

Arctic Storm

The Russo-Finnish Winter War, 1939-40



Haaglund

 2-2-9

20

 4-2-5

1x Ski

 3-2-4

1

 9-6-3

5ii Bike

 1-1-5

© Rodger B. MacGowan 1993

The following articles on Arctic Storm, and the battles of the Winter War, are designed to complement each other and give you some insight into the game and period.

Jim Werbaneth cracks the hard nut of an army's relationship to the environment in which it operates, in the process showing how Arctic Storm simulates the harshness of the historical battlefield. On the other hand, John Kranz takes a look at Arctic Storm from the perspective of a frustrated Soviet player. Game Designer David James Ritchie presents us with a fascinating historical module on the Battle of Suomussalmi. We conclude our C3i Cover Feature with two new game variants for Arctic Storm by Jack Polonka.

Hakkaa Paalle! Armies, Environment, and Arctic Storm

BY JIM WERBANETH

The Winter War of 1939-1940 captured the imagination of the world. It was David and Goliath. A totalitarian empire tried to brutally subjugate one of its lost provinces, a democracy that had become independent only after centuries of foreign domination.

As in the *Old Testament*, size, power and arrogance did not add up to an easy victory. Finland, though small and weak, managed to cut Stalin's proud army to pieces. Though the Soviets did manage to grind down the Finns in the end, it was an excruciatingly difficult victory, which was almost as hard a blow to Soviet prestige as a clear defeat would have been.

i

"...understanding the relationship of the contending armies to the environment in game terms, and formulating appropriate strategies and tactics, is essential to victory..."

A number of factors permitted the Finns to resist so effectively and aggressively. One was a greater degree of agility, and a willingness to use it in order to run rings around a less mobile enemy. Small Finnish forces could dance around their prey, striking when they wished, and withdrawing on their own terms. Mobility was the great force multiplier. Though the Soviets were the aggressors, for much of the war it was Finland that held the initiative.

But underlying it all was the fact that the Finnish army was built in tune with the Finnish environment. It relied less on motorization than on skis. The soldiers were skilled in their use, and thoroughly at home in the frozen woods of their country. Combined with their superior tactical-level initiative and courageous ruthlessness, their environmental compatibility made for a horrible nightmare for their enemies.

The Russians called it *belaya smert*. It means white death.

Whereas the Finns made the best of their circumstances and overcame their material shortages, the Soviets were seldom able to take full advantage of their staggering advantages in numbers, airpower, and equipment. The root of their problems was that the Red Army was built for combat in other, less demanding theaters. It might have been a fearsome entity on the plains of Ukraine, particularly in the summer, but was far less suited for combat in the great frozen north.

If there is one principle that *Arctic Storm* players must remember, it is this: understanding the relationship of the contending armies to the environment in game terms, and formulating appropriate strategies and tactics, is essential to victory.

offensive punch, especially early in the game. In addition, tanks and other motorized units can exploit holes in the Finnish lines, at least in areas of clear terrain or a good road net.

But the problem is, these conditions do not occur very often. First of all, knocking a hole through enemy defenses is much easier said than done, and is seldom accomplished in a single turn. One factor is the combat results table, which is very hard on attackers, even at the highest odds. A victory can leave the winning side too depleted to exploit.

Just as critical is a severe shortage of tank-friendly terrain. The game map is overwhelmingly wooded and marshy, a terrible arena for armored operations. Except in the farthest north, roads can offer good, direct avenues to the cities and towns. On the other hand, the forests and swamps on either side channelize the advance. As the Finns have far better mobility in general and lateral movement in particular, they can block a road-bound advance easily.

Clear terrain actually offers less opportunity to the Soviets. Most of it is in the

southwest, between Helsinki, Turku and Pori. If Russian tanks are operating there, then their side has probably already won anyway. Nothing demonstrates the conflict between the Soviet army and the environment more than their tanks.

Airpower is another asset largely negated by the harsh environment, this time by the weather rather than conditions on the ground. The USSR has a huge superiority in air points, which can raise borderline attacks to overwhelming odds. In addition, the Soviets can parachute supplies to cut off units, sometimes staving off disaster.

But once again, reality does not approach promise. One of the most common random events is Event C - cloudy skies. This prohibits Soviet resupply by air throughout the theater of war, and combat air support south of the Arctic Circle. Although overcast becomes progressively less common as the game goes on (and the weather gets colder and clearer), it denies the USSR a vital advantage in the critical, early stages of the game.

Remember that, in 1939, aircraft (like armor) amounted to a good-weather, temperate-zone weapon, hard to use with consistent effectiveness in the far north.

If the Soviet army is defined by what it has, then the Finnish one is defined by what it doesn't. There is no significant armor, or even mechanization of any kind. As for airpower, in *Arctic Storm*

The Soviet BT-7-2:

Main Russian Battle Tank during the Winter War.

