 2/ErP 10 was at Kangasvaara, PPP 7 at Ristisalmi, 1/ErP 10 was at the south end of Ylä-Tolvajärvi, 8/3/JR 37 at Kivisalmi and ErP 112 in reserve at Tolvajärvi. 5/KTR 12 and JR 16 were approaching and would be in the battle area in the next day.

In the morning, Belyayev moved against PPP 7 and the much abused bicycle battalion fled to Kivisalmi by the afternoon. Luckily for the Finns, rather than pursue, Belyayev chose to regroup. Meanwhile, the 718th reached Haukivaara by nightfall.

At 1700, Pajari returned to Tolvajärvi with orders to relieve Räsänen. The defenders of Tolvajärvi would now become Task Force Pajari.

8 December 1939

1/JR 16 under Captain U. Herranen arrived at Tolvajärvi in the morning and joined 8/3/JR 37 at the Kivisalmi bridge. Herranen's battalion was shaken by the contact with the defeated elements of the Task Force and would be attacked as soon as they began to dig in. Belyayev's 609th Rifle Regiment drove the Finns from Kivisalmi in disorder. While futile, the defense bought enough time for Pajari to get 3/JR 16 dug in along the west shore of Tolvajärvi. With approaching nightfall, the 609th stopped its pursuit short of Hevossalmi and established its HQ at the hotel on Hirvasjärvi.

That hotel was built shortly before the war had a chalet-style building. The first floor's walls were built of stone and an overhanging second story. The hotel would become a key point in the Russian defense on the 12th. While the 609th established itself at the hotel, the 364th advanced a battalion to take possession of Kotisaari, another position that figured prominently in the coming battle.

That evening Talvela arrived and summed up the situation as follows:

"A total catastrophe seemed imminent, as the superior enemy...could continue the attack anytime and pierce the front...In situations like this, as in all confused and hopeless situations, an energetic attack against the nearest enemy was and is the only way to improve the spirits of the men and get control of the situation."

In that aggressive spirit, Talvela and Pajari planned a night raid on the Russians

from troops that had spent the day in reserve at Tjokki. Shortly before midnight, Pajari's raiding force set out across the ice south of Kotisaari and headed for the eastern shore south of Kivisalmi.

9 December 1939

At 0100, PPP 7 attacked the battalion of the 364th on Kotisaari, an attack to divert the attention from the raiding force. After Captain Ericsson was killed, the attack fell apart and PPP 7 fell back across the ice. Having reached Kivisalmenkangas, Pajari found the Russians camped along the main road with huge bonfires illuminating their positions. The raiding force took up positions and opened fire. The surprised Russians panicked and began to fire in all directions. Pajari pulled out and headed back to Tolvajärvi. Two hours later, the raiding force could still hear Russians firing at each other in the darkness. At 0500, Pajari was back in his camp.

The raid accomplished its purpose in throwing Belyayev off balance as he did not attack on the 9th. The 609th and 364th consolidated their positions while the 718th arrived at Hirvasvaara throughout the day.

Pajari, who had a weak heart, spent the day resting and the Finns did little more than adjust their lines, rest, and reorganize.

10 December 1939

The day passed quietly, aside from the obligatory Russian artillery barrage, while Belyayev planned an attack for the night while he waited for a battalion of the 718th to complete a flank march around the Finn position from the north. Talvela took advantage of the lull to confer with Col. Ekholm on launching a coordinated counterattack along with Task Force Pajari.

That evening Talvela issued orders to both of his Task Force commanders to start the counteroffensive the next day, but Belyayev would throw a wrench in the works first. About 2200, the battalion of the 718th that had spent the day marching around the Finn's northern flank struck the main road behind their lines. Luck was not to be on Belyayev's side though, even while taking the Finns by surprise. A field kitchen was boiling sausage soup for the machine gunners of 3/JR 16. As the Finnish cooks scattered, many of the Russians (hungry from their long march) couldn't resist stopping for dinner. This gave Pajari a chance to gather about 100 men to launch a counterattack the men clustered around the field kitchen.

11 December 1939

Pajari's provisional company had been thrown the Russians off balance and held them until the Finnish reserves could attack. The last of 718th's battalions retreated by 0400, but they had fought hard and casualties were high. At the sound of the gunfire and

thinking it signified the opening of the Russian flanking attack, Belyayev opened the next part of his plan (he was unaware of the field kitchen sausage issues).

A battalion of the 364th was to cross the ice from Kotisaari and flank the Finns from the south. For some reason, the battalion was slow to move and by the time it had crossed the lake, Lt. Eero Kivelä of 9/3/JR 16 had set up an ambush with three of his platoons. The Russians were intercepted and sent fleeing back across the ice with heavy losses. At dawn, Belyayev made a half-hearted attempt at carrying out the rest of his plan by ordering an attack in the center by the 609th. This attack was easily beaten off and Belyayev called off the entire action.

The Russian attack made it impossible for the Finns to launch the coordinated assault they had planned and it was postponed until the next day. Talvela's Chief of Staff, LTC Stewen, suggested that the attack plan be revised to take advantage of the new reserve units now available. Talvela agreed and gave Major J.A. Malkamäki command of his own ErP 9, 2/1/JR 16, and 3/1/JR 16. This force would lead the attack by going around Hirvasjärvi to the north and then drive south along the east shore to the main road behind the hotel. PPP 7 would be brought up as the task force reserve.

12 December 1939

About midnight, Malkamäki's force moved out of their positions to march to the northwest shore of Hirvasjärvi. The difficult terrain kept him from reaching their jump-off positions before dawn, delaying the planned attack. Shortly before 0900, the reinforced battalion came under heavy fire from the north. Belyayev, in an attempt to renew his offensive, had sent two battalions of the 718th to the north end of Hirvasjärvi. 3/1/JR 16 on the left flank was the hardest hit and by 1000 it was in full retreat to Tolvajärvi. The company on the right flank (1/ErP 9) also came under heavy fire from across the lake and was also in retreat by 1000.

