Arctic Storm
The Russo-Finnish Winter War, 1939-40
[1.0] Introduction

On 30 November 1939, the Soviet Union's powerful Red Army invaded the tiny nation of Finland. The entire world, including the watching Germans, expected the war to end in a crushing Soviet victory in a matter of weeks, if not days. But the Finns resisted bitterly and managed, by dint of incredible courage and masterful improvisation, to inflict a string of humiliating defeats on the invaders. Instead of a victory march, the Soviet Union found itself unexpectedly involved in a serious struggle with implications for its future survival. That struggle has gone down in history as the Winter War.

Arctic Storm is a regimental/divisional scale game simulating the war between Finland and the Soviet Union in the winter of 1939–40. There are two players:

- The Soviet player controls playing pieces representing the Red Army.
- The Finnish Player controls pieces representing the Finnish Army and the Western Allies (Great Britain, France and Poland).

The game is played in game turns, each of which represents one week of real time. During each game turn, each player moves his pieces across the map and uses them to attack enemy pieces.

[2.0] Game Parts

[2.1] Parts Inventory

The game includes:

- One game map
- One sheet of 200 playing pieces
- One rules booklet
- One Player Aid Card
- One Events Card
- Two ten-sided dice

[2.2] The Game Map

The mapsheet shows the area where the Winter War was fought. It is divided into hexagons (hexes) that regulate movement and combat. Each map hex is 24 kilometers across. Each hex has its own unique four-digit identity number, used to identify the hex for various game purposes.

[2.3] Playing Aids

The map, Player Aid Card, and Events Card contain charts, tables, tracks and displays used in play. These include the:

- Map Key, showing what the colors and symbols on the map mean.
- Movement Chart, showing the number of Movement Points (MP's) it costs to enter each map hex.
- Combat Table, used to find the outcome of combat between opposing units.
- Combat Summary, listing combat-related column shifts, strength modifications and special rules.
- Event Table, used to determine what random events occur each game turn.
- Event Key, explaining the events listed on the Event Table.
- Turn Track, used to show the passage of weekly game turns.
- Victory Track, used to show how many Victory Points (VP's) each player has.
- Replacement Track, used to show how many Replacement Points (RP's) each player has.
- Victory Table, used to determine who wins the game.
- VP Summary, showing how many VP's you add to or subtract from the VP total as a result of game activity.
- Setup Chart, showing where to set up units at the game's start.
- Finnish Reinforcement Schedule, showing when Finnish reinforcements arrive.
- Soviet Reinforcement Schedule, showing when Soviet reinforcements arrive.
- Unit Types List, showing the types of units in the game.

[2.4] The Playing Pieces

There are two types of pieces: units and markers. Units are the military formations that actually fought (or could have fought) in the Winter War. There are three unit types: combat units, Soviet Headquarters (HQ's) and Finnish leaders. The numbers and letters on the units identify them and show their size, strength and capabilities. You use the markers to show unit status, the passage of time and how many RP's and VP's the players have.
A unit's name is its actual historical designation. When the name has a slash (/), the numbers and letters to the left of the slash are the unit's own individual military designation; those to the right show the division to which the unit belongs. For example, the Soviet regiment marked 81/163 is the 81st Rifle Regiment of the 163rd Rifle Division. Note that the Soviet regiments have their unit type boxes color coded for purposes of the Divisional Integrity Bonus. See 9.41.

Some units (not shown) have a box around their Movement Allowance to show that they are ski-mobile. See 6.14.

**[2.42] Unit Types**

A unit's type determines some of its capabilities. Unit types include:

- Infantry & Rifle
- Motorized Rifle
- Tank
- Cavalry
- Mechanized Cavalry
- Marine
- Naval Infantry
- Mountain & Mountain Rifle
- Ski
- Paratroop & Parachute Infantry
- Motorized Artillery
- Border Guards
- Bicycle
- NKVD (Police)
- Partisan (Sissi)
- Soviet Army HQ
- Soviet Corps or Group HQ
- Finnish Leader

**Note:** During this period, Soviet infantry formations were called rifle units. Arctic Storm follows this convention. For play purposes, treat rifle formations as infantry units and treat mountain rifle formations as mountain units.

**[2.43] Unit Sizes**

All combat units have a size. HQ's and Leaders don't have a size. Unit sizes include:

- I = Company
- II = Battalion
- III = Regiment
- x = Brigade
- xx = Division

**[2.44] Unit Values**

- *Attack Strength (AS)* is the value the unit uses when attacking. It can be modified by several factors.
- *Defense Strength (DS)* is the value the unit uses when defending. It can be modified by several factors.
- *Movement Allowance (MA)* is the maximum number of Movement Points (MP's) that a unit can spend to move during each friendly Movement Phase.
- *Stacking Value (SV)* is a unit's relative size measured in Stacking Points (SP's). Unit SV's determine how many units can occupy a hex.
- *Command Radius* is the range (in hexes) over which an HQ can support a friendly unit.
- *Command Bonus* is the number of column shifts an HQ can add to combats involving units that are within its Command Radius.
- *Attack Bonus* is the number of column shifts that a leader can give to attacking Finnish units with which it is stacked.
- *Defense Bonus* is the number of column shifts that a leader can give to defending Finnish units with which it is stacked.

**[2.45] Unit Nationality**

The units' colors show their nationality:

- Red = Soviet
- White = Finn
- Yellow = Foreign Volunteers
- Tan = British
- Light Blue = French
- Dark Blue = Polish
[2.46] Abbreviations

Due to space limitations, the following abbreviations are used on the playing pieces:
C du N = Chasseurs du Nord;
Group G = Grendal Group; Group M = Murmansk Group; Group P = Mobile Group Pavlov; Group R = Rebola Group; ICT = Independent Covering Troop; FVC = Finnish Volunteer Corps; NVK = Norwegian Volunteer Corps; Para = Paratroop; PIN = Parachute Infantry; SVC = Swedish Volunteer Corps;
15LE = 13th Demi-brigade du Legion Etrangere; 24G = 24th Guards.

[2.47] Markers

Game Turn Marker

RP Marker

Front Back

Soviet RPs Soviet RPs
x 1 + 10

[2.6] Die Roll Results

When rolling the game’s ten-sided dice, always read the 0 (zero) face as the number “10.” Most of the die rolls used in the game require that you roll two dice and add the results.

[3.0] How to Start

You can set up the game two ways: place the units where they were historically (the Historical Setup) or place them where you want, within limits (the Variable Setup).

Historical Setup. Place the units in the hexes listed in 18.0 (Setup Chart) on the Events Card. All units start at full-strength (front face showing). When you are finished, go to step 8.

Variable Setup: Just follow the numbered steps below in order. As in the historical setup, all units start at full-strength.

1. Place the following units in the hexes indicated:
   Finnish 25 Infantry III at Kemij (2208);
   Finnish 27 Infantry III at Oulu (2910);
   Finnish 10 ICT Infantry I at Petsamo (5146);
   Soviet 1 Marine at Kronstadt (6521);
   Soviet Group M HQ, 1 Tank x3 and 3 Rifle xx at Murmansk (5121).

2. The Soviet player sets up the following Soviet units within stacking limits in any hexes in the Soviet Union south of the Severe Weather Line: XXXX, XXXX and Group G HQ’s, 136 and 138 Mountain Rifle xxx’s, 4 Motorized Cavalry x2; 18, 24; 43, 49; 50; 56, 70, 90, 100, 123, 142 and 168 Rifle xx’s, 13, 23, 35, 40 and 50 Tank x3; 1 Artillery xx.

3. The Finnish player sets up the following Finnish Army units within stacking limits in any hexes in Finland within six hexes of any Leningrad hex: 4, 5, 6, 8, 10 and 11 Infantry x2’s, 1, 2; 3 and 4 Infantry x2’s; 1 Cavalry x1; 1 BN x1; 1, 3 and 5 Border IIs; 4, 5, 6 and 7 Bicycle IIs; 4 Tank I’s; 26, 64 and 65 Infantry IIs; 1, 2; 3 and 4 Infantry IIs; Heinrich’s leader.

4. The Finnish player sets up the following Finnish Army units within stacking limits in any hexes in Finland within six hexes of Koppselka (1823): 34, 35, 36, 37, 38, 39 Infantry IIs; 8, 9, 10, 11, 12, 13, 23 and 112 Infantry IIs; 4 Border II.

5. The Soviet player sets up the following Soviet units within stacking limits in any hexes in the Soviet Union south of the Arctic Circle: Group R and 45000 HQ’s, 364/139, 718/139, 609/139, 436/155, 659/155, 786/155, 81/163, 662/163 and 759/163 Rifle IIs; 25/44, 144/44 and 305/44 Motorized Rifle IIs; 75 Mountain Rifle xx; 54 Rifle xx; 34 Tank x3.

6. The Finnish player sets up the following Finnish Army units within stacking limits in any hexes in Finland: 5, 6, 7, 14, 15, 10, 17, 18 and 19 Infantry IIs; 2 Border II.


8. Place the x1 VP marker with its front (positive) face showing in the VP Track’s 5 Box. Place the x10 VP marker with its front (positive) face showing in the VP Track’s 5 Box. Place the three RP markers face-up in the Replacement Track’s 0 Box.

9. Place the Game Turn marker in the Turn Track’s 1 Box.

You are now ready to play.

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[4.0] How to Play

Arctic Storm is played in game turns, each of which represents one week of real time. A complete game can last up to 18 game turns, but will usually end earlier. Each game turn consists of an Event Segment, a Supply Segment, two player turns (a Soviet Player Turn, followed by a Finnish Player Turn) and a Turn Segment. The player whose player turn is in progress is the active player; the other player is the inactive player. Each player turn consists of a number of phases undertaken in the order listed in the Course of Play defined in 4.1. Players can perform only actions permitted by the Course of Play, and actions can be performed only in the order shown. Not all phases occur in both player turns.

[4.1] Course of Play

A. Event Segment

1. Event Phase. The Soviet player determines what event occurs this game turn per 5.0 (Events).
2. Diplomatic Phase. The Soviet player, at his option, makes a peace offer per 7.5 (Diplomacy), and the Finnish Player accepts or rejects it.

B. Supply Segment

1. Soviet Command Phase. The Soviet player determines which HQ’s are active per 10.0 (Soviet HQ Units).
2. Soviet Supply Phase. The Soviet player determines which of his units are supplied per 11.0 (Supply).
3. Finnish Supply Phase. The Finnish player determines which of his units are supplied per 11.0 (Supply).

C. Soviet Player Turn

1. Soviet Reinforcement Phase. The Soviet player replaces lost units and steps per 12.0 (Replacements) and puts reinforcements in play per 13.0 (Reinforcements).
2. Soviet Movement Phase. The Soviet player moves any or all of his units per 6.0 (Movement).
3. Soviet Combat Phase. The Soviet player attacks any or all Finnish units in hexes next to his own combat units per 9.0 (Combat).

D. Finnish Player Turn

1. Finnish Reinforcement Phase. The Finnish player replaces lost units and steps per 12.0 (Replacements) and puts reinforcements in play per 13.0 (Reinforcements).
2. Finnish Movement Phase. The Finnish player moves any or all of his units per 6.0 (Movement).
3. Finnish Combat Phase. The Finnish player attacks any or all Soviet units in hexes next to his own combat units per 9.0 (Combat).

E. Turn Segment

Determine whether the game is over and who won per Section 17.0 (How to Win). If the game isn’t over, advance the Turn marker one box on the Turn Track to indicate the start of the next weekly game turn.

[4.2] Turn Track

See map.

[4.3] Course of Play Outline

See back page of rules.

[5.0] Events

Outside factors that have a bearing on play but that are beyond the players’ control are called events. Some of these factors represent events that actually occurred historically, but that need not have happened exactly when they did, if at all. Others are events that could have occurred, but did not. In Arctic Storm, these events occur semi-randomly as a result of a dice roll during each Event Segment’s Event Phase.

[5.1] Event Procedure

During each Event Phase, the Soviet player rolls two dice, adds the resulting numbers and finds the Event Table column representing the dice roll result. He reads down that column until he comes to the row containing the number of the current game turn. Where row and column intersect, he finds an Event Letter, representing the event that occurs during the current game turn. The Event Key explains each event’s effect. Just follow the directions.

[5.2] Event Table

See map or Events Card.

[5.3] Event Key

See Events Card.