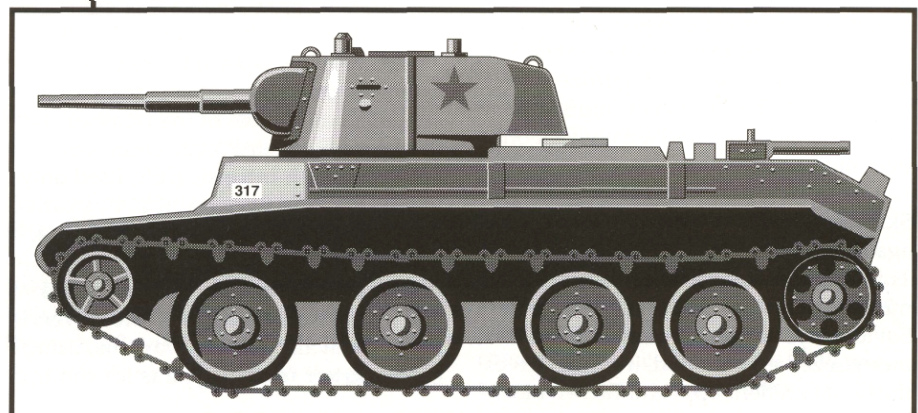
Weight: 13.8 tons

Length: 18.5 ft Width: 8 ft.

Crew: Three

Armament: one 45-mm gun; two 7.62-mm machine guns

Speed: 33 mph on its tracks



© R. MacGowan

Arctic Storm: The Russo-Finnish Winter War, 1939-40

the Finns never have more than three points, and the Soviets no fewer than eight (assuming that the weather cooperates).

But they do enjoy two highly important advantages that are attuned with the environment. They are also primary causes of frustration and rage among Soviet players.

One is a veritable swarm of infantry battalions. These give the Finnish side a far greater freedom than the division-heavy enemy in allocating troops according to economy of force, yet also leave open the option to concentrate when necessary. Since the few Soviet divisions that break down into regiments lack the Finnish units' mobility and sheer numbers, the USSR has no comparable resource.

But the greatest Finnish asset is ski mobility. Finnish units that lack skis are exceptions rather than the rule, and at times almost seem to be freaks of nature. Their pervasiveness, and impact on the game, are so great that not only do skis define the Finnish army, they go a very long way to defining *Arctic Storm*.

No other aspect of the game so clearly demonstrates the need to wage war in concert with the environment. Units equipped with cross-country skis function in concert with the frozen, snowy conditions of Finland in winter, and not in defiance of it, as is the case with Stalin's tanks.

Troops on skis have greatly increased mobility. Except for forests and mountains, they expend just one movement point to enter a hex, and ignore the costs for crossing frozen waterways. This is a major improvement over "leg" infantry, and a truly vast one over motorized units.

Skis then double this increased mobility again, due to the Finnish Reaction Phase. This amounts to a complete, second movement phase. Since it occurs in the Soviet Player Turn, between combat and mechanized exploitation, it further gives the Finn excellent opportunities to block



armored advances, and otherwise disrupt enemy initiatives. Finally, it permits the Finnish player to prepare for his own, upcoming player turn.

Bureaucracy and Leadership

One more area in which there are fundamental differences between the armies is in command. But here, although their system is not an unqualified success, the Soviet procedure can work to their advantage.

As represented in the game, the USSR's command system is fundamentally bureaucratic. Soviet combat units get their orders from higher headquarters rather than from individual leaders.

Their HQs are always mechanized, but their command radii and combat bonuses vary widely. In one combat per phase, a headquarters can give friendly units column shifts equal to its own command bonus. For the most part, this amounts to just one column, but the 7th Army's is a very valuable four columns.

The better HQs especially are major assets, as their bonuses are always available, regardless of the weather, unlike the Red Air Force. Likewise, tanks lose their intrinsic shift, used only when attacking anyway, after two turns, when the shock wears off the Finns. A good headquarters can make the difference between a borderline attack and an overwhelming one. Moreover, in turns when airpower is available, using a headquarters frees air points for commit-

ment elsewhere, increasing the pressure on the Finnish lines.

HQs carry one major disadvantage. Soviet supply is traced through headquarters. This creates bottlenecks that channelize efforts, and makes it easier for the Finns to stall the attack; put an HQ out of supply, and the units around it will follow. This also eliminates the command bonus in the process. Eliminating the counter increases Soviet headaches even more. So, an important asset is just as much a point of vulnerability.

Finland's army is much more independent of its own command structure. At least in game terms, there are no Finnish headquarters. Instead, there are counters representing individual leaders and their command groups.

Whereas Soviet HQs can influence the battle from a distance, Finnish leaders have to do so in a more up-close and personal manner; only if one is in the same hex as units in combat can it impart its bonus. It represents leadership on the most basic level, where the boot meets the gravel (or the ski meets the snow). It does not reflect military bureaucracy, for better or worse.