Malkamäki's three other companies made it across Hirvasjärvi with little loss and took Hirvasvaara around 1100. The retreating Russians counterattacked and brought the Finnish advance to a halt. Under pressure, Malkamäki ordered a withdrawal around 1200. The Finns withdrew across the lake in a wide arc to the north and arrived at Tjokki and Kokkari near nightfall. A few platoons of 2/1/JR 16 never received the order to withdraw from Hirvasjärvi and hunkered down on the island to fight off the Russians until nightfall alone. Around noon, 1/1/JR 16, 9/KTR 13, and the Obuhoff platoon had to be committed to hold off the part of the 718th coming across the lake and to keep the Russians from assaulting the hotel.

The other Finnish flank attack was also compromised by mishap and tough fighting

by the Russians. At 0800, Captain A.V. Kanerva with two companies of ErP 112 began his attack on the south end of Kottisaari as scheduled, but 9/3/JR 16 failed to attack because its battalion HQ did not issue the proper orders. Kanerva fought his way on to Kottisaari and by 1200 some of his platoons had even reached Ruissaari and Kivisalmenkangas. Unable to force the Russians to give up their positions Kanerva's companies withdrew to Väliisaari and Okkolansaari to regroup by 1330.

The Finnish attack in the center, aimed at taking the hotel and opening the main road, was delayed from 0700 to 0915 because Pajari wanted to wait for his artillery to shell the Russian defenses before assaulting them. The results of this bombardment was so negligible that Pajari cursed himself for waiting for it. Captain Laakso's 2/JR 16 spearheaded the assault across Hevossalmi under the covering fire from Finnish MG companies along the shore.

The Russian artillery began firing at the assaulting Finns with lots of ammunition, but the fire was so inaccurate as to not have any effect on the fighting. 4/2/JR 16 and 6/2/JR 16 took the small hill near Hevossalmi, but were stalled by a group of Russians holding the gravel pits. 5/2/JR 16 and some MG units were brought over to drive the Russians from the gravel pits. Some Russian light tanks moved up the road from the hotel, but were forced to withdraw by Finnish AT guns posted to cover the road. 2/JR 16 pressed on from the gravel pits to the foot of the hill where the hotel stood. There, they were met by a hail of fire and (at 1200) the battalion was ordered to withdraw back to the gravel pits to reform. During this brief lull, the Finns brought forward a mortar battery for additional support. At 1300, the Russians tried to recover the gravel pits but were repulsed.

Around noon, with 1/1/JR 16 holding off the Russians to his north, Pajari was able to commit additional reserves to assault the hotel. By 1330, the attack on the hotel resumed. The hotel bristled with MGs and the battle seesawed for a while. Finally, 2/ErP 10 cleared Hirvasharju and attacked from the north—drawing some of the fire to meet this new threat.

Some of the 609th's defenders, afraid of having their having their line of retreat cut, began to withdraw down the main road. At this point, the Finns stormed the hotel and secured the first floor around 1500. Near nightfall, 6/2/JR 16 was assigned the job of clearing the second floor. The company commander wanted to burn the building down to prevent more casualties, but the battalion commander (Major Paloheimo) would not allow this to be done. Using grenades, the company was able to clear the floor quickly without casualties. The Finns took 28 prisoners and found the body of the 609th's commander, who had died defending his command post.

While the battle for the hotel was reaching its climax, the assault against Kotisaari was renewed. About 1400, 1/ErP 112, 2/ErP 112, 8/3/JR 16 and 9/3/JR 16 advanced against the

island and cleared it by 1730 after a hard fight. With the loss of the hotel and Kotisaari, Belyayev knew he could no longer hold on in the Tolvajärvi area and ordered the battered 139th to retreat to Ristisalmi where they would try to hang on until 8th Army could send reinforcements. Before Belyayev's men could get away, Pajari gave PPP 7 (his reserve) a chance to extract some revenge from their old adversary. The bicycle battalion was sent down the main road in pursuit, but nightfall and the Russian rear guard south of Kivisalmi prevented an effective pursuit.

Aftermath

Talvela and Pajari resumed the offensive on 14 December and took back Ristisalmi. That was the last battle of the Winter War for the 139th as it was ordered back to Russia to be rebuilt. Replacing them was the 75th Rifle Division from the 8th Army reserve. On 16 December, Pajari encountered a roadblock west of Hietajärvi manned by about 200 Red Army officer cadets who put up a stiff resistance and won the respect of the Finns. The roadblock held up Pajari for the rest of the day.

On 18 December, the Finns reached Ägläjärvi held by the 75th Rifle Division. On the 20th, Talvela ordered Pajari to the rear to rest out of concern for his heart condition. The task force came under the command of LTC Kaarlo Viljanen. The new commander and fresh reinforcements were able to take Ägläjärvi on the 23rd.

At 2000, 23 December, Mannerheim called a halt to further offensive action. Originally, he had hoped the task force could retake Suojärvi, but the casualties already taken prompted him to give up that goal.

The Finnish victory in the Tolvajärvi campaign won Talvela promotion to Major General on 19 December. He and his men had forced back the most serious threat to the 4th Corps front and caused the deployment of the 75th Rifle Division which could have been used elsewhere on the front. For the remainder of the war, the Russians were never again able to seriously threaten the Tolvajärvi-Ägläjärvi road.

Designer's Notes

Map and Terrain:

The game map was drawn from LTC Pajari's 1:25,000 situation maps with some additional information drawn from a 1922 set of Finnish 1:100,000 maps.

While the water in the swamps is frozen, they still contain more undergrowth and fallen trees than a forest hex, so the movement cost is still higher than a normal forest hex.

The rule for blowing holes in the ice was designed so that it will not happen very much. Neither side used this as a tactic. It is here for color.