[6.0] Movement

The active player can move any or all of his units during each of his Movement, Reaction or Exploitation Phases. During each phase, you can move each unit any number of hexes in any direction(s) up to the limit of its Movement Allowance (MA). Move each unit individually, tracing a path of connected hexes through the hex grid. When you remove your hand from the unit, its movement is over.

[6.1] How to Move Units

[6.11] During each phase in which movement is allowed, the active player can move all, some or none of his units of the appropriate types. The inactive player’s units can’t move, and combat can’t occur. The active player moves each unit individually.

[6.12] Each unit has a number of Movement Points (MP’s) equal to its MA. As it enters a hex, the unit spends the number of MP’s shown for its mobility class on the Movement Chart in order to enter the terrain in the hex and cross the terrain in the hexside through which it is moving. If the Movement Chart has a “P” instead of an MP cost, that terrain is prohibited to units of that mobility class; they may not enter or cross it.

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exception doesn’t apply to movement during a Soviet Exploitation Phase.

[6.23] A unit doesn’t have to spend any or all of its available MP’s. However, MP’s can’t be saved for later use or transferred to other units. A unit loses any unused MP’s left to it at the end of a phase.

[6.24] A unit can’t enter a hex containing an enemy unit other than a leader. Soviet units can freely enter hexes occupied only by Finnish leaders.

[6.25] Only supplied Soviet motorized and ski-mobile units can move during a Soviet Exploitation Phase.

[6.26] Units can enter Norway and Sweden only when permitted to do so by an event.

[6.27] Only Finnish ski-mobile units and leaders can move during a Finnish Reaction Phase.

[6.28] Units in a motti can’t move during the Soviet Movement Phase. See 11.5.

[6.3] Terrain and Movement

[6.31] The Movement Chart lists the MP costs to enter various terrain. Units pay different MP’s to enter each terrain type, depending on their mobility class (6.13).

[6.32] There are eight types of hex terrain through which units can move: clear, woods, forest, marsh, rough, wooded rough, city and ice. Mountain and water hexes are prohibited terrain; units can’t enter them.

Exception: Mountain and mountain rifle units can enter mountain hexes.

[6.33] All rivers and all lakes except for Lakes Ladoga and Onega are frozen throughout the game. They are ice, not water and are a different color than the map’s water hexes. Hexes that are entirely unfrozen sea or shallow water are called water hexes. Hexes containing only unfrozen sea or shallow water are called water hexes. Units can’t enter these hexes or cross these hexes unless they are frozen. Once frozen, water hexes/ hexes become ice hexes/hexes. Hexes with both land and water are called coastal hexes; for movement purposes, treat them as if they were entirely land.

[6.34] Units that enter a hex by crossing an ice hexside pay the MP cost to cross the hexside in addition to the cost to enter the terrain in the hex. The frozen rivers and small lakes that are specifically shown as ice hexsides on the map end the hexside separating frozen shallow water from each other are all ice hexsides within the meaning of this case.

[6.35] Units that enter a hex by moving along a road (e.g., through a hexside containing a road symbol) ignore the other terrain in the hex and pay the road MP cost to enter the hex. Where a road or rail line crosses a sea or ice hexside, a bridge exists, and units ignore the cost to cross the hexside.

Important Note: Assume that a road exists wherever you see a rail symbol.

[6.36] The bodies of land separated from the mainland by the sea or by a surrounding lake are islands. For game purposes, islands in coastal hexes are part of the mainland. In addition, all islands occupying the same hex are treated as a single island. Water hexes containing islands that aren’t part of coastal hexes and aren’t connected to the mainland by roads can’t be entered by normal movement. Units can enter them only after they become ice hexes or, in the case of the Soviet player, per 16.3 (Baltic Islands).

[6.37] The Movement Chart’s MP costs to enter a city apply only to cities that are friendly, or that were friendly at the game’s start and that contain no enemy units. Units can’t enter enemy cities during a Movement, Finnish Reaction or Soviet Exploitation Phase. They must instead attack enemy cities during a Combat Phase and then enter them in a post-combat advance per 9.46.

[6.38] Hex 0918 is a clear hex at the start of the game. Whenever a Soviet unit first enters hex 0918, the Finnish player can, at his option, announce that he is opening the gates of the Saimaa Canal, inundating the hex. Thereafter, hex 0918 is treated as clear for purposes of combat and as marsh for purposes of movement and paratroops. In addition, half the AS of all units attacking out of hex 0918 during the game turn in which it is inundated and the game turn that follows. The Finnish player can exercise this option during movement, during a paratroop or during a post-combat advance or retreat. However,
if he doesn’t exercise it at the moment that a Soviet unit first enters hex 0918, the option is permanently lost; he can’t exercise it later.

[6.39] Units can’t exit the map except as part of a required withdrawal per 13.4 (Withdrawals). Once withdrawn, units can’t reenter the game.

[6.4] Freezing Water

**Important Note:** Certain unfrozen water hexes and hexsides (see 6.33) freeze and change to ice during the game. Be sure to carefully distinguish between what is “ice” and what is “water” when playing.

[6.41] There are two types of water hexes on the map:

- Sea
- Shallow Water

[6.42] Sea hexes and hexsides never freeze. Units can’t enter sea hexes. They can only cross sea hexes if they are bridged by roads and railroads.

[6.43] Shallow water hexes in Lakes Ladoga and Onega automatically freeze and become ice hexes on Game Turn 5. They stay frozen for the rest of the game.

[6.44] Shallow water hexes in the Gulf of Finland automatically freeze and become ice hexes on Game Turn 11. They stay frozen for the rest of the game.

[6.45] Turn Track boxes 5 and 11 contain the same pattern as shallow water hexes to remind you that different shallow water hexes freeze on those game turns.

[6.46] Game events (including thaws) have no effect on the formation of ice.

[6.5] Rail Movement

[6.51] Rail movement is a special form of movement that can be used only during Movement (not Finnish Reaction or Soviet Exploitation) Phases instead of normal movement. During each Movement Phase, the active player can use rail movement to move any number of friendly units an unlimited distance.

[6.52] A unit can use rail movement only if it is supplied and occupies a friendly rail hex that isn’t in an enemy ZOC at the start of its Movement Phase and then expends all its MP’s to move by rail. Simply remove the unit from its hex and place it in any other friendly rail hex that isn’t in an enemy ZOC and that is connected to the first hex by a continuous line of friendly connected rail hexes free of enemy ZOC’s. The presence of a friendly unit in a hex negates an enemy ZOC for purposes of rail movement.

[6.53] Finnish units (including Foreign Volunteers and Western units) can use rail movement only to move between hexes in Finland along rail hexes in Finland.

**Exception:** Once Event H or I occurs, Finnish units (including Foreign Volunteers and Western units) can also use rail movement to enter, leave and/or pass through hex 3307 in Sweden as if it were part of the Finnish rail net.

[6.54] Soviet units can use rail movement only to move between hexes in the USSR along rail hexes in the USSR.

[6.6] Map Key

See map.

[6.7] Movement Chart

See map or Player Aid Card.

[7.0] Stacking

The term stacking refers to having more than one unit in a hex. Players must observe stacking limits at the end of each Movement Phase, Finnish Reaction Phase and Soviet Exploitation Phase, whenever they place reinforcements on the map and at the end of each advance and retreat during a Combat Phase.

[7.1] Stacking Procedure

At the end of each Movement Phase, Finnish Reaction Phase and Soviet Exploitation Phase, whenever they place reinforcements on the map and at the end of each advance and retreat during a Combat Phase, the players make a stacking check to ensure that stacking limits are being observed. In each hex in which a player is violating stacking limits, he must immediately remove enough units to ensure that his remaining units conform to those limits. Treat units removed for violating stacking limits as if they were eliminated in combat.

[7.2] Stacking Limits

[7.21] Each combat unit has a stacking value printed on its piece. This value is measured in terms of stacking points.

[7.22] You can have up to six stacking points per hex above the Severe Weather Line.

[7.23] You can have up to 12 stacking points per hex below the Severe Weather Line.

[7.3] Stacking Checks

[7.31] All friendly combat units in a hex count toward that hex’s stacking limit.

[7.32] HQ’s, leaders and markers don’t count toward their hex’s stacking limit.

[7.33] In the rare cases when opposing units temporarily occupy the same hex (due to amphibious assaults executed per 16.14 and 16.22), compute stacking limits for each side separately. The presence of enemy units never affects the number of friendly units that can be in the hex.

[7.34] You can’t place reinforcements on the map in violation of stacking limits. If a reinforcement can’t enter play due to this stricture, then you must withhold it and bring it into play later per 13.34.

[7.4] Massing Troops

[7.41] At his option, the Soviet player can have double the normally permissible number of stacking points in hexes that meet any of the following conditions:

- The hex is a city hex.
- The hex is next to a city hex.
- The hex is within five hexes (four intervening hexes) of any city hex that is part of Leningrad (0422, 0423, 0523, 0524, 0622, 0623).

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Whenever the Soviet player exercises this option, he is considered to be missing troops in the hex.

[7.42] The Soviet player is subject to the restrictions and penalties in Section 9.0 (Combat) when he masses troops in a hex.

[7.5] Inspecting Stacks

Neither player can inspect the other players' stacks except when determining the combat ratio during combat.

Exception: The Finnish player can inspect Soviet stacks whenever he has a Finnish ski-mobile unit next to them that isn't actually in the process of moving.

Note: This rule requires a certain amount of honesty between players. If you find your opponent exceeding acceptable societal boundaries in this area, we suggest picking up an iced bottle of Absolut, Stoli or the local Finnish brand, taking a stiff swig and then slamming him over the head with what remains. If you're playing solitaire, you are free to inspect stacks, of course; but keep the bottle handy. It's winter. It's Finland. You're Suomi Alone. What else is there?

[8.0] Zones of Control

The hex a combat unit occupies and the six surrounding hexes constitute that unit's Zone of Control (ZOC). These hexes are called controlled hexes. The presence of a ZOC inhibits movement and retreat by enemy units and the tracing of enemy Lines of Communication (LOC's) and Lines of Supply (LOS's).

[8.1] ZOC Effects

[8.11] All combat units exert a ZOC into all six surrounding hexes at all times except as follows:

- The Finnish 4th Tank I does not exert a ZOC.
- Soviet units in a motti do not exert a ZOC. See 11.5.
- No unit ever exerts a ZOC into a hex or across a hexside containing terrain that it is prohibited from entering/crossing during normal movement.

Unlike combat units, leaders and HQ's never exert a ZOC.

[8.12] Units aren't affected by friendly ZOC's.

[8.13] It costs extra MP's to enter and/or leave a hex in an enemy ZOC:

- All leg and motorized units (including Soviet HQ's) pay one MP to enter or leave a hex in an enemy ZOC.
- Ski-mobile units pay one MP to enter or leave a hex that is in an enemy ZOC and that is south of the Severe Weather Line.
- Ski-mobile units pay one MP to enter a hex that is in an enemy ZOC and that is north of the Severe Weather Line.

[8.14] MP costs to enter and leave hexes in enemy ZOC's are in addition to terrain costs. Units that don't have enough MP's to pay all terrain and ZOC costs associated with a move can't make that move.

[8.15] Units can both enter and leave any number of ZOC's during a Movement Phase if they have enough MP's. However, Soviet units can't move directly from one hex in an enemy ZOC into another hex in an enemy ZOC if both hexes are above the Severe Weather Line. They must first enter at least one hex that is free of enemy ZOC's. Soviet units can move directly between two hexes in enemy ZOC's if at least one of the hexes is below the Severe Weather Line.

[8.16] Units can't trace an LOS or LOC through a hex in an enemy ZOC.

[8.17] ZOC's affect post-combat advances and retreats per Section 9.0 (Combat).

[8.18] The presence of a friendly combat unit or HQ in a hex negates an enemy ZOC for purposes of tracing LOS's and LOC's and for purposes of retreat. It does not do so for movement purposes.

Note. The presence of friendly combat units doesn't negate enemy ski-mobile ZOC's for purposes of determining if an unsupplied unit is in a motti.

[8.19] If a given unit is in an enemy ZOC, then the unit exerting that ZOC is also in the friendly unit's ZOC (if any). The two units are equally and mutually affected.

[8.2] Extent of ZOC's

[8.21] A unit's ZOC extends into all adjacent hexes that the unit could enter during normal movement, if it had the requisite MP's. Its ZOC does not extend into prohibited hexes (including enemy cities with an active IDS). See 6.37.