Though they lack the operational flexibility of Soviet headquarters, Finnish leaders give their side a sizeable advantage by being completely removed from logistical concerns. Units trace supply directly to the source, without having to pass through an intermediate point. Since Finland also has a longer supply radius than the Soviets, this gives them enormous flexibility. In fact, in almost all situations, a Finnish unit that is not completely surrounded by the enemy or its zones of control, is in supply.

As the Soviet example shows, logistical reliance on HQs gives no extra capabilities, and actually just provides one more place where things can go wrong. Or the enemy can make things go wrong.

"...Lest aspiring Stalinist aggressors despair, the Soviet side can win Arctic Storm..."

Putting it Together

The differences between the two armies do much to determine who has the initiative. In the beginning, it rests with the aggressors. Then, with the snows of Turn 3 (or Turn 2 if Event Q occurs), it immediately passes to the Finns, who acquire their ski capability. Later, if the Soviets can hold out long enough, they will wear down the Finns, and resume the offensive to win the game.

The ski is Finland's greatest asset, and the most decisive consequence is *motti*. More than just being cut off from their supplies, units in *motti* are exposed to the worst of the elements, and lose both their offensive ability and their zones of control. This deprives them of almost all ability to influence anything beyond the actual hexes they occupy. A unit in *motti* is not just isolated; it is nearly irrelevant.

Two of the greater attractions of this for the Finns are low risk and low cost. Ski units that work their way around the enemy nearly always do so without engaging in combat. Then, their reaction phase enables them to get away from danger before it really develops. Finally, ski troops are unusually able to move, and retreat, through enemy zones of control with decreased hazard.

The reaction phase is not just a good chance to get away from danger. Good Finnish players quickly learn to use it offensively, to strike deeper at the enemy, or prepare to put still more Soviets into *motti* (*motti-ize* them, as some gamers call it).

One tactic that causes Soviet players enormous grief is to abandon a *motti* in the movement phase, moving the ski units just far enough away to open a supply line in the next turn's supply phase. Then, in the ensuing Finnish Reaction Phase, the Finnish player can slam the door shut again, putting the *motti* markers right back on, for more victory points. This entails little or no risk if the victims are far from their comrades, as at Suomussalmi or Salla. Besides, most Soviet players will retreat, trying to escape the threat of the dreaded *motti*.



Though affected units might look ripe for elimination, the Finn should attack them only after the greatest consideration. The combat results table is most unforgiving, even at high odds, which the weak ski units are unlikely to achieve, and casualties are almost certain.

He has to balance the costs of destroying a *motti* with the possible benefits. The benefits are obvious; dead Soviets and victory points. On the other hand, with a negligible replacement rate, the Finns cannot afford to lightly shed blood for any offensive task. Even with a myriad of battalions, the Finnish player is liable to need every soldier he can get to stave off a late Soviet offensive.

To achieve high enough odds, he may have to shift one or two of his strongest units, his non-skiing infantry divisions, from the Mannerheim Line. On the other hand, stripping this position unduly can open Viipuri to a Soviet thrust, which in practical terms might win the game. This is one more reason for the Finnish player to think twice before making a concerted effort to undertake any counteroffensive.

Sometimes, it is best to let the Soviet player get too bogged down in Finland, with his spearheads either in *motti*, or unable to make any headway. Rather than going out of his way to beat his enemy's head in, the Finn should just let the Soviet do it to himself.

Another good way to hurt the Soviets at little risk is to initiate deep thrusts into enemy-held territory, and the USSR itself. A Finnish unit, even one of the ubiquitous little battalions, passing through a Soviet-controlled town deprives its victory point to the enemy.

Only by diverting one of his own units from another, probably more pressing task can the Soviet recover it.

Points lost for towns in the Soviet Union are lost forever. Since the Russian cannot recover the point for taking back a town in his own country, Finns passing through the USSR do permanent damage. Though a town here and a point there might not seem like much, added up they can be very, very significant.

Unless the Soviet player is totally incompetent, it is virtually impossible for the Finns to gain an automatic victory by wiping out the Red Army or capturing Leningrad. However, in a match-up of comparatively skilled players, a Finn who intelligently and aggressively exploits the full potential of his ski units can win by forcing the victory point total off the low end of the scale.

Lest aspiring Stalinist aggressors despair, the Soviet side can win *Arctic Storm*. They do have the larger army and greater replacement rate, and if the Finns allow it to happen, they will win a head-to-head war of attrition. Such a war would be on Soviet terms, and so it is essential for the Finnish player to see that it does not happen that way.

Yet the Soviet side does not have to completely rely on the shortcomings of the Finnish player. Like his opponent, he must understand the advantages and limitations of his own army.