Information on the astronomical conditions in the area at the time of the battle (phase of the moon, sunrise, sunset, and duration of twilight) was provided by Dr. Randy Olson, director of the planetarium at the University of Wisconsin at Steven's Point. It turns out the battle was fought under a New Moon, hence the night visibility is 1 not the normal 2.

The Finnish Force

The Finnish order of battle came from two Finnish books: *Talvisodan Ihme* and *Talvisodan Historia*, and material from the Finnish Institute of Military Science. Much is made of the disparity in numbers between Task Force Pajari and the 139th Rifle Division in English-language sources. While it is true that in total numbers of men the Russians had a 2 to 1 advantage, an analysis of each forces' TO&E both sides have an almost equal number of infantry.

A typical Finnish rifle company had 4 platoons with a standard firepower of 5. The platoons of PPP 7 have a firepower of 4 as I do not feel they had the full allotment of MGs. Some of the Provisional Company platoons are reduced as they had few MGs (they represent rear area and artillery troops through into ad hoc infantry to counter the Russians on the night of 10-11 Dec).

The snow at Tolvajärvi was just one foot deep with little drifting. Because of this, the Finnish ski troops do not get the dramatic superiority in movement that they would have in later battles. The ski troop movement bonus is given to reflect the mobility advantage gained by skis. Units cannot ski into assault combat, as the units would have to cache their skis at such a time.

The Russian Force

The 139th Rifle Division was organized along standard 1939 lines—a combined arms force too heavily stocked with heavy equipment to fight effectively in the far north. It had a smaller percentage of its men acting as infantry (45% vs the Finnish Task Force's 80%) as more of its strength was dedicated to support or to man weapons that were of limited use in Finland. The 139th did have a recon and an engineer battalion, but these have been factored into the infantry regiments to make up for losses occurring before the battle.

The only mention of tanks in the battle was in the counterattack by one platoon near the hotel during the battle of the 12th. It is unclear what kept them out of action earlier in the battle. It is unlikely that previous battle losses were the reason, so it is more likely that mechanical problems or a decision by Belyayev not to risk them for little gain kept them from playing or trying to play a larger part.

Despite the plethora of field artillery attached to the 139th, it had little effect on the battle due to antiquated fire control methods and lack of accuracy. The most effective of their artillery were the 76mm guns that were placed so as to fire direct fires instead.

Ambush Table


















Roll	Result
0 or less	No Overwatch, Ambush possible.
1 to 3	No Overwatch, No Ambush
4 or more	Overwatch allowed, No Ambush

Die roll Modifiers

-1	Fog/Mist, Lt Snow
-2	Hvy Snow
-2	Night: Rolling stack in Illum, moving stack is not
+2	Night: Rolling stack is not in Illum, moving stack is
-1	Other than the above two night cases
-2	Moving unit is part of a Finnish Raid force

Rolling Unit's Op Sheet Status

+2	Prep Defense
+1	Hasty Defense
+0	Attack
-1	Move
-2	Unassigned

Terrain Effects		Movement Foot	Vehicle	Combat Type	Notes:
	Open	2 (1)	4	Open	Reduced value for Ski Troops
	Woods	2	P	Partly Prot	
	Forest	3	P	Partly Prot	
	Swamp	4	P	Partly Prot	
	Lake	2 (1)	3	Billiard Table	Reduced value for Ski Troops
	Primary Roads	1/2	1/2	ot	
	Secondary Roads	1/2	1	ot	
	Tracks	1	2	ot	
	Stream	+1	-	ot	
	Building	ot	ot	Partly Prot	See 1.5
	Hotel	ot	ot	Prot	See 1.5
	Gravel Pit	3	P	Partly Prot	
	Fire Tower	ot	ot	ot	See 1.8
	Bridge	ot	ot	Billiard Table	See 1.6
	Contour Line	+1	-	ot	
	Holes in the Ice	3	P	ot	See 1.4b
	Trees Down	x2 ot	x2 ot	ot	See 1.7, Double normal terrain cost

P—Prohibative ot—Other Terrain Prot—Protective

Weighted Turn Numbers

3 if unassigned and no direct fires.

2 if assigned but no direct fires. (2 is the max possible at night.)

1 if direct fires.

Command Prep Table

Type	Weighted Turns Elapsed					
Prepared Defense	1-12	13-26	27-41	42-55	56-70	71+
Attack	1-6	7-12	13-27	28-42	43-60	61+
Hasty Defense	1-4	5-7	8-16	17-25	26-38	39+
Move	1-3	4-6	7-15	16-21	22-33	34+
1 or less	10	8	6	4	3	3
2	10	9	7	5	4	3
3	11	10	8	6	5	4
4	12	11	9	7	6	5
5	12	11	10	8	7	6
6	np	12	11	9	8	7
7-8	np	12	11	10	9	8
9 or more	np	np	12	11	10	9

Notes:

= Roll or more on two dice to implement.

np = Not Possible.

Tactical Combat Series: v.3.1 Charts & Tables

©1994 The Gamers, Inc. All Rights Reserved.

The Gamers
Quality Wargames Since 1988

Basic Terrain Effects on Combat and Movement Chart

Game Specific Charts (if any) take precedence over this generic one.

Terrain	Type	Foot Movement	Vehicle/Carrier Mvt (not Truck)	Truck Movement
Open	Open	1	1	2
Swamp	Partly Pro	3	4	P
Woods	Partly Pro	1	2	3
Hedge Hexside	Partly Pro	NE	+1	+2
Buildings	Partly Pro	NE	NE	NE
Forest	Partly Pro	2	3	4
City/Village	Protective	1/2	1/3	1/3
Beach	Billiard Table	1	1	2
Bocage	Partly Pro	+2	P	P
Cliff Hexside	ot	P	P	P
Primary Road	ot	1/2	1/3	1/3
Secondary Road	ot	1/2	1/2	1/2
Railroad	ot	1/2	1/2	1/2
Stream	ot	+1	+3	+5
Creek/River	ot	P	P	P
Shingle	Partly Pro	+2	P	P

Notes:

ot= Other Terrain

P= Prohibited

NE= No Effect

Spotting Range Chart

1) SFA, Artillery Spotting, Fire-based Overwatch Trigger Fires:
Spotting Range is **UNLIMITED**

2) Movement-based Overwatch Triggers:

Target is Infantry or Weapons Unit

Terrain of Target ⁽¹⁾ is...	Spotting Range
Billiard Table or Moving on ROAD	UNLIMITED
Open	3 Hexes
Partly Protective, or Protective	ADJACENT ONLY

(1) Use Terrain of unit OR

(in the case of Movement-based Overwatch)

that of the center of the hexside crossed during movement.