[8.22] ZOC's extend across all hexsides except water hexsides. The presence of a bridge across a water hexside negates the water hexside for ZOC purposes.

[8.23] Friendly and enemy ZOC's coexist in the same hex. A ZOC's effectiveness doesn't change merely because an enemy ZOC also exists in the same hex.

[8.24] There is no additional effect from having more than one friendly or enemy ZOC exerted on a hex.

[9.0] Combat

Combat occurs between adjacent opposing Units at the active player's discretion. The active player is the attacker; the inactive player is the defender. The attacker first announces all of his attacks. He then individually resolves each attack, using the procedure detailed below.

[9.1] Combat Procedure

1. Total the AS of the attacking units.
2. Total the DS of the defending units. If the hex under attack is a city, add its Intrinsic Defense Strength (IDS) to this total.
3. Compare the attacker's total to the defender's total and state the comparison as a probability ratio: attacker's strength to defender's strength. Round this ratio down (in the defender's favor) so that it conforms to the simplified odds ratios (1-1, 2-1, 3-1, etc.) on the Combat Table. The result is called the combat ratio.

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4. The attacker finds the line at the top of the Combat Table for the terrain in the defender’s hex and reads across the row of entries in that line until he comes to the combat ratio from step 3.

5. The attacker shifts the combat ratio to the right the appropriate number of columns for any leaders, HQ’s, artillery units, tank units or AP’s he is using and for surprise. He can’t shift further right than the right-most Combat Table column for the combat’s terrain line found in step 4; ignore any excess column shifts.

6. The defender shifts the combat ratio to the left the appropriate number of columns for any leaders, HQ’s or AP’s he is using and for the presence of towns, ice and bridges. He can’t shift further left than the left-most column of the Combat Table; ignore any excess column shifts.

7. If all attacking units are supplied, the attacker rolls two dice. Otherwise, he rolls one die. He then finds the result in the Combat Table’s left-most column. The attacker reads across the entries opposite that result until he gets to the entry in the column found in step 6. This is the combat result.

8. Add one (1) to the Soviet player’s printed combat result if any Soviet units involved in the combat occupy hexes in which the Soviet player is missing troops per 7.4. A No Effect ("-") result becomes a “1” (not a bold 1). Skip this step if the printed result was an “E.”

9. Subtract one (1) from the defender’s printed combat result if any defending units occupy fortifications that were friendly to them at the game’s start. A bold result remains bold; a “1” becomes a “-.” Skip this step if the printed result was an “E” or “-” result.

10. The players immediately apply the combat result before resolving any other attacks. See 9.8.


[9.21] Units can attack only during a friendly Combat Phase. They can attack any and all enemy units and cities to which they are adjacent. Only units directly adjacent to an enemy unit or city can attack it. Units with an AS of 0 (zero) can still attack per 9.45.

[9.22] A unit can’t attack into a hex or across a hexside that it’s prohibited from entering during its Movement Phase. In practice, this case has three main effects:

- No unit can attack across an unbridged water hexside. Units can attack across ice hexsides and across bridges.
- Non-mountain units can attack enemy units in mountain hexes only if they attack along a road. Mountain units can freely attack enemy units in mountain hexes, regardless of the presence of roads.
- Motorized units can only attack enemy units in rough and wooded rough hexes if they attack along a road.

[9.23] Attacking is completely voluntary: units aren’t forced to attack, and not every unit that is next to an enemy unit must make an attack. A unit that isn’t involved in an attack isn’t affected by its results.

[9.24] You can attack an enemy-occupied hex using as many units as can be brought to bear from the six adjacent hexes.

[9.25] No unit can attack or be attacked more than once per Combat Phase.

[9.3] Multiple Unit and Multi-Hex Combat

[9.31] All units in a given hex must be attacked as a single combined DS. The defender can’t withhold a unit from the defense, nor can the attacker attack one unit in a hex without involving all of the other units in the hex in that attack.

[9.32] Other units in the same hex with an attacking unit need not participate in the same combat with it (or in any combat, for that matter). When one unit in a stack is attacking, the other units in the stack could choose to attack the same hex, one or more other hexes or no hex at all.

[9.33] If a unit is next to more than one enemy-occupied hex, it can attack all of them in a single combat. Any number of units and hexes can be involved in a given combat. However, no matter how many units or hexes are involved, all attacking units must be next to all defending units.

[9.34] If two or more hexes containing different terrain are being attacked in a single combat, use the Combat Table terrain line that is most favorable to the defender. This is always the line closest to the bottom of the table.

[9.35] A given unit’s Attack and Defense Strengths are unitary; that is, they can’t be divided among different combats for purposes of either attack or defense.

[9.4] Combat Strength Modifications

[9.41] The Soviet 44th Motorized Rifle XX and 52nd, 88th, 104th, 122nd, 138th, 155th and 163rd Rifle XX each consist of three regiment-sized units. When all three regiments making up one of these divisions are supplied and stacked in the same hex, they get a Divisional Integrity Bonus. Increase the AS and DS of each regiment by one. Apply this effect before halving each unit’s AS for terrain per 9.43 and 9.44.

Note: The reduced strength of 718/139 Rifle w is not a misprint. This unit’s strength differs from that of the division’s other regiments for historical reasons.

[9.42] Halve the individual Defense Strengths of unsupplied combat units. Round fractions down. Treat a modified DS of less than one as “0” (zero). However, see 9.45.

[9.43] Halve the individual Attack Strengths of combat units attacking out of hex 0918 during the game turn in which it is inundated or during the following game turn. Round fractions down. Treat a modified AS of less than one as “0” (zero). However, see 9.45.

[9.44] Halve the individual Attack Strengths of motorized units attacking enemy units in rough, wooded rough and mountain hexes. Round fractions down. Treat a modified AS of less than one as “0” (zero). However, see 9.45.

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Regardless of actual Attack and Defense Strengths, each side has a minimum strength of "1" for purposes of combat ratio calculation. This rule is especially important when dealing with units having an Attack or Defense Strength of 0 (zero). If, after combining the strengths of all units in a hex together with any active IDS in the hex, the final strength of the stack is 0, then the units in that hex have a total combined strength of "1" for combat purposes, regardless of their actual strength.

Example: Two Soviet NKVD regiments (AS of zero) attack a reduced-strength Finnish Border Guards battalion (DS of zero) in a woods hex. After making all strength modifications, each side still has a strength of zero, but the combat ratio is calculated as if each side's total strength was one.

Each city on the map has an Intrinsic Defense Strength (IDS) of two (2) when friendly to the player who controlled it at the game's start. This value represents home guards, militia, paramilitary police, etc. Use the city's IDS as the hex's Defense Strength when it is unoccupied; add its IDS to the Defense Strength of any friendly units when the hex is occupied. A captured city temporarily loses its IDS. It gets its IDS back when recaptured by the side that controlled it at the start of the game.

Regardless of the strength of the opposing sides, always round the combat ratio down (in favor of the defender).

Design Note: Why do we round off in favor of the defender? Why not simply use that rule for Mrs. Snagglepuss taught us in the 2nd grade about .5 and over, round up, lower than .5, round down? The rounding-down premise is "the defender's vigor," that slight edge that all units have when on the defense. That advantage is partially built into the CRT and partially handled by the rounding-down rule.

The Finnish Player can use his leaders to affect combat by shifting the combat ratio column in his favor per Section 14.0 (Leaders).

If one or more supplied Soviet tank units are attacking and it is Game Turn 1 or 2 or if the Finnish 4th Tank is attacking for the first time, shift the combat ratio column one column to the right.

If one or more supplied Soviet artillery units are attacking, shift the combat ratio column one column to the right. Apply this column shift even if the only attacking unit is an artillery unit.

If all attacking units are attacking across ice hexes and/or water hexes containing bridges, shift the combat ratio one column to the left. Bridges do not negate ice hexes for combat purposes.

If there are one or more towns in the defender's hex(es), shift the combat ratio one column to the left.

If it is Game Turn 1 or 2, the Soviet player is aided by the surprise nature of his attack. If it is Game Turn 1, shift the combat ratio for all Soviet attacks two columns to the right. If it is Game Turn 2, shift one column instead.

The Combat Table consists of a number of columns of results. The further to the right a column is, the more it favors the attacker; the further left it is, the more it favors the defender. Surprise, the special effectiveness of some weapons, air power, the support of higher headquarters and the effects of hexside terrain are represented by column shifts. This section details all available column shifts; they are also summarized on the Player Aid Card. Apply all column shifts to the right before applying any shifts to the left. All column shifts are cumulative.

You can't apply more column shifts than there are columns available. Once you shift as far right or left as you can on the terrain line for the current combat, you can't make any more shifts in that direction.

Both players can use their available Air Points (AP's) to affect combat by shifting the combat ratio column in their favor per Section 15.0 (Air Power).

The Soviet player can use his HQ's to affect combat by shifting the combat ratio column in his favor per Section 10.0 (HQ's). An HQ can affect any combat involving one or more friendly combat units (including units stacked in the same hex with the HQ). An HQ has no effect on combat solely involving friendly HQ's (including itself).

The Combat Table
See map or Player Aid Card.

See Player Aid Card.

Each combat unit and HQ has one or more strength levels called steps. The Combat Table results represent steps lost or hexes retreated (each player having the option of satisfying a combat result by either retreating or standing and taking losses). However, see 9.84. The removal of steps from a unit or its inability to finish a retreat can cause its elimination (removal from the game).

HQ's and those combat units whose backs are blank have one step. A one-step unit is eliminated when it loses a step.
[9.83] All combat units printed on two sides have two steps. Their first step is represented by their front (full strength) side; their second by their back (reduced strength) side. When a full-strength, two-step unit sustains a one-step loss, flip it over to its reduced side; if its reduced side is already showing, eliminate it.

[9.84] Possible combat results include step losses, retreats and eliminations (loss of all steps). There are four types of printed Combat Table results:

- A "-" is a No Effect result; units that sustain this result don't lose any steps or have to retreat.
- An "E" is an Eliminated result; all participating units are automatically eliminated when they sustain this result. You can’t retreat to satisfy an E result.
- A number result (1, 2, etc.) means that you must either remove that number of steps from one or more affected units or else retreat all of those units that number of hexes. The player who controls the units affected by a combat result decides whether to stand and take losses or retreat. He must do one or the other; he can’t satisfy part of it by removing steps and the rest by retreating. If he decides to stand and take losses, he can apportion those losses among his units however he wants so long as the total number of steps removed equals the combat result.
- If a number result is bold, then the affected side automatically loses one step, and can’t retreat to satisfy the loss. Removing this step satisfies the first loss represented by the result. Any remaining losses after the first step is removed can be satisfied by either retreating or removing additional steps (but not both). Except for the required first step loss, treat bold results just like other numbered results.

Example: A pair of full-strength, two-step units attack an enemy-occupied hex and sustain a combat result of 2. You can satisfy this loss in three ways:

- You can subtract the entire loss from one unit, eliminating it.
- You can flip over both units to their reduced side, removing one of required step loss from each unit.
- You can retreat both units two hexes.

If the 2 result had been boldfaced, you would have been required to flip over one unit to satisfy the first loss. You could then have satisfied the second loss by removing the already reduced unit, flipping over the other unit or retreating both of the attacking units one hex.

[9.85] Some combat results are split results (e.g., 1/1). In a split result, the defender always sustains his result first, whether it’s a step loss or a retreat. Once he satisfies all of the requirements of his combat result, the attacker then sustains his result. If any attacking units are still in their original hex after the attacker satisfies his result and any of the defender’s hexes are vacant, then the attacker can advance any or all surviving units into the vacated hex(es) per 9.9. The defender never advances in a split result, though he can do so if the combat result affects only the attacker.

[9.86] Only units that were actually involved in a combat are affected by its results. Step losses are apportioned only among involved units, and only those units can retreat. If the involved units can’t retreat and can’t satisfy all required step losses, they are eliminated, and there is no further effect. Only units actually involved in a combat can advance into the vacated enemy hex.

[9.87] If the defender sustains any combat result during an attack on an unoccupied city hex, the attacker’s units can enter the city (making it friendly to them) during a post-combat advance just as if it had been vacated by the defender. Defending units can enter an enemy city (making it friendly to them) during a post-combat advance only if the city was actually vacated as a result of the attacker’s units retreating or being eliminated and there was no split result (per 9.85).