First of all, the Soviets must push hard in the first two turns. In addition to their HQ bonuses, they get a one-column shift for each attack using armor, and one or two (depending on the turn) for strategic surprise. Since these are temporary advantages, they should be exploited while they can be.

This calls for a direct assault on Turn 2, or Turn 1 if the Finn allows, on the Mannerheim Line. A prolonged offensive toward Viipuri can teach the Soviet side whole a new meaning of the word "frustration." However, with the combination of combat shifts available early in the game, it is entirely possible

Arctic Storm: The Russo-Finnish Winter War, 1939-40

for at least one maximum-odds attack, which carries the possibility of defender elimination. Should air support be available, more of these attacks might be possible, including one on the fortified line north of Lake Ladoga.

The objective is to match the Soviet side's greatest strength, on the most favorable terms, against Finland's most powerful units. It is well worth the gamble to destroy the heart of the Finns' capacity for holding static positions. If this effort fails, the USSR will suffer casualties, but these probably would have happened anyway. If it works, the Finnish player will have to worry more about stopping his opponent, and less about causing mischief behind his lines. A probable ramification is the diversion of ski-mobile battalions from fluid movement, their greatest strength, to fixed defense, their greatest weakness. Therefore, Soviet success early in the game can alter the whole pattern of the conflict.

In almost every game, the Soviets will have to cope with the phenomenon of *motti*. This is somewhat similar to surviving quicksand; one of the cardinal rules is don't panic. Unassisted breakout attempts surely lead to disaster; the units suffer the usual penalties from being out of supply, plus an additional prohibition against advancing after combat if all goes well, and a handicap against retreating through enemy zones of control if it fails, which it probably will. Ultimately, this only saves the Finns the trouble of cutting down their entrapped enemies.

Likewise, an attempt to cut through from the outside can be extremely dangerous.

Often, units trying to rescue a *motti* are caught themselves. It is a recurring theme of military history for a relief force to need rescue itself, and is amply represented in *Arctic Storm*.

Sometimes the best countermeasure to a *motti* is to do nothing at all. If the costs and risks of rescue do not clearly justify a rescue attempt, then none should be made. Then the *motti* should remain as a distraction to the Finns, tying down their troops, and presenting a continuing temptation for their own ill-advised attempt to eliminate it. In addition, it forces the Finnish player to remain aware of the possibility that a relief force will approach later, once Soviet replacements start arriving.

One of the most important principles of *motti*, and the game in general, is that if a player makes an attack, he should do it in adequate force. Half measures normally just lead to bigger problems.

One of the Soviet Union's more important, but less obvious, assets is its force of NKVD motorized units. These have no offensive capability (rubber truncheons don't work very well on armed enemies). But they are highly mobile, at least on roads, and free up other, more offensive capable units from rear area security to other tasks.

Another valuable mission is holding open supply corridors to pockets that would otherwise be in *motti*. Moving NKVD units next to *mottis* can end their isolation and make a breakout, assisted or otherwise, possible.

Although cold weather is normally seen as the ally of the Finns, it ultimately works to the Soviets' advantage, too. Normally, flank marches are the hallmark of the Finns, while the hapless, less mobile invaders just get trapped by it. But when the waters of Lake Ladoga, and then the Gulf of Finland, freeze, this enables the Soviets to turn the flanks of the fortifications on their shores. As historically, this can be the turning point of the game. If the Soviet player has managed to stave off defeat this long, and his forces are not either destroyed or caught in *motti*, the tide can now turn in his favor.

Conclusions

The first sentence of the game's designer's notes reads: "Geography is destiny—at least in *Arctic Storm*." The statement is true, but incomplete; it should specify that environment is destiny. Environment takes in not just the geography of forests, marsh and poor road net, but the frigid, snowy climate as well. Together, they are destiny.

The competing forces can be evaluated only in the context of the full range of natural conditions. The Finnish army is meant to work in, and with, them. The Red Army moves and fights in conflict not only with the enemy, but nature itself. As a result, Finnish successes normally happen because of the environment, and Soviet ones in spite of it.

Though the conditions of Finland in winter are highly unusual in wargaming, the dynamics that result should be familiar to most players, from a very different kind of war; modern NATO versus Warsaw Pact conflict. Games on it may have declined since the collapse of Communism, but wargamers can easily apply their pre-Gorbachev experiences to *Arctic Storm*.

Both pit big, lumbering armies against smaller ones that must be more mobile, flexible, and nimble to win. In both, the Soviets have the edge of brute strength; the other superior agility. One can see a conceptual cousin of American AirLand Battle doctrine in the proper use of Finnish ski troops.

One major difference is obvious, in that whereas superior unit-for-unit firepower is a cornerstone of the NATO way of war, the Finns remain inferior to the Soviets in this area in the game. Some players might also feel that the Finns of *Arctic