Target is Vehicle or Carrier Unit: Spotting Range is **UNLIMITED**

BUTTONED UP FIRERS or SPOTTERS:

Above OR (if they have a Point Weapon) **NOMINAL RANGE** (whichever is less).

If the firer does not have a Point Weapon, only apply the above.

Area Fire Table

Total all applicable modifiers (column shifts to get a net shift before applying any). Resolve fires shifted off either edge of the table on the last table column.

The Terrain:

Class	Regular	Some Units Dug In	All Units Dug In	Notes
Billiard Table	+2	0	-1	(applies to Sortie Attacks)
Open	0	-1	-2	(applies to Sortie Attacks)
Partly Protective	-1	-2	-2	(applies to Sortie Attacks)
Protective	-2	-3	-3	(applies to Sortie Attacks)

Ignore P-type units when determining the Dug In quality of the target hex.

-1 if Fire is at Night in an Lighted Area
-2 if at Night, not in an Lighted Area

Do Not Apply to Artillery Fires
Do Not Apply to Artillery Fires

The Target:

+1 if any unit in hex is in MOVE MODE	(applies to Sortie Attacks)
-1 if all or some units in the hex are already SUPPRESSED or PARALYZED	(applies to Sortie Attacks)
-1 if the Target Hex is in Smoke or an Artillery Attack Zone (Do not apply to Artillery Fire Resolution)	(applies to Sortie Attacks)
-2 if at least one of the units in the hex have a P-type DEFENSE of 2 or more	(applies to Sortie Attacks)
+2 Overwatch Fires vs ROAD MOVING target	
+1 CROSSFIRE (See 11.2)	

Range: Applies to every weapon (including Mortars, use range of spotter) EXCEPT Artillery and Sortie attacks.
Apply the longest range firing unit only for each fire.

+4	In hex
+2	1 hex
+1	2 hexes
0	3-4 hexes
-1	5 hexes
-3	6 or more hexes

Stacking (All apply to Sortie Attacks) (ignore P-types and anything riding a Half-track, COUNT things being towed)

+0	1 to 7 steps in hex
+1	8 to 12 steps in hex
+3	13 or more steps in hex

Suppressed Fires, Firers in Artillery Attack Hexes, or Buttoned Up Firers are x1/2 (these are cumulative)

Total Firepower Directed at Hex																	
Result	Less than 1	1	2	3	4	5	6-7	8-9	10-12	13-16	17-20	21-25	26-50	51-75	76-100	101-150	151+
No Effect	11..53	11..51	11..45	11..42	11..36	11..34	11..32	11..26	11..24	11..22	11..16	11..14	11..12	11	—	—	—
Morale Check	54..65	52..63	46..56	43..54	41..51	35..45	33..42	31..35	25..33	23..26	21..24	15..21	13..15	12	—	—	—
-1 Step ☼	66	64..66	61..66	55..66	52..65	46..63	43..61	36..55	34..53	31..51	25..45	22..43	16..41	13..35	11..33	11..31	11..25
One Die x1/2 ☼	—	—	—	—	66	64..66	62..66	56..65	54..63	52..61	46..54	44..52	42..46	36..43	34..42	32..35	26..33
Two Dice x1/2 ☼	—	—	—	—	—	—	—	66	64..66	62..66	55..66	53..65	51..61	44..55	43..52	36..46	34..43
Three Dice x1/2 ☼	—	—	—	—	—	—	—	—	—	—	—	66	62..66	56..66	53..66	51..66	44..66

Battalion Morale Additions:

+1 if casualty result is 4 to 5 steps
+2 if casualty result is 6 or more steps.

Add Battalion Morale addition to EACH Battalion in the hex (if more than one).
All results other than No Effect require a Morale Check.
Dice results require division by 2 and rounding.
☼ Any applicable units in the target hex must Button Up.

Artillery Barrage Fire Values

Size Ranges (mm)-->	100 or less	101-120	121-130	131-200	201-300	301 or more
Common Sizes-->	75	105	122	150,155	8 inch	16 inch
Battery Barrage Markers						
Good Shoot	8	12	15	18	30	120
Bad Shoot	4	5	6	8	14	54
Battalion Barrage Markers						
Good Shoot	11	16	20	25	43	167
Bad Shoot	5	7	9	11	19	75

Barrage Zone Sizes:

Battery: Target Hex only

Battalion: Target Hex and the Six Adjacent Hexes.

Units in or entering hexes **adjacent** to a Barrage Zone Hex are attacked with 1/2 the Barrage Zone's Firepower.

Fast Fire Missions:

Pay three times the ammunition. 122mm guns or smaller. Firepower above is x2.

Tactical Combat Series:
v.3.1 Charts & Tables

©1994 The Gamers, Inc. All Rights Reserved.

Morale Table

Modifiers

- +1 if the target of an Artillery Barrage Marker attack (ACTUAL Attack Zone Hex only) or Sortie
- +1 if checking unit is already PARALYZED
- +1 Night, not negated by lighted areas
- 2 One or more units in the hex is DUG IN
- 1 If Stack contains one or more P-type Targets in it.
- +2 CROSSFIRE (see 11.2)
- 1 if checking unit is in Partly Protective or Protective terrain.