[9.88] There are three cases where units can’t retreat to satisfy a combat result:

- The attacker suffers the result while attacking one or more enemy units in fortifications that were friendly to the defender at the game’s start. In multi-hex combats, this restriction applies even if only one of the hexes under attack has a fortification.
- The Soviet player suffers the result during Game Turn 1-4.
- The Soviet player suffers the result during a combat involving one or more hexes in which he is massing units per 7.4.

[9.9] Advances And Retreats

[9.91] Advances and retreats are voluntary. A unit is never forced to advance or retreat after combat. The player who controls a unit always decides whether it advances or retreats and determines the path it follows.

[9.92] Units always advance and retreat individually. The units making up a stack can retreat in different directions if desired. If retreating units leave more than one retreat path (per 9.97), then advancing units can enter any or all of the hexes vacated during those retreats; they aren’t restricted to following any one retreat path.

[9.93] Units must observe the following restrictions when retreating:

- Except as noted in 9.94, a retreating unit must end its retreat in a hex that is separated from its original hex by a number of hexes exactly equal to the combat result.
- A retreating unit can enter only those hexes which it could legally enter during its Movement Phase (assuming it had enough MP’s). It can’t retreat into impassable terrain or across impassible hexes.
Arctic Storm

- Finnish units that start their retreat in Finland can't retreat into any hex in the USSR.
- Soviet units that start their retreat in the USSR can't retreat into any hex in Finland.
- Units can't retreat into Norway or Sweden unless Event H or I has occurred.
- Advancing and retreating units can't enter hexes containing enemy combat units or HQ's.
- A unit must retreat into a vacant hex in preference to one containing one or more friendly units unless the vacant hex is in an enemy ZOC. Within this restriction, advancing and retreating units can freely enter, exit and/or pass through friendly-occupied hexes during their advance/retreat.
- Units must always end their advance/retreat in conformance with stacking limits. If they fail to do so, then the player who controls the retreating units must eliminate enough units from each hex that isn't in conformance so as to satisfy the stacking limits are being observed.
- If a unit can't finish its retreat due to impassable terrain or enemy units, the retreating unit is eliminated in the last hex it can enter.

[9.95] Advancing units ignore enemy ZOC's. Retreating units ignore enemy ZOC's exerted in friendly-occupied hexes and can freely exit vacant hexes in an enemy ZOC. If a retreating unit enters a vacant hex in an enemy ZOC, the player who controls that unit rolls one die and modifies the resulting number. If the modified result is 1-4, the unit loses a step before entering the hex. If the result is greater than 4, the unit enters the hex without additional loss. Modify this die roll as follows:

- Subtract 1 if the retreating unit is Soviet.
- Subtract 3 if the retreating unit was in a motti at the start of the combat.
- Add 2 if the retreating unit is ski-mobile.

[9.96] If a unit retreats into a friendly-occupied hex that is then attacked during the same Combat Phase, the retreat unit doesn't add its strength to the hex's defense. However, if the units with which it's stacked suffer any result except - (No Effect), the unit is eliminated, regardless of whether the other units in the hex retreat or stand and take step losses. Eliminating units for this reason doesn't count toward satisfying combat losses.

[9.97] When a unit retreats (or is eliminated), it leaves behind it a path of hexes called the retreat path. Any or all of the attacker's or defender's victorious units that participated in the combat and aren't in a motti can advance along this enemy retreat path as far as they want. They can follow it to its end, or they can end their advance anywhere along the retreat path. Advancing units can't stray from the retreat path (e.g., they can't enter hexes that weren't entered by a retreating enemy unit). Advancing units can freely enter an enemy city that has just been evacuated, ignoring its IDS, as soon as they do so, the city becomes friendly. Advancing units can't enter enemy-occupied hexes or enemy cities with an active IDS that were unoccupied at the beginning of the combat. The option to advance must be exercised immediately, before any other combat values are resolved.

[9.98] Units can't attack or be attacked during the rest of the Combat Phase after making a post-combat advance. Even if their advance puts them next to enemy units that aren't being attacked or whose combat hasn't been resolved, they can't participate in any additional combat.

[9.99] If all units in a hex are eliminated in a combat, any victorious units that aren't in motti can advance two hexes. The first hex entered must that formerly occupied by the defender's eliminated units. The second can be any adjacent vacant hex. If the first hex is a city, ignore its IDS; the city becomes friendly when entered. The second hex can't contain an enemy city with an active IDS.

[10.0] Soviet HQ Units

Soviet HQ's are motorized units representing army, corps and group command and support infrastructure. For game purposes, corps and group HQ's are functionally identical. HQ's are either active or inactive. Soviet combat units that are within the Command Radius of an active HQ are said to be in command. They can draw supply from that HQ and benefit from its Command Bonus.

[10.1] HQ's and LOC's

[10.11] All Soviet combat units benefit from being in command. A combat unit is in command if it can trace a Line of Communications (LOC) to an active HQ. An HQ is active if it is supplied.

[10.12] An LOC is a continuous chain of hexes equal to the HQ's Command Radius traced from the unit back to the HQ. It includes the HQ's hex, but not the combat unit's hex. Observe the following restrictions when tracing an LOC:

- All hexes of the LOC must be passable to the unit tracing the LOC during normal movement.
- No hexes of the LOC can contain an enemy combat unit or an enemy city with an active IDS.
- The LOC can be traced into a hex containing an enemy ZOC only if that hex also contains a friendly unit.

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[10.2] Command Benefits

[10.21] Combat units that are in command during the Soviet Supply Phase are supplied for the rest of the game turn per Section 11.0 (Supply).

[10.22] If one or more Soviet combat units that is involved in a given combat can, at the moment of combat, trace an LOC to an active HQ, then the Soviet player can choose to shift the combat ratio a number of columns in his favor equal to that HQ's Command Bonus. If the units are attacking, shift right; if defending, shift left. The following restrictions apply:

- Each combat can be affected by only one HQ.
- Each HQ can use its Command Bonus only once per phase, and it must be active in order to do so.

[11.0] Supply

There are two possible supply states: supplied and unsupplied. Units other than Finnish leaders and Sissi (partisan) units must be supplied in order to operate up to their potential. Finnish leaders and partisans don’t need to be supplied and are unaffected by the rules in this section.

[11.1] When to Check Supply

[11.11] The Soviet player determines if his HQ’s are supplied during the Supply Segment’s Soviet Command Phase.

[11.12] The Soviet Player determines if his combat units are supplied during the Supply Segment’s Soviet Supply Phase.


[11.14] Units that are supplied during the Supply Segment are supplied for the rest of the game turn, regardless of any changes in the battlefield situation. Units that are unsupplied during the Supply Segment remain unsupplied for the rest of the game turn even if they subsequently satisfy the conditions for being supplied.

[11.2] Supply Determination

[11.21] A Finnish unit or Soviet HQ is supplied if it can trace a Line of Supply (LOS) from the hex it occupies to a supply source that has the capacity to supply it. Trace this LOS from the unit’s hex (exclusive) to the supply source hex (inclusive) just as if the unit were expending MP’s to move along a chain of connected hexes between the two.

[11.22] Except in the case of rough and wooded rough hexes, trace an LOS using the MP costs in the Movement Table’s Mot column. It costs three MP’s to trace an LOS into a rough or wooded rough hex.

[11.23] An LOS can be traced only across hexes and into hexes through which a motorized unit could move during a Movement Phase, assuming that it had sufficient MP’s. You can trace an LOS into, out of and through rough and wooded rough hexes per 11.22 even though these hexes are normally prohibited to motorized units. You cannot trace supply into or through mountain hexes except along roads; units occupying mountain hexes can trace supply out of those hexes though.

[11.24] Trace an LOS along roads and railroads at the road movement rate in the Movement Table’s Mot column.

[11.25] The total MP cost to cross the hexes and enter the hexes through which an LOS is being traced can’t exceed the following limits:

- Soviet LOS = 20 MP’s.
- Finnish LOS = 25 MP’s.

[11.26] You can’t trace an LOS into a hex containing an enemy HQ or combat unit.

[11.27] You can only trace an LOS into a hex in an enemy ZOC if that hex contains a friendly unit other than a leader.

[11.28] All hexes in an LOS must be friendly to the player whose unit is tracing the LOS.

[11.29] Soviet combat units don’t have to trace an LOS. Instead, a Soviet combat unit is supplied if it occupies any Leningrad hex (0422, 0423, 0523, 0524, 0622 or 0623) or Soviet supply source or can trace an LOC (per 10.2) to a supplied HQ that has the capacity to supply it.

- Each supplied Army HQ can supply 50 stacking points.
- Each supplied Corps or Group HQ can supply 15 stacking points.

To remind you of their greater supply capacity, Soviet Army HQ’s have a colored box around their unit ID on the front of their piece.

Note: Make sure that you understand the difference between an LOC and an LOS before starting play. Trace the former by counting hexes. Trace the latter just as if the unit tracing the LOS were expending MP’s to move through the hexes making up the LOS.

[11.3] Supply Sources

[11.31] The supply sources available to each player are printed on the map. Only Soviet units can draw supply from Soviet supply sources. Only Finnish units can draw supply from Finnish supply sources. There are two categories of supply sources available to each player: major and minor. Both types are described in 11.34 through 11.37.

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[11.32] All supply sources in the USSR are friendly to the Soviet player at the game’s start and can be used to supply Soviet units. All supply sources in Finland (but not in Norway and Sweden) are friendly to the Finnish player at the game’s start. Finnish supply sources in Sweden and Norway and the Finnish supply source in hex 4506 are inactive at the game’s start and can’t be used. They are activated during play and become friendly to the Finnish player for the rest of the game per Events H and I.

[11.33] Supply sources remain friendly to the player to whom they belong until they are captured (entered) by enemy units. If captured, they stop functioning as supply sources. If recaptured (entered by friendly units), they once again start functioning as supply sources.

[11.34] Oulu (2910), Turku (0506), Helsinki (0511) and Viipuri (0919) are Finnish major supply sources. Any number of Finnish Army and Foreign Volunteer (but not Western) units can draw supply from them.

[11.35] All Finnish supply sources above the Severe Weather Line except for Oulu are Finnish minor supply sources. Of these, Finnish units can use only Petsamo (5416) at the game’s start. The others, including those in Sweden and Norway, become active during play per Events H and I. Up to 12 stacking points of Finnish Army and/or Western units can draw supply from each active minor supply source.

[11.36] Murmansk (5121), Tallinn (0111) and hexes 0733, 0129, 0125 and 0124 are Soviet major supply sources. Each Soviet major supply source except Murmansk can supply any number of Corps or Army HQ’s (plus any combat units stacked in the supply source). Murmansk can supply two corps HQ’s (plus any combat units stacked in the supply source).

[11.37] Petrozavodsk (1729), Medvezhegorsk (2028), Belomorsk (3027), Kàem (3226), Kandalaksha (4220) and Polyanyny (5220) are Soviet minor supply sources. Each can supply one corps HQ (plus any combat units stacked in the supply source).

[11.38] Soviet units can also be supplied per 15.23, 15.3, 16.23, 16.22, 16.24 and 16.33, and Western units can be supplied per 16.14.

[11.4] Supply Effects

[11.41] Soviet HQ’s have two sides: supplied (front) and unsupplied (back). To show that an HQ is supplied, leave its front side up. To show that it’s unsupplied, flip it over so that its back is showing. To show that a combat unit is unsupplied, place a No Supply marker on it.

[11.42] Unsupplied HQ’s are inactive. They have no Command Radius or Command Bonus. Units can’t trace an LOC to an inactive HQ.

[11.43] Unsupplied units can’t receive replacements.

[11.44] Unsupplied units can’t move during the Soviet Exploitation Phase.

[11.45] Unsupplied Soviet units get no strength bonuses for having all of a division’s regiments in the same hex.

[11.46] Unsupplied combat units have their Defense Strengths halved (rounded down). Strengths of less than 1 are treated as ‘0’ (zero).

[11.47] If any of the units participating in an attack are unsupplied, roll one die (instead of two) to resolve the attack.

[11.48] When the Soviet player finds that one of his units is unsupplied, he must check to see if it’s in a motti per 11.5.

[11.49] Place a No Supply marker on each unsupplied unit to show its status.

[11.5] Mottis

Historical Note: Motti (Mo’-tee) is a Finnish word meaning “wood stacked for cutting.” During the Winter War, the Finns applied the term to pockets of Soviet troops that had been cut off from support and were awaiting annihilation.

[11.51] When the Soviet player finds that one of his units is unsupplied, he checks to see if it’s in a motti by examining the surrounding hexes. If all six hexes adjacent to the unit are impassable to that unit, occupied by Finnish combat units and/or in the ZOC’s of Finnish skimmobile units (regardless of the presence of Soviet units in the hex), then the unit is in a motti. Show this by placing a motti marker on the unit. The marker remains as long as the unit is unsupplied and meets the conditions of this case.

[11.52] Units in mottis operate under the following restrictions:

- They can’t move.
- They have no ZOC.
- They can’t advance after combat.
- They suffer a penalty when trying to retreat through an enemy ZOC.

[12.0] Replacements

Each player gets Replacement Points (RP’s) that he can use to strengthen reduced-strength units and rebuild previously eliminated units. During his Reinforcement Phase, each player gets the number of RP’s listed in his RP row on the Turn Track plus any additional RP’s that he accrues due to events. The player uses these RP’s to strengthen or rebuild his combat units. For each RP expended, he flips one reduced-strength unit over to its full-strength side or takes one previously eliminated unit as a reduced-strength reinforcement.

[12.1] Obtaining RP’s

[12.11] Neither player gets any RP’s on Game Turn 1 or 2. Starting on Game Turn 3, each player gets RP’s at the rates indicated in his RP row of the Turn Track.

[12.12] Players can get additional RP’s per the Events Table.

[12.13] The Finnish player gets two different types of RP’s:

- Finnish RP’s. Unless otherwise noted, all RP’s allotted to the Finnish player are Finnish RP’s that he can use to strengthen or rebuild Finnish Army and Foreign Volunteer units.
- Western RP’s. Under some circumstances, the Finnish player also gets Western RP’s that he can use to strengthen British, French and Polish units.
[12.14] Players can immediately use any or all of their RP's, or they can save all, some or none of them for use during later Reinforcement Phases. There's no limit to how long players can save RP's.

[12.15] Arctic Storm has a Replacement Track and three RP markers (Soviet, Finnish and Western) for use in tracking RP additions and expenditures. As you get and spend RP's, place each marker in the Replacement Track box representing the total number of RP's of that type that you have. If you have more than ten RP's of a given type, flip the marker over to its +10 side.

[12.16] You can't accumulate more than 19 RP's of a given type. When you have 19 RP's of one type and receive an additional RP of that type, you must use the new RP during the current Reinforcement Phase. If you can't or won't do so, you permanently lose the new RP.

[12.2] Using RP's

[12.21] During your Reinforcement Phase, you can use RP's for two purposes: to strengthen eligible reduced-strength units and/or to rebuild previously eliminated units. You can use RP's for both purposes during the same game turn as long as you spend one RP for each step worth of strengthening/rebuilding.

[12.22] There is no limit to the number of RP's that you can use in a game turn. However, you can't use more RP's than you have available, and you can't strengthen or rebuild a unit without spending RP's to do so.

[12.23] You can strengthen a supplied reduced-strength unit by spending one RP to flip it over, adding one step to the unit and making it a full-strength unit. You can't strengthen unsupplied units.

[12.24] You can rebuild a previously eliminated unit by spending two RP's to do so. The unit appears as a reinforcement per 13.2. If the unit has two steps, it enters the game as a reinforcement at reduced strength. Once on the map, you can strengthen it on a later game turn. You can't strengthen a unit during the same game turn you rebuild it, nor can you rebuild a unit at full strength.

[12.25] You can use Soviet RP's to rebuild any previously eliminated Soviet rifle division, mountain rifle division or rifle regiment or to strengthen any supplied reduced-strength Soviet unit. You can use Soviet RP's to strengthen, but not rebuild, motorized rifle, tank, cavalry, mechanized cavalry, marine, mechanized artillery, ski, paratroop, parachute infantry or NKVD units; once eliminated, these units are gone for good. You can't rebuild HQ's.

[12.26] You can use Finnish RP's to rebuild any previously eliminated Finnish Army or Foreign Volunteer brigade, regiment or division or to strengthen any supplied reduced-strength Finnish Army or Foreign Volunteer unit. You can't use Finnish RP's to rebuild company and battalion-sized units; once eliminated, these units are gone for good.

[12.27] Except as noted in the Event Key, you can't use Finnish RP's to strengthen or rebuild Western (British, French or Polish) units. Under specified circumstances, the Finnish Player gets Western RP's earmarked solely for this purpose. You can use these RP's to strengthen any supplied reduced-strength French, British or Polish unit. You can't rebuild eliminated Western units.

[12.3] Replacement Track

See map.

[13.0] Reinforcements

The players add new units to their forces as detailed in this section. These new units are called reinforcements.

[13.1] How They Appear

During his Reinforcement Phase, each player checks his Reinforcement Schedule to see what reinforcements, if any, he is due that game turn. Game turns in which the players get reinforcements have a letter in their Replacements row of the Turn Track. The letter in the current game turn's box is the Reinforcement Schedule letter that the player checks to see what reinforcements he gets. The player places these units on the map or sets them aside for later entry, at his option. Reinforcements have no effect on play until they are actually placed on the map. Once placed, they immediately function in the same way as units already in play.

[13.2] Where They Appear


Exception: See 13.42.


[13.3] Restrictions

[13.31] You can only place reinforcements on the map in a supplied state. You can't place them in a given hex if this would leave them unsupplied.

[13.32] You can only place reinforcements in friendly hexes.


[13.33] You can't place reinforcements on the map in violation of stacking limits. See Section 7.0 (Stacking) for details.

[13.34] Reinforcements that don't enter play the game turn they become available can enter during any subsequent game turn. Alternatively, they need never be brought into play. However, once they enter the game, they can't be voluntarily withdrawn.

[13.4] Withdrawals

[13.41] The Soviet player has to withdraw his Group G HQ from play on Game Turn 6. In addition, the Finnish player may have to withdraw some Finnish units as a result of Events I and P. Once withdrawn, units never reenter play.

[13.42] Withdraw the Group G HQ by simply removing it from the map. Replace it with the 13.xxxx HQ, which you place directly on the map in the hex formerly occupied by the Group G HQ. If the Group G HQ has already been eliminated at the start of Game Turn 6, then the 13.xxxx HQ enters as a normal reinforcement instead.
[13.43] Foreign Volunteer units that must withdraw per Event 1 are immediately removed from the map in the same manner as the Soviet Group G HQ.

[13.44] Western units that must withdraw per Event P must move to the western map edge and expend one additional VP to exit the map.

[13.45] Only the units listed in 13.41 can be withdrawn and only under the circumstances detailed herein and on the Event Key.

[13.46] Withdrawing units doesn’t result in any VP gain. If a unit was eliminated before it could be withdrawn, then it’s elimination does result in a VP gain.

[13.5] Finnish Reinforcement Schedule

See map or Player Aid Card.

[13.6] Soviet Reinforcement Schedule

See map or Player Aid Card.

[14.0] Finnish Leaders

The Finnish Player has four leaders (Haglund, Heinrichs, Siilasvuo and Talvela) who had an effect on the historical campaign out of proportion to the size of their commands. He can use these leaders each game turn to affect the outcome of combat during both combat phases.

[14.1] How to Use Leaders

Whenever Soviet units attack a hex containing a Finnish leader, the Finnish player can, at his option, shift the combat ratio column for the combat to the left a number of columns equal to the leader’s Defense Bonus. Whenever one or more attacking Finnish units are stacked with a leader, the Finnish player can, at his option, shift the combat ratio column to the right a number of columns equal to the leader’s Attack Bonus.

[14.2] Leader Restrictions

[14.21] Each leader can affect only one combat per phase.

[14.22] The Finnish player can use only one leader per combat.

[14.23] Leaders have no ZOC. Soviet units ignore the presence of Finnish leaders for movement purposes. However, see 13.26.

[14.24] Leaders can’t attack or defend alone. Their presence has no effect on whether a hex is friendly or enemy. Unlike other units, leaders don’t make an enemy hex friendly by entering it. Soviet units can’t attack Finnish leaders that are alone in a hex that doesn’t have a functioning IDS. A Finnish leader that is in a city is not “alone.”

[14.25] Finnish leaders never die. You never eliminate them, even if all of the units with which they are stacked are wiped out. You can’t destroy them in order to satisfy a step loss.

[14.26] When a Soviet unit enters a hex that doesn’t have a functioning IDS and that contains only a Finnish leader, the leader is displaced. Remove it from the map and place it on the next game turn’s Turn Track box. The leader arrives as a reinforcement during next game turn’s Finnish Reinforcement Phase. Place it in any friendly city in Finland or in any Finnish-occupied hex.

Exception: Leaders displaced on Game Turn 18 are removed permanently.

[15.0] Air Power

Soviet air superiority should have played a decisive role in the Winter War. However, difficult terrain, bad weather and Finnish tenacity kept this advantage from being felt outside the main battle front. For this reason, Arctic Storm abstractly portrays the air war. Air assets are represented by Air Points (APs) with which players can support their units.

[15.1] Air Points

[15.11] Each game turn, the players get the number of AP’s listed on their AP line of the Turn Track for use during that game turn.

[15.12] You can use each of your AP’s to shift the combat ratio one column to the right when you are the attacker or to shift it one column to the left when you are the defender. AP’s used during the Finnish Combat Phase can’t be used during the Soviet Combat Phase and vice versa.

[15.13] You can use a maximum of four Soviet AP’s and two Finnish AP’s to affect each individual combat.

[15.14] Each player can use no more than two AP’s north of the Arctic Circle during a given game turn.

[15.15] The Soviet player can use no more than eight AP’s north of the Severe Weather Line during a given game turn. This total includes AP’s used north of the Arctic Circle.

[15.16] AP’s that aren’t used during their game turn of availability are lost. They can’t be saved for later use.

[15.2] Soviet Paratroops

[15.21] The Soviet player gets 201st Paratroop x and 9th and 10th Parachute Infantry x’s as reinforcements as a result of Event N. These units function as normal combat units. In addition, each of them can make one paratroop per game.

[15.22] A unit can make a paratroop only if it starts the Soviet Movement Phase in Leningrad. The Soviet player picks up the unit and places it in any unoccupied clear, city, woods or marsh hex within eight hexes. He then checks for paratroop survival by rolling a die and adding 1 if the target hex is woods or marsh and 4 if it’s a city.

☐ If the modified result is 1–6, the unit sustains no losses.

☐ If the modified result is 7–10, the unit loses one step (and can’t retreat to satisfy the loss).

☐ If the modified result is greater than 10, the unit is eliminated.

If the unit making the paratroop survives the die roll, its hex immediately becomes friendly, just as if the paratropped unit had advanced into it after combat.
16.0] Sea Power

The Soviet player controls the Barents Sea and the Gulf of Finland at the start of the game. This control gives him certain special capabilities.

16.1] The Barents Sea

16.11] The Soviet player controls the Barents Sea throughout the game except when an H, I or J Event has occurred. Whenever any one of these events occurs, the Soviet player permanently loses control of the Barents Sea.

16.12] If the Soviet player controls the Barents Sea and Petsamo is friendly to him, he can use that town as a minor supply source. Petsamo temporarily ceases to be a Soviet minor supply source when it becomes friendly to the Finnish player. It permanently ceases to be a Soviet minor supply source when the Soviet player loses control of the Barents Sea. The Finnish player can use Petsamo as a supply source whenever it is friendly to him, even when the Soviet player controls the Barents Sea.

16.13] At his option, the Soviet player can deploy two regiments of 104th Rifle (x) in hex 5517 at the start of the game. These units are supplied throughout Game Turn 1. If, at the end of the Soviet Combat Phase of that game turn, Petsamo isn’t friendly to the Soviet player, the Soviet player can, at his option, place these units in Murmansk (5121); they are presumed to have moved there by sea. The Soviet player must exercise the option to move these units to Murmansk after executing his last attack on Game Turn 1: he permanently loses this option at the start of the first Finnish Reaction Phase.

16.14] If, during the Finnish Reinforcement Phase in which Event I occurs, Petsamo is occupied by one or more Soviet units, then the two Western units landing at Petsamo must do so by making an amphibious assault. The Finnish player makes an immediate attack with the two units just as if it were a friendly Combat Phase. This attack can be supported by any adjacent friendly units that would normally be allowed to attack during a Finnish Combat Phase, and can be supported by Finnish AP’s. All combat results sustained by the Finnish player must be taken as step losses. If, at the end of the combat, Petsamo is still occupied by one or more Soviet units, the Western units are destroyed, and no further Western units can enter play. If, at the end of the combat, the hex is occupied only by Finnish units, the hex immediately becomes friendly to the Finnish player. The Western units are automatically supplied throughout the game turn.