Unit Morale (Unit Morale x2⁽²⁾ if in Assault-style Combat) plus Bn Morale plus Steps Lost and Modifiers from above

Result	1 or less	2	3	4	5	6	7	8	9	10	11	12	13+
No Effect	11..53	11..46	11..41	11..33	11..25	11..21	11..14	11	—	—	—	—	—
Suppressed	54..65	51..65	42..64	34..62	26..54	22..51	15..43	12..34	11..24	11..15	11..13	11	—
Paralyzed	—	—	65	63..64	55..63	52..61	44..55	35..53	25..46	16..42	14..34	12..31	11..23
SYR (1)	66	66	66	65..66	64..66	62..66	56..65	54..64	51..63	43..61	35..53	32..45	24..41
Surrender	—	—	—	—	—	—	66	65..66	64..66	62..66	54..66	46..66	42..66

Notes:

- (1) Paralyzed units cannot SYR. On an SYR result, they remain paralyzed.
- (2) Do not apply this multiplier when making a Morale Check in an Overrun Combat in Partly Protective or Protective terrain.

Adjustment Table

(Do not use for Rocket Artillery Fires)

Range from Spotter to Target Hex is 3 Hexes or less

Nationality	No Shoot	Scatter	Bad Shoot	Good Shoot
1. US	11..14	15..16	17..32	33+
2. Commonwealth, Germans	11..16	21..23	24..36	41+
3. Other	11..22	23..26	31..44	45+
4. Japanese, Soviets	11..23	24..32	33..52	53+

Range from Spotter to Target Hex is 4 to 6 Hexes

Nationality	No Shoot	Scatter	Bad Shoot	Good Shoot
1. US	11..16	21..22	23..36	41+
2. Commonwealth, Germans	11..22	23..25	26..44	45+
3. Other	11..24	25..32	33..52	53+
4. Japanese, Soviets	11..25	26..34	35..61	62+

Range from Spotter to Target Hex is 7 Hexes or more (OR AT NIGHT...NOT negated by Illum)

Nationality	No Shoot	Scatter	Bad Shoot	Good Shoot
1. US	11..23	24..25	26..44	45+
2. Commonwealth, Germans	11..24	25..31	32..53	54+
3. Other	11..31	32..35	36..61	62+
4. Japanese, Soviets	11..31	32..36	41..65	66

Save Yourself Retreat Table

One Die + Unit Morale, Bn Morale, and Steps Lost

Steps Lost	Result
8 or less	Retreat 3 Hexes
9-11	Retreat 4 Hexes, -1 step (1)
12-14	Retreat 5 Hexes, -2 steps (1)
15 or more	Unit Disintegrates, destroy all steps (2)

- (1) Do not apply losses to units which could not roll for an SYR themselves. Apply step losses per stack, NOT per unit.
- (2) If any units are in the hex to which (1) applies, those units retreat 7 hexes.

The Gamers
Quality Wargames Since 1988

Minefield Costs and Attacks

By Force...

- ...MP cost +2
- ...Area Fires Attack with 18 firepower,
- ...Point-target roll of 8 or more to kill.

By Breaching...

- ...MP cost +3
- ...Area Fires Attack with 9 firepower.

Mortar & Infantry Gun Smoke Scatter Table

Die Roll	Result
1	No Smoke placed, unit is still Fired Marked
2-3	Smoke scatters out 1 hex, roll die for direction
4-6	Smoke lands in intended hex

Point Fire Table

Modifiers (Total determines table row used)

The Terrain:

Class	Modifier
Billiard Table	+3
Open	+2
Partly Protective	0
Protective	-1

The Target:

-2	Target is an AT or Inf Gun
-1	If target is DUG IN
-1	Target is in FIRE MODE (do not apply to AT Guns)
+2	Overwatch fires vs ROAD MOVING target
-1	Target is in a SMOKE or in ARTILLERY ATTACK ZONE hex

The Firer:

+1	AT Gun is the firing unit
+2	Fires are an SFA
-2	Firer is BUTTONED UP, SUPPRESSED, or in an ARTILLERY ATTACK ZONE Hex

Other:

-2	NIGHT (negated in Lighted Area)
----	---------------------------------

Firing Differential (Attack minus Defense)

Net Mod	+5 or more	+4,+3	+2	+1	0	-1	-2	-3	-4
+4 or more	12, 16, 42	14, 22, 44	16, 23, 45	22, 25, 45	23, 31, 46	33, 43, 52	41, 46, 61	46, 56, 64	54, 62, 66
+3	14, 22, 44	16, 24, 46	22, 25, 51	24, 31, 51	25, 33, 52	35, 45, 54	43, 52, 63	52, 62, 66	56, 66, P
+2	16, 24, 46	22, 26, 52	24, 31, 53	26, 33, 53	31, 35, 54	41, 51, 56	45, 54, 65	54, 64, P	64, P, P
+1	21, 25, 51	23, 31, 53	25, 32, 54	31, 34, 54	32, 36, 55	42, 52, 61	46, 55, 66	55, 65, P	66, P, P
0	22, 26, 52	24, 32, 54	26, 33, 55	32, 35, 55	33, 41, 56	43, 53, 62	51, 56, P	56, P, P	P, P, P
-1	23, 31, 53	25, 33, 55	31, 34, 56	33, 36, 56	34, 42, 61	44, 54, 63	56, 66, P	P, P, P	P, P, P
-2	26, 34, 56	32, 36, 62	34, 41, 63	36, 43, 63	41, 45, 64	46, 61, 66	66, P, P	P, P, P	P, P, P
-3	34, 42, 64	36, 44, 66	42, 45, P	44, 51, P	45, 53, P	54, 65, P	P, P, P	P, P, P	P, P, P
-4 or less	44, 52, P	46, 54, P	52, 55, P	54, 61, P	55, 63, P	66, P, P	P, P, P	P, P, P	P, P, P

Notes:
Firing differential of -5 or less has an automatic no kill possible.
a,b,c = a is close range, b is nominal range, c is long range
(Close= 1/2x Printed Range, Nominal= Printed Range, Long= 2x Printed Range)
or more to kill at given range on two dice
P= Kill is impossible
If a kill results in a hex, the remaining applicable units in the hex must Button Up.