16.2] The Gulf of Finland

16.21] The Soviet player controls the Gulf of Finland during Game Turn 1–5. Starting on Game Turn 6, no one controls the gulf.

16.22] During the Soviet Combat Phase of any one game turn in which the Soviet player controls the Gulf of Finland, he can make an amphibious assault against any one of three Finnish-held hexes: Turku (0506), Hango (0207) or Helsinki (0511). He moves his 1st Marine x from Kronstadt (0521), Tallinn (0111) or hex 0523 to the target hex and uses that unit to attack the hex just as if the marines occupied an adjacent clear hex not separated from the target hex by any hexside terrain. If the target is Hango and it’s unoccupied, the attacking unit sustains no losses in the combat; it automatically advances into Hango, which becomes friendly to the Soviet player. Otherwise, the Soviet player resolves the attack according to the standard combat procedure in 9.2. All combat results sustained by the either player must be taken as step losses. If, at the end of the combat, the Soviet unit is the sole occupant of the target hex, the hex becomes friendly to the Soviet player. Otherwise, the Soviet unit is eliminated. The Soviet Marine unit is supplied throughout the game turn in which it makes an amphibious assault.

16.23] During the Soviet Movement Phase of each game turn during which the Soviet player controls the Gulf of Finland, the Soviet player can move one unit between any two of the following hexes: Turku, Helsinki, Hango, Kronstadt, Tallinn, 0523. Both hexes must be friendly to the Soviet player.

16.24] During game turns in which the Soviet player controls the Gulf of Finland, he can use Turku, Helsinki and Hango as special supply sources when friendly. All

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Note: A city’s IDSs doesn’t directly affect paratroop survival; the +4 die roll modification for cities replaces their IDS when checking for paratroop survival.

15.23] Units move and have combat normally for the rest of the game turn after making a paratroop. They undergo no special restrictions due to the paratroop other than any losses they suffer per 15.22.

15.24] A unit is supplied for the rest of the game turn after making a paratroop.

15.25] Any number of units can paratroop during the same game turn. Units can also paratroop on different game turns. However, each unit can make only one paratroop per game turn.

15.26] If a unit paratroops into hex 0918 before it is inundated, the hex is clear. The Finnish player decides whether to inundate the hex only after the first unit paratroops into it. If he decides to inundate the hex, treat it as marsh for all subsequent paratroops, including any additional paratroops made during the same game turn.

15.3] Soviet Air Supply

The Soviet player has an Air Supply capacity. At any time—even when the Finnish player is the active player—the Soviet player can use this capacity to supply all Soviet units in any one hex of his choice that is south of the Severe Weather Line. Remove all No Supply markers from the units in that hex; they are supplied for the rest of the game turn (even if they leave the hex). Supplying units by air doesn’t use any of the AP’s received per 15.1.

There are two situations where the Soviet player can’t supply units by air:

- The Soviet player can’t supply units by air when Event B is in force.
- The Soviet player can’t supply units by air in a hex where he is massing troops per 7.16.
Soviet units that are in or adjacent to any of these friendly hexes during the Supply Segment are automatically supplied for the rest of the game turn.

[16.3] Baltic Islands

[16.31] The islands in hexes 0415, 0515, 0517 and 0518 are friendly to the Finnish player on Game Turn 1. However, he can’t deploy units on them.

[16.32] The islands listed in 16.31 become friendly to the Soviet player on Game Turn 2. Thereafter, he can move one unit per game turn from one of the hexes listed in 16.33 to any one of those island hexes (0415, 0515, 0517 or 0518) during Game Tums 2-5 (up to a maximum of one unit per hex). Once a unit moves to an island, it stays there until Game Turn 11, after which it is free to leave.

[16.33] Soviet units in hexes 0415, 0515, 0517 and 0518 are automatically supplied.

[17.0] How to Win

The Soviet player gets Victory Points (VP’s) during play for capturing Finnish towns, cities and fortifications. He loses VP’s for a variety of reasons. Players keep a running VP total by moving the VP markers along the Victory Track. The Victory Track total at the end of the game determines who wins. Alternatively, the game can end early without any need for determining a victor if one player wins an automatic victory.

[17.1] Ending the Game

The game ends in one of three ways:

- One player wins an automatic victory per 17.4 (Automatic Victory).
- The players agree to truce talks as a result of a Soviet peace offer per 17.5 (Diplomacy). The final Victory Track total after truce talks modifications determines who wins.
- It is the end of Game Turn 18. Southern Finland’s muddy season starts, making further campaigning impossible. The final Victory Track total determines who wins.

[17.2] Tracking VP’s

Move the VP markers along the Victory Track to show the number of VP’s gained or lost by the Soviet player. If the Soviet VP total falls below zero, flip the marker over to its back (negative) side; if the total again rises to zero, flip it back over to its front (positive) side. Find the game’s winner and his level of victory by comparing the VP total at the end of the game to the VP totals on the Victory Table. The entry next to the span of numbers within which the game’s VP total falls shows the winner and his level of victory.

[17.3] VP Accumulation

[17.31] The Soviet player starts the game with 65 VP’s. He gains and loses VP’s during play per 17.12 through 17.39.

[17.32] The Soviet player gets three VP’s each time he captures a fortification in Finland, one VP each time he captures a town in Finland and ten VP’s each time he captures a city in Finland. He gets VP’s for a fortification in addition to any VP’s for a town or city in the same hex.

[17.33] The Soviet player loses one VP each time the Finnish player captures a town in Finland or the USSR, five VP’s each time the Finnish player captures a Soviet major or minor supply source in the USSR and ten VP’s each time the Finnish player captures a city in Finland or the USSR. Hexes must be friendly to the Soviet player before the Finnish player can capture them. If a hex is both a city or town and a supply source, the Soviet player loses VP’s for both features.

[17.34] The Soviet player loses one VP each time he uses an RP to strengthen or rebuild a unit. He also loses one VP each time he removes a unit from the map for any reason other than a required withdrawal. These losses occur immediately. At the end of the game, the Soviet player loses one VP for each unit whose reduced strength side is showing.

[17.35] The Soviet player loses one VP each time a moti marker is placed on the map.

[17.36] Starting on Game Turn 6, the Soviet player automatically loses three VP’s at the start of each game turn.

[17.37] The Soviet player automatically loses ten VP’s when Events H, I or J occur.

[17.38] The Soviet player gets VP’s for each of these objectives that are friendly to him at the end of the game:

<table>
<thead>
<tr>
<th>Objective</th>
<th>VP’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petsamo (5416)</td>
<td>10</td>
</tr>
<tr>
<td>Nausti (4914)</td>
<td>5</td>
</tr>
<tr>
<td>Hango (0207)</td>
<td>10</td>
</tr>
<tr>
<td>Turku (0506)</td>
<td>15</td>
</tr>
<tr>
<td>Oulu (2910)</td>
<td>15</td>
</tr>
<tr>
<td>Helsinki (0511)</td>
<td>20</td>
</tr>
<tr>
<td>Viipuri (0919)</td>
<td>20</td>
</tr>
</tbody>
</table>

[17.39] The Soviet player automatically loses 20 VP’s if the game ends at the end of Game Turn 18 due to the onset of the muddy season. He doesn’t lose these VP’s if the game ends per 17.4 (Automatic Victory) or 17.5 (Diplomacy), even if the game doesn’t end until Game Turn 18. For purposes of the rule, it is how, not why the game ends that is important.

[17.4] Automatic Victory

[17.41] If, during any Turn Segment, one player has units anywhere on the map and the other player has no units on the map, the game immediately ends in an Automatic Decisive Victory for the player who still has units on the map.

[17.42] If, during any Turn Segment, all hexes of Leningrad are friendly to the Finnish player, the game ends in an Automatic Finnish Decisive Victory.

[17.43] If, during any Turn Segment, Helsinki, Turku and Oulu are all friendly to the Soviet player, the game ends in an Automatic Soviet Decisive Victory.

[17.44] If, at any time, the VP Track total exceeds 99, the game ends immediately. The Soviet player wins an Automatic Decisive Victory if the total is positive. The Finnish player wins an Automatic Decisive Victory if it’s negative.
[17.5] Diplomacy

(Do you feel lucky, punk?)

As you can see from this section’s modest length, there isn’t much diplomacy in Arctic Storm. In fact, the only reason it’s here is to give you a way to end the game early. The diplomacy thing just isn’t something you’re likely to do in December or January. But long about February or March, when the Soviets have to worry about whether they’re going to end up in an undeclared war with the British and French (not to mention getting bogged down in the spring mud), offering to exchange a few VP’s for peace can be mighty attractive. And, if you’re the Finnish player, and you’re not sure how long your weakened line north of Leningrad can hold—well, you might be inclined to agree.

[17.51] During each Diplomatic Phase, the Soviet player can, at his option, make a peace offer. Peace offers that get accepted lead to immediate truce talks, which result in VP adjustments arrived at by comparing two player die rolls.

[17.52] Each Soviet peace offer consists of an offer to end the war on terms involving a positive modification to one player’s truce talks die roll. This modification abstractly represents a commitment to specific postwar reparations and transfers of territory. It can take the form of an addition to either the Soviet or the Finnish truce talks die roll. Alternatively, the Soviet player can propose that both players make unmodified die rolls.

Example: “The Soviet people talk peace with bourgeois fascist White Finns in exchange for addition of five to Soviet truce talks die roll.”

[17.53] If the Finnish player rejects a Soviet peace offer, the Soviet player loses one VP, and the game continues.

[17.54] If the Finnish player accepts a Soviet peace offer, the players immediately roll two dice. If the peace offer included a proposal for an addition to one player’s die roll, that player modifies his die roll accordingly. The players then compare the modified results.

[17.56] The Soviet player can make any number of peace offers during the game, but he can make only one offer per game turn.

[19.0] Background

On 30 November 1939, the Soviet Union attacked the tiny state of Finland in an attempt to force the former Grand Duchy back into the (now Sovietized) Russian Empire. Following a crushing 30-minute artillery shell ing, the Finnish army, consisting of a vanguard of an army of 600,000 men and 1,701 tanks, surged across the frontiers, overpowering the green reserves who made up 80% of the 300,000-man opposing army. The invasion force was deployed by Leningrad Military District commander, Kirill A. Meretskov, who mounted six widely separated advances along a 1,400-kilometer front.

The Isthmus. The Karelian Isthmus, between the Gulf of Finland and Lake Ladoga, is the traditional route by which Sweden and Russia have always invaded each other, and Meretskov evidently felt that what was good enough for Peter the Great was just fine for him. He assigned 230,000 troops of Yakovlev’s 4th Army to push through the isthmus north of Leningrad and then on to the main Finnish forces holding the fields just south of the 140-kilometer-long Mannerheim Line. Awaiting Yakovlev behind the Mannerheim Line was Osterman’s Army of the Isthmus, consisting of Olshuist’s 2nd Corps and Heinrichs’ 3rd Corps and a battery of supporting troops and reserves. A separate 21,500-man covering force tasked in the forests between the Mannerheim Line and the Soviet frontier, in order to make the Soviet advance to the Mannerheim Line as costly as possible.

Ladoga-Karelia. Separated from the Isthmus by Lake Ladoga is a narrow corridor of militarily significant terrain south of Ladoja and the difficult lake country. Here, Meretskov deployed two corps of Kovalcev’s 8th Army, plus eight additional rifle divisions assembling behind the front. Kovalcev was to drive through this corridor to Sortaval, threatening the communications of the main Finnish forces in the Mannerheim Line. His two corps would operate independently, one pushing along the northern shore of Lake Ladoga while the other secured the northern route through Ilimaari and Tolvajari. Heiskanen’s 4th Corps had the unenviable job of stopping Kovalcev along a 30-kilometer front with just two divisions and five independent battalions.

The Central Front. Chukhov’s 5th Army was supposed to drive across Finland’s narrow waist to the Gulf of Bothnia at Kerää and Oulu, slicing the country in half and cutting off communications with friendly Sweden. Chukhov’s forces were to advance along these three axes:

- Salla Axis. The right-wing Special (45th Rifle) Corps was to march to Salla and thence southwest to Rovaniem, Lapland’s first (and only) city.

- Sioumussalmi Axis. Chukhov’s main force, 45th Rifle Corps, was to push through the town of Sioumussalmi and drive to Oulu.

- Rebbia Axis. The smaller Rebbia Group was to push into the Kuiru area from Rebbia and, from there, march northwest to join 45th Rifle Corps’ advance on Oulu.

See map.

[17.6] Victory Track

See map or Player Aid Card.

[17.7] Victory Table

See Events Card.

[18.0] Setup Chart

See Events Card.
**Arctic Storm**

Opposing Chukov's army along the 680-kilometer stretch of wilderness making up this front were a couple of independent battalions of Tuapche's Northern Group.

The Arctic Front. The inhospitable reaches of northern Finland contained two important objectives: the port of Petsamo and the naval mines at Nautilus. Frolow's 14th Army, based on Murmansk, was to secure both. Once they were in Soviet hands, Frolow could drive down the Arctic Highway to Norvegialand and link up with the Special Corps. Frolow's opposition consisted of a company-sized guard force, four independent infantry battalions and some Porolcare Guard companies of Tuapche's Northern Group.

**March Into Disaster**

Meretskov's initial attack overwhelmed the Finns along most of the front. During the last week, Soviet troops in Petsamo drove to the Mannerheim Line, while in Ladoga-Karelia, they punched through almost to Ilootammi. In the Arctic, 10th Rifle Division had some problems taking Petsamo, despite having crossed the border a day ahead of the rest of the Red Army, but Frolow was marching on Nautilus by the end of the first week. Only on the Central Front did the Soviets have real problems. There, Chukov's right wing took Salla on the first day of the war, but was stopped cold at Kemijarvi, while his main force bogged down around Suomasalmi, and the Rovelo Group was halted by Finnish reserves.

It was during the second week of the war that everything started to come apart for the Soviets. Low cloud cover in southern Finland delayed the 2nd of them with the advantage of air superiority until late December, and their first attacks on the Mannerheim Line got nowhere. By the end of the year, there was stalemate in the Imitatsum.

The advance of Kovaliev's overextended spearheads north of Lake Ladoga soon ground to a halt, and on the 27th, 4th Corps began to operate against their supply lines. During the next ten days, the Finns managed to chop up and pocket the 18th and 16th Rifle Divisions and 5th Heavy Tank Brigade inside a chain of isolated fronts.

Meanwhile, a rejuvenated Finnish defense, led by Colonel Paavo Talvela, stopped the Soviets around Ilootammi and the second week of the war. In a grueling four-day battle, Talvela's reinforced Group T forced the 139th Rifle Division to withdraw, leaving behind a thousand dead. The fighting in this area was a kind of watershed. For the first time, the Finns realized that they could beat—not just delay—the Soviets. And after Talvela, the Finns got very aggressive, indeed. Group T, now under General Talvela, chased the 78th Rifle Division all the way to Aittoski northwest of Vuotele, before Finnish CIC Field Marshal Carl Mannerheim stopped the attack to conserve manpower.

The biggest Finnish victory in those early days came at Suomasalmi. Here, during the second week of the war, the aggressive Colonel Jalmari Silasvuo put together a fresh brigade around the nucleus of 9th Division's 27th Infantry Regiment, a unit composed mostly of lumberjacks, who were at home in the deep forest, especially now that the snowpack was starting to form, making possible large-scale ski operations. This combination of commander and troops proved lethal to the Soviets. Outnumbered four to one, Silasvuo counterattacked. By the end of the war’s third week, the 163rd Rifle Division was cut off at Suomasalmi, awaiting rescue by the crack 40th Motorized Rifle Division, which was driving up the Rautel road. Within a few days, Finnish ski troops had cut off, cut up and immobilized that division too. On Christmas Eve, the Soviets tried to break out. They failed. During the fourth week of the war, with temperatures at -30°, the demoralized Mongolians and Ukrainians of 40th Rifle Corps, many still in their summer uniforms, began to slowly freeze to death in snow drifts up to two meters deep. On the 30th, Silasvuo finished mopping up the 163rd, by January, he had collected the 40th Motorized as well.

Total Soviet losses at Suomasalmi came to 22,500 killed and 9,000 prisoners, with the rest of the corps eliminated by wounds or frostbite. Finnish losses were 900 dead and 1,770 wounded.

Buoyed by Suomasalmi and Tolvojarvi, the Finns attacked everywhere. The 9th Division turned its attention to 5th Rifle Division, which it chopped up around Kuhmo in late January, along with a newly formed Soviet ski brigade sent to rescue it. After turning back Frolow’s 14th Army’s attack in late December, Wallenius’ newly formed Lapland Group attacked 122nd Rifle Division at Salla, killing it so badly during heavy fighting in January that the Soviets were forced onto the defensive in this sector for the rest of the war. On the northern shore of Lake Ladoga, the Finns pocketed the entire left wing of Kovaliev’s 8th Army and took no less than ten large pockets early in January. They spent much of the rest of the war wiping out most of these pockets in a complex series of engagements known to history as the march battles. Finnish aggressiveness forced the Soviets to commit yet another army (the 15th) to the battles in Ladoga-Karelia and to provide large numbers of motorized NKVD LOC troops to guard their rear elsewhere in Finland.

**The End of the Beginning**

The Soviets were hardly idle during all of this. January, 1940, saw a major command shakeup. A new Northwest Front replaced Leningrad MO and Anti-Communist KTL. Theirs, one of the Red Army’s most senior field commanders, came up from the Ukraine to run things. Meretskov was demoted to commanding 7th Army.

At the same time, the Soviets reinforced 7th Army and sent a new 12th Army to the Imitatsum. Dmitri G. Pavlov (whom the Russians quite seriously called the Soviet Gadusen) took command of a new mobile reserve, consisting of a rifle corps, a cavalry corps and a tank brigade; its mission was to attack across the ice of the Gulf of Viipuri and get behind the Finns. During January, Timoshenko’s troops underwent an accelerated program of training for winter warfare and assault operations. They also got new and better weapons, including KV tanks, armored sleighs, ski-mounted one-man armored shields, flame-throwing tanks and heavy artillery.

All of this marked the start of a new phase of the war—one where the Red Army would use its mass to real advantage by forcing Finland to fight a battle of attrition that it could not win. As heavy casualties made the Finns more Szovite, the Soviet Foreign Ministry would reopen diplomatic channels in hopes of finding a political solution to the war that had turned out so badly.

**Round Two**

On 1 February, after two weeks of shelling, 14 rifle divisions and six tank brigades of 7th and 12th Armies opened a softening-up attack against the Mannerheim Line. Day after day, Red Army commanders threw waves of troops at the enemy fortifications. Often three or four attacks per day struck the same position. Each attack was mounted by fresh troops and was preceded by a crushing artillery preparation and by air strikes. Tanks and armored sleighs closely supported each wave of attacking infantry. After ten days of this, the Soviets launched their main attack. This time, their efforts were crowned with success. By dusk, Soviet troops were through the main defenses in the Suurmu sector. Over the next three days, they tore a hole four kilometers wide and five deep in the forward defense line. By the 14th, the Finnish 2nd Corps was in full retreat from the Mannerheim Line to its second defense zone, the so-called V-Line covering Viipuri.

The Soviets reached the V-Line on the 17th and began to punch through it on the 19th. The entire position was on the verge of falling when a heavy blizzard brought Timoshenko’s attack to a screeching halt. Under cover of the bad weather, the weakened Finns regrouped their forces, evacuated Koivisto Island and withdrew into their final defensive position—the T-Line.

On 2 March, 7th and 12th Armies attacked the T-Line forcing the Finns back to the outskirts of Viipuri, where a bitter battle developed for Finland’s second city. At one point the fighting in western Karelia became so desperate that the Finns opened the sluices at the headwaters of the Saimaa Canal in an effort to stop the attackers. But the Russians advanced through chest-high freezing water to continue the attack. Meanwhile, the now thinly-stretched Finns barely halted an attack by 10th Rifle Corps across the ice of Viipuri Bay.

West of Viipuri, part of Pavlov’s Mobile Group attacked across the ice of bay and established a lodgement on the north shore. By the 9th, after turning back a Finnish counterattack, Pavlov was able to consolidate this foothold and bring a hundred tanks across the ice to support a fresh attack. By the 7th, he had cut the coastal highway east of Gräslari, cutting off the Finnish forces in Viipuri from the capital. Still the Finns fought on inside the city.

On 11 March, Meretskov opened a major assault on Viipuri with a drammatic barrage. During three days of shelling and street-fighting, the city was utterly destroyed. Finally, on 13 March, 7th Army battled its way into the wrecked city center, though the Finns continued to hold out in parts of Viipuri right up until the armistice. The "capture" of Viipuri was the Soviets’ one great prestige victory of the war.

**Bitter Spring**

On 13 March, after weeks of secret negotiations, the Soviets and Finns finally signed an armistice ending the Winter War. By noon, the guns were silent. Having at one point pitted 1,200,000 troops, 1,700 tanks, and 3,000 aircraft against a nation of only 320,000 which was never to put more than 300,000 troops into the field, Soviet Russia finally won its war with Finland. The overmatched Finns had lost 25,000 dead and 43,000 wounded, a heavy toll for a nation so small. The Red Army lost over 250,000 men killed and 400,000 wounded. In addition, against an ill-equipped enemy that started...
the war with only 100 Bofors AA guns, 162 antiquated aircraft and 112 Bofors 37mm AT guns, the Russians managed to lose an estimated 1,000 aircraft and 2,500 tanks.

The war had two main effects:

- It embittered the Finns: Finland lost the Bybatches Peninsula, the Kavkaz Islands, their islands in the Gulf of Finland and a chunk of real estate around Salla. It was also forced to grant the Soviets a 30-year lease on Hangö. The ducalissian peace terms helped lune the Finns into joining Hitler in a new war against Russia within 18 months.

- The magnitude of the Soviet defeat convinced the Germans that Russia was ripe for invasion. A German General Staff evaluation prepared at the end of the war's first month concluded that: "The Russian 'mass' is no match for an army with modern equipment and superior leadership."

Without the Winter War, Germany would have still invaded Russia in 1941—but the invasion would have been planned differently—and it would not have included the Finns.

(20.0) Design Notes

**Terrain**

Geography is destiny—at least in *Arctic Storm*. When you understand the map and terrain, most of the war's tactical questions are answered. For example, the Finns will never attack the big road junctions in the south, where the big crossings are. You'll need to use the rivers to your advantage, and the Finns will do exactly the same. The Finns will never attack the big road junctions in the south, where the big crossings are. You'll need to use the rivers to your advantage, and the Finns will do exactly the same.

**Weather**

After terrain, weather is the most important factor in the game. That's why it's called the Winter War.

**Factored Effects and the Gimme Shelter Rule.** From a military standpoint, winter in Finland sucks. It's real cold, the snow is thick, the days are short, and the nights are long. The Finns are at a disadvantage in this type of warfare because they lack the equipment and training to adapt to it. The Finns are at a disadvantage in this type of warfare because they lack the equipment and training to adapt to it.

**Weather-related Events.** When you're already

- **Frostbite.** The weather event that garnered most comment during testing was Frostbite. The playtests seemed to feel that frostbite should be a product of cold weather, and they're right. But everything is relative. Cold weather is hard on the troops (and has been factored into casualty rates), but wet weather is worse. A good thaw will fill up the aid stations with frostbite casualties faster than a blizzard. It's all quite simple, in fact. In winter, as long as the ground is frozen, all the water at the front have to worry about weather-wise is keeping warm. Once the ground thaws due to a temporary thaw, they also have to worry about keeping dry. The combination of wet feet and cold nights produces many times the casualties of cold weather alone.

**The Weapons & Armies**

The condition of the Winter War fielded two completely different armies, with different weapons, structures, and methods. But the Soviets had manpower, tanks, planes, and guns. The Finns had... and guns. That's the simple view. It's also pretty accurate.

**Motorization.** The Red Army during this period was more motorized than ever. An average rifle division in the game has 20 or so tanks, trucks, motorized artillery, and/or armored cars. This is in no way the case in real life. But it's a good approximation, and it's enough to make the game realistic. The Soviets had motorized units, and the Finns didn't. That's a significant difference, and it's a big part of what makes the game realistic.

**Artillery.** The Soviet motorized artillery divisions are more in the nature of "breakthrough artillery" than the direct-fire self-propelled gun units of later years. The artillery column shift in combat represents their special effectiveness on the attack.

**Tanks.** Soviet tanks were highly effective during the first days of the war in the south, when tank fights gripped the Finnish infantry, who had no effective AD defense. Then the Finns (who coined the term "tanker" (tanker) discovered how easy it was to screw up a tank and move it. The Finns used this to their advantage, and the Soviet tanks were a force to be reckoned with.