Artillery Point Fire Table

A modified roll of 10 or more destroys the target.

- 1 if attack is from a Bad Shoot mission or Infantry Gun (100mm or greater)
- +1 if the attack is from a Fast Fire Artillery Mission

Regardless of the success of the above roll, all applicable units in the hex rolled for are Buttoned Up.

AT Roll Table

Modifiers

+1	Target in SMOKE
+1	Target is BUTTONED UP
-2	Target STACKED with INFANTRY
-2	Firer SUPPRESSED
-1	Target or Firer is in ARTILLERY ATTACK ZONE
+1	VISIBILITY is 3 or less or at NIGHT (negated in Lighted Areas)
+1	If against a ROAD MOVING target in Overwatch fires

Target Terrain	In Hex	One Hex Range
Billiard Table or Open	9	10
Partly Protective	8	9
Protective	7	8

Roll two dice. Modify the dice as below.
If the number rolled is greater than or equal to the above, destroy the target.
Otherwise, no effect.

AT Roll Attacker Step Loss:

If an AT Roll is made with a RAW roll of 3 or less, destroy the step that made the attack.

Sortie Successful Attack Table




























































Die Roll	Conditions
3-6	Open with No Smoke or Billiard Table Terrain with No Smoke
4-6	Other than the Above

Sortie Point Fire Modification Chart

Modifier	Reason
-2	Target in Smoke, Artillery Attack Zone, Partly Protective or Protective Terrain
-1	Target in Move Mode
+2	Target's Defense is 2 or less
-1	Target is Dug In













































































































































Note: Even if a Sortie Point Fire is unsuccessful (provided the attack roll was made), the applicable units in the target hex must Button Up.

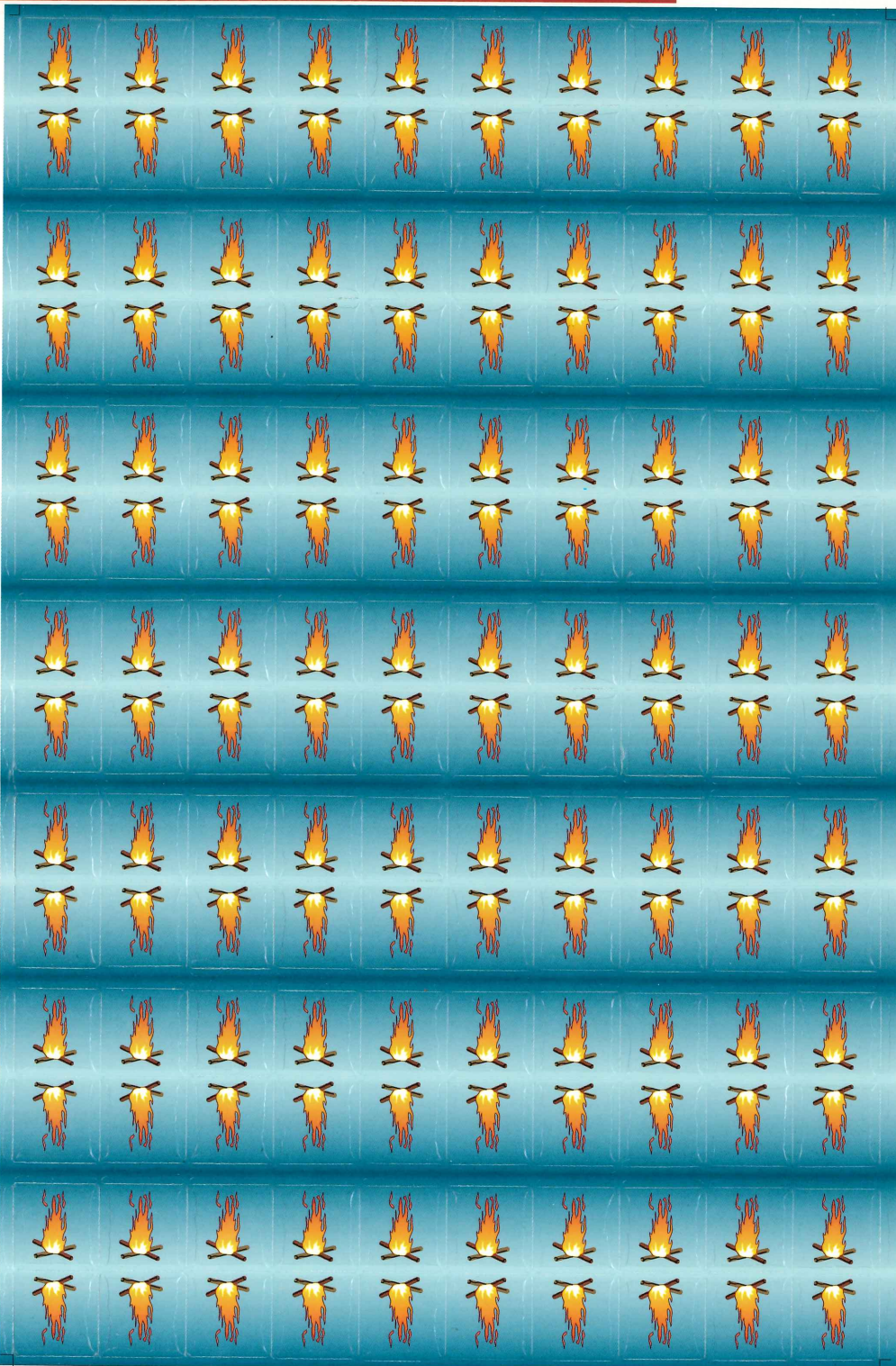
Countersheet 1 Front: **A Frozen Hell**

 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm	 81mm
 81mm	 81mm	 81mm	 81mm	 81mm							

[illegible][illegible]

[illegible]

 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw
 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw	 Withdraw
 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!
 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!	 Panic !!
 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig
 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig	 No dig
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down
 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down	 Trees Down

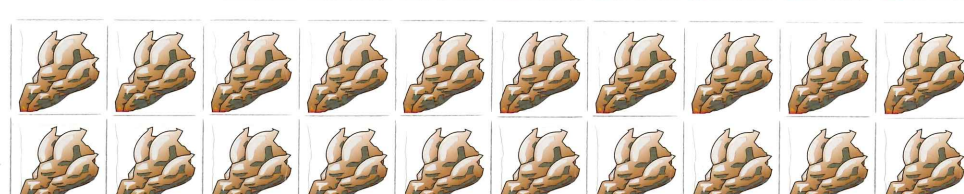
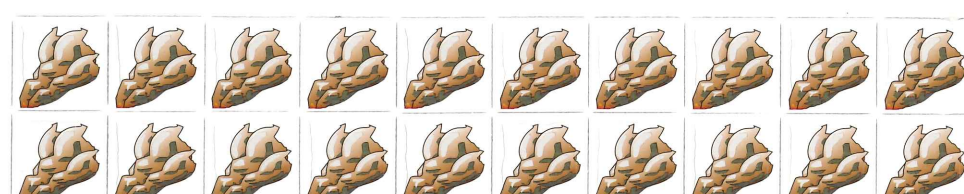
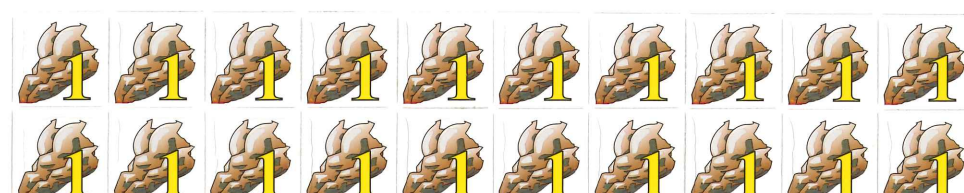
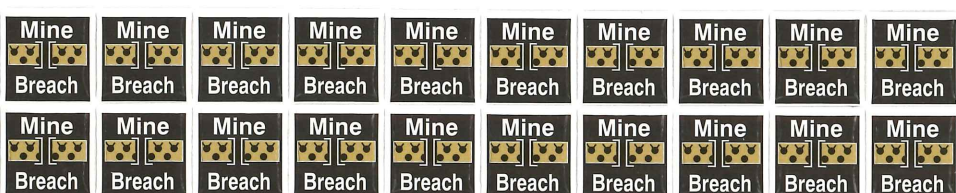
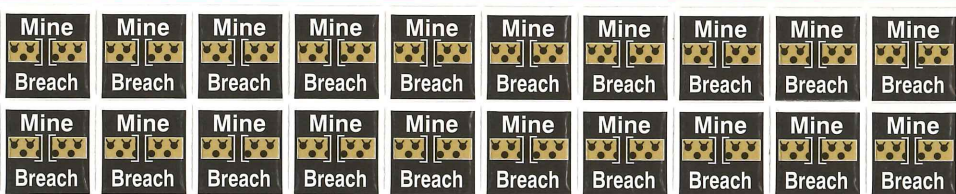
[illegible]

Btry Bad
76mm
4
9/ KTR 13

Countersheet Front: TCS Markers v3.1



Countersheet Back: TCS Markers v3.1



Finnish Battalion Morale

PPP
7

ErP
9

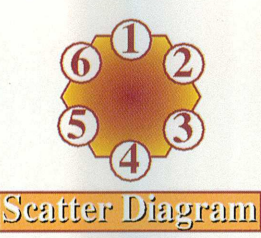
ErP
10

ErP
112

1/JR
16

2/JR
16

3/JR
16



The Gamers
Quality Wargames Since 1988

Weather Table

Time	Freeze	Clear	Fog/Mist	Light Snow	Heavy Snow
0600-0700	24	54	10	31	12+
0730-1100	23	43	9-10	11	12+
1130-1630	23	43	9	10-11	12+
1700-2330	24	54	-	10-11	12+

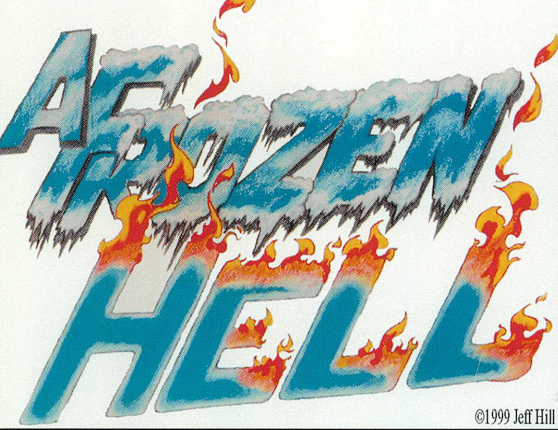
is Two Dice modified by current Weather DRM (if any) according to the Weather Record Track.