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Finnish tanks were notable for their absence. The Finns started the war with 31 obsolete Vickers tanks, divided into five companies, all but one of which operated mainly as tractors. The 40th Tank Company made a single attack in February that achieved modest success mainly as a result of surprise; hence the column shift when the otherwise insignificant Finnish tank unit makes its first (and usually last) attack.

Skiis. Skiis were the big equalizer in the Winter War. Most Finnish skiis were in wooden cross-country skis, and border guards, bicycle troops, ski troops and independent battalions of reservists were all issued skiis. In the Red Army, hardly anybody skied. The Soviets did eventually issue a lot of wooden skiis to their troops, but nobody knew how to use them, and the equipment was so shoddy that any the Finns captured got burned as kindling. What made skiis important was that winter opened up the landscape to cross-country movement—but only for men on skiis. Imagine a Finnish ski patrol shuèwing away from a successful long-range firefight to set up a new ambush down the trail a ways while their helpless victims had to make their way through chest-high drifts, and you get the idea. That’s why, in the game, ski-mobilie troops have greater M.A.S., pay fewer MP’s to enter most terrain and don’t have to pay to leave ZOC’s in the undeveloped country north of the Severe Weather Line. That’s also why ski-mobilie units have an especially effective ZOC (reflectcd in the mott rules). The reason for treating these units as log units during the first two game turns is that they were leg units! In many areas, the snowpack wasn’t deep enough for large-scale ski operations until mid-December, so the Finns didn’t issue skiis to most units until then.

Soviet Supply and Support. The Soviets have HQs because they had a lot of guns and tanks and trucks and, well, everything. They needed a more complex logistical arrangement to organize it all and keep the machines of war supplied, so Soviet units have to draw supply through HQs, while the less lavish equipped Finns get it direct. It’s not that the Finns didn’t have a good system; it’s just that they didn’t have the large network of depots and depots represented by Soviet HQs. The Finns also lacked all of those extra guns, tanks and engineers that a typical Soviet HQ could throw into a battle. Hence, the Finns’ modest corps-level assets are already factored into the strength of their infantry divisions and brigades (the main beneficiaries of corps artillery support), while Soviet HQs have combat bonuses that they can apply to individual battles anywhere within their zone of operations. Soviet army HQs represent both the named army HQ and its subordinate corps (including all of their assets), which is why bonuses and ranges differ so drastically.

By the way, checking supply once per game turn is more realistic than you might think. At Arctic Storm’s scale, it takes awhile to run out of supplies. Plus, units usually have a margin of hoarded consumables that the QM never hears about, and the ammunition and fuel held by combat units tends to get shuffled to the troops that are most hotly engaged, keeping combat performance at critical points high until shortages get really severe.

Finnish Leaders. The Finns may have lacked the heavy firepower and combat support assets represented by Soviet HQs, but they did produce some superior leaders. The game’s leader pieces represent these men and their personal command teams. The physical presence of these teams at the point of decision, where they could provide direction and boost morale, often gave the Finns a critical margin of military competence. In the game, leaders have to stack with the units they are helping; this represents the command team’s physical presence at a key point. Since the pieces represent both the named leaders and their key staffs and task force commanders, it seemed a little superfluous and somewhat unrealistic to provide mechanics for leaders getting killed and wounded. Instead, the game includes an abstract “displacement” system that represents command teams being dispersed or out of communications while evading the enemy. This system forces the Finnish player to use his leaders realistically and to balance his aggressiveness against the potential loss of a leader for a turn. The Soviets also had some decent officers in the field, notably Pavlov and Shtorn, but they didn’t exercise the same kind of personal leadership as men like Haaglund and Talvela.

Soviet Doctrine and Expectations. The prohibition against Soviet units retraining to satisfy losses dur¬ing CT’s 1-1 reflects both Soviet doctrine and the Soviet expectation that the Red Army would quickly overwhelm the Finns. Nobody wanted to be the one officer to order a retreat during the victory march; nobody wanted to be accused of Slackin. It was only after Smolensk that Soviet commanders started to be more flexible and realistic.

Finnish Improvisation. In October 1939, the Finns broke up their 30,000-man standing army to form the nucleus of a much larger force embracing hundreds of thousands of reservists. The expanded Army was only partly mobilized when war broke out, and the Finns were forced to improvise. This they did with vigor. Units changed names, were detached, attached, combined and recombined in a never-end¬ing Brownian movement. The original 9th Infantry Division, for example, started the war with two infantry regiments in the Oulu area and the third (the 27th) in the Isthmus. It never fought as a division—but a new division with the same number was formed at Suomasalmi around an independent brigade, which had, in turn, been formed quite recently around a core of the 27th Infantry Regiment (newly arrived from the Isthmus) and some local reservists. I felt the time, regiments fighting outside of the Monument Line never even saw their parent divisions; instead they fought as part of independent task forces that appeared and died as needed. Arctic Storm sorts out this tangle by breaking down doubtful units into their constituent parts and leaving them that way throughout the game.

Otherwise, the game would have included 50 more pieces, a much more complex replacement schedule and a lot of boring rules for what unit got replaced by what other unit when. Anyway, if you know enough about the Finnish cb to worry about where, say, the 13th Infantry Division got to, then you also probably know enough to look for it in the form of the 37th, 38th and 39th Infantry Regiments.

Foreign Volunteers. The one large volunteer unit that actually fought in the Winter War was a brigade of 8000 Swedish "volunteers" (most temporarily detached from the Swedish Army) that took over the defense of the Arctic mid-way through the war. Another, much smaller force of Norwegians never saw action. The Finnish volunteer unit represents a mixed bag of volunteers from Hungary, Italy, Britain and elsewhere who never saw action, but could have.

Sissi. These units were formed from local woodsmen and actually functioned as irregular scouts, but the Finns tended to call them partisans, and so they are named in the game. The sissi weren’t supposed to hold ground and didn’t have much in the way of heavy weapons. Mairly, their job was to gather intelligence, tear up the enemy rear area and kill Russians. They were very good at it: It was sissi depredations that were largely responsible for forcing the Soviets to bring in large numbers of NKVD LOC troops to guard their rear.

The Bri. The French, and the Poles. Foreign intervention isn’t all that likely in Arctic Storm, but when it does occur, it greatly changes the nature of the situation—as it would have historically. Committing a few squadrons of modern British and French fighters could have easily quadrupled the effectiveness of Finnish air power and forced the Soviets to curtail operations. Assuming that the Western Allies had gotten their act together to intervene, the game assumes that they would most likely have used the same forces that they actually employed in Norway in April. If the invasion was unopposed, 20-25% of the invasion force would still have had to be left behind to guard Norway; if opposed, 80% or more would have had to stay in Norway. A more difficult invasion of the Arctic coast would have required a sortie by the Home Fleet (dicey) and probably would have involved a smaller tribal force (say, about what could have been sent on to Finland in the wake of an unopposed invasion of Norway). If you don’t like these assumptions, feel free to use your own.

Victory. At first blush, the Arctic Storm’s victory conditions look a little cockeyed. But they accurately reflect Stalin’s desire to conquer Finland outright (or at least come away with some desirable real estate) balanced against his need to prop up Soviet prestige and avoid involvement in the larger war that was tearing Europe apart. The Soviet player gets VP’s during play for capturing objectives whose loss is likely to affect Finnish morale (towns, cities and fortifications). He gets VP’s at the end of the game for holding objectives of post-war political or economic significance (Petsamo, the nickel mines at Naussi, the capital of Estonia, etc.). He loses VP’s anytime anything happens that damages Soviet prestige, raises Finnish morale or draws the Soviets into the war between the Axis and Allies. For example, since killing lots of Russians is a big morale booster for the Finns, the Soviet player loses VP’s for losing units or having to commit replacements to the battle; the Finns, on the other hand, are fighting a war of national survival and so are not concerned with losses per se, so there’s no Soviet VP award for killing Finnish units. In other words, what’s being measured are the political and morale effects of game events—not their objective military value. Once you realize this, the victory conditions hopefully start to make sense.

The Arctic Storm map, rules and pieces contain a lot of Finnish words with which you are almost certainly unfamiliar. In fact, most of the place names on the map look to Western eyes more like grab bags of leftover vowels than actual words. That’s because Finnish, part of what linguists call the Finno-Ugric group, is mostly vowels. The alphabet has only 21 letters, and except for foreign words and proper names, you hardly ever see the letters b, c, d, f, g, w, x or z. This eccentricity…combined with a complete lack of definite articles…makes Finnish one of the most difficult languages for Westerners to comprehend. The fact is, it’s so difficult that one in 20 Finns don’t even speak Finnish as their main language; they speak Swedish instead.

Don’t despair, though. If all you need to do is understand and pronounce a few proper names, it’s not all that hard. In fact, Finnish is actually a fairly logical language. Read on.

Pronouncing Pyhaselka and Other Delights

Actually, its pronounced pyo-o-hal-kel-kah. Follow these rules when pronouncing other Finnish words:

- With few exceptions, you say them just like you spell them.
- Always put the stress on the first syllable. In words with more than three syllables, place a lighter stress on the third, fifth or seventh syllable. Never stress the last syllable.
- Single vowels are short; double vowels are veeveeeery long.

How to Read and Say Place Names

Most of the Finnish words on the game map are place names built up by stringing together a few basic terms. Once you grasp these terms, it’s easy to understand and pronounce most Finnish place names.

Ala (ah-lah). Lower.
Etelä (ay-tel-lah). South.
Huippu (Hoo-poo). Peak or summit.
Jarvi (yaar-vee). Lake, especially a small lake.
Joki (yaar-kee). River, especially a small river.
Kaupunki (kow-poon-kee). Town.
Kirikko (kihr-ko). Church.
Koski (kaw-see). Waterfall.
Kylä (kyleh). Village.
Laakso (lahk-ro). Valley or gorge.
Lahti (lah-tee). Bay or inlet.
Linna (lee-nah). Castle.
Mäki (mahr-kee). Low hill.
Metsä (Meh-tah). Wood or forest.
Napapiiri (Nah-pah-peer-ee). Arctic Circle.
Niemi (nee-ee-mee). Peninsula.
Norja (Nor-ya). Norway.
Norjalainen (Nor-yah-lay-nen). Norwegian.
Pohjoa (pah-hoo-la). North.
Ranta (rahn-tah). A level coastline or beach.
Ruotsi (roo-oot-see). Sweden.
Saari (sahr-ree). Island.
Salmi (sah-lum). Strait or narrow. An arm of the sea or a channel between two lakes.
Selkä (sel-ka). A wide stretch of water.
Siltä (sill-tah). Bridge.
Suo (soo). Bog, marsh or moor.
Suomi (soo-oom). Finland.
Suu (sou). River mouth.
Tori (toh-ree). Market or market square.
Torni (toh-nee). Tower.
Vaara (vaah-ra). Mountain ridge.
Vuori (Voo-oree). Mountain.
Vesi (vesee). A small body of water. Especially, a small lake.
Ylä (eye-lah). Upper.

Special Terms

Hakkaa Palle (hahk-ah-pay-law). Finnish battle cry from the Thirty Years’ War, when a third of Gustavus Adolphus’s army consisted of Finns. It means, literally, “Cut them down!” The Finns revived the battle cry early in the Winter War, and their Russian and Ukrainian adversaries came to thoroughly loathe it. In fact, it scared the bejesus out of them.

Motti (Mooh-tee). Wood stacked for cutting. During the Winter War, the Finns applied the term to pockets of Soviet troops that had been cut off from support and were awaiting annihilation.

Sisar (see-sah). Guts. Courage of an extreme nature—like taking on a bear with a pocket knife.

Sissi (see-sih). Courageous ones. The name the Finns gave to their partisan units.

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[4.3] Course of Play Outline

A. Event Segment
   1. Event Phase
   2. Diplomatic Phase

B. Supply Segment
   1. Soviet Command Phase
   2. Soviet Supply Phase
   3. Finnish Supply Phase

C. Soviet Player Turn
   1. Soviet Reinforcement Phase
   2. Soviet Movement Phase
   3. Soviet Combat Phase
   4. Finnish Reaction Phase
   5. Soviet Exploitation Phase

D. Finnish Player Turn
   1. Finnish Reinforcement Phase
   2. Finnish Movement Phase
   3. Finnish Combat Phase

E. Turn Segment