Weather Record

Freeze	Clear	Fog/Mist	Light Snow	Heavy Snow
50	-2	50	3	5
				+1
				2
				+1

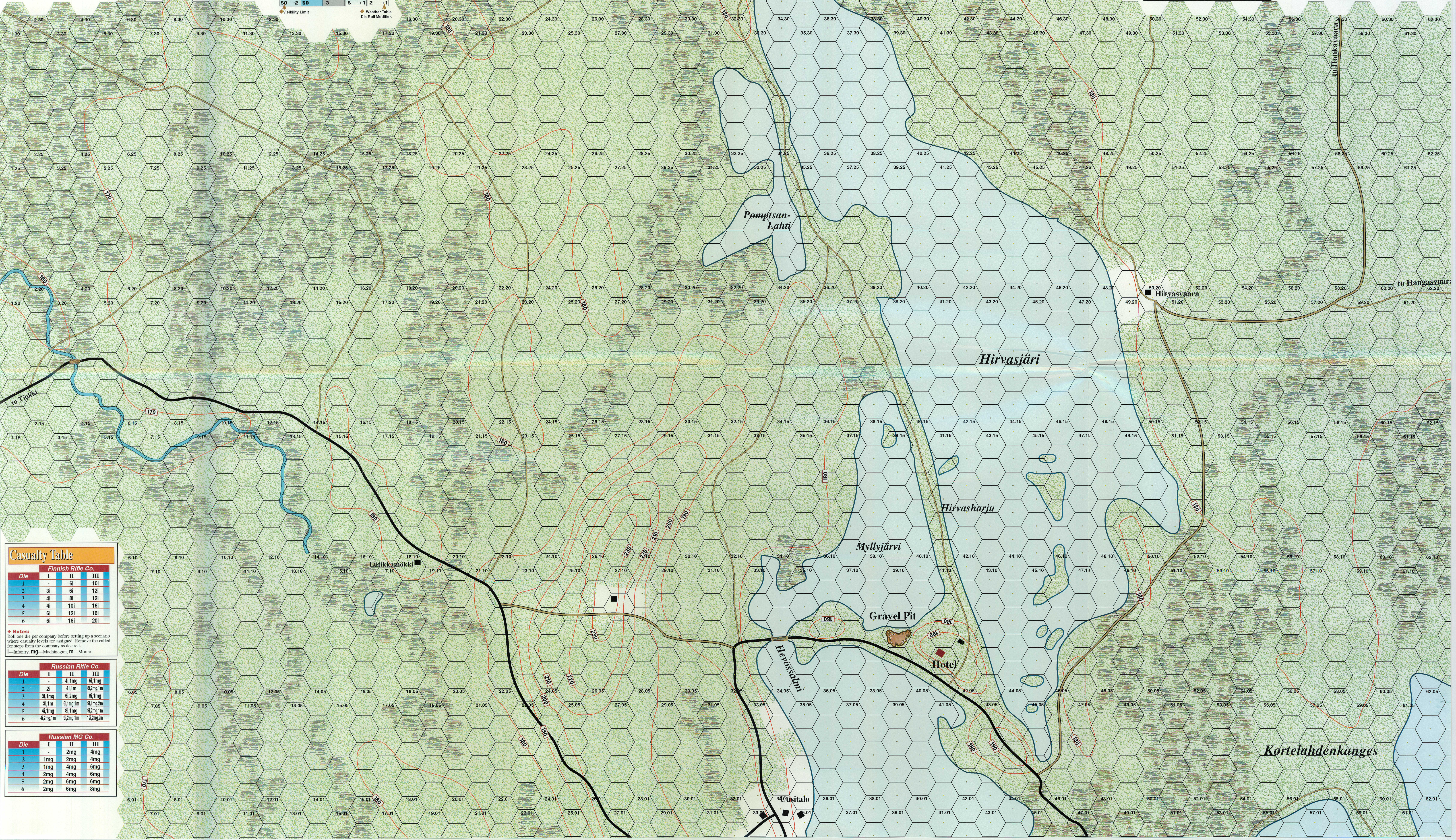
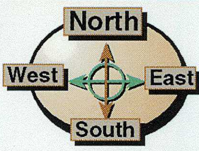
Visibility Limit

Weather Table Die Roll Modifier.



© 2000, The Gamers, Inc. All Rights Reserved.
Rules Download??? Don't Hesitate, ASK RIGHT AWAY!...
Call, FAX, E-Mail, or Write:
write: The Gamers, Inc. • 500 W. 4th Street • Homer, IL 61849
voice: (217) 896-2145 fax: (217) 896-2880
e-mail: letters@thegamers.com
Web Page: <http://www.thegamers.com>

MAP A



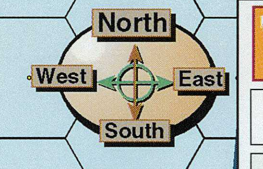
Casualty Table

Die	Finnish Rifle Co.		
	I	II	III
1	-	6i	10i
2	3i	6i	12i
3	4i	8i	12i
4	4i	10i	16i
5	6i	12i	16i
6	6i	16i	20i

Notes:
Roll one die per company before setting up a scenario where casualty levels are assigned. Remove the called for steps from the company as desired.
I—Infantry, mg—Machinegun, m—Mortar

Die	Russian Rifle Co.		
	I	II	III
1	-	41mg	61mg
2	2i	41m	82mg1m
3	3i1mg	62mg	81mg
4	3i1m	61mg1m	91mg2m
5	4i1mg	81mg	92mg1m
6	4i2mg1m	92mg1m	122mg2m

Die	Russian MG Co.		
	I	II	III
1	-	2mg	4mg
2	1mg	2mg	4mg
3	1mg	4mg	6mg
4	2mg	4mg	6mg
5	2mg	6mg	6mg
6	2mg	6mg	8mg



MAP B

Terrain Key	
	Open
	Woods
	Forest
	Swamp
	Lake
	Primary Roads
	Secondary Roads
	Tracks
	Stream
	Building
	Hotel
	Gravel Pit
	Fire Tower
	Bridge
	Contour Line

1/ 364	1/ 609	1/ 718
2/ 364	2/ 609	2/ 718
3/ 364	3/ 609	3/ 718

Russian Battalion Morale		
Dec 8th	Dec 9th	Dec 10th
	1939	
Dec 11th	Dec 12th	Day Record
1	3	6
Night	Twilight	Dawn Dusk
50	Visibility	

Turn Record											
1700	1630	1600	1530	1500	1430	1400	1330	1300	1230	1200	1130
	0630	0700	0730	0800	0830	0900	0930	1000	1030	1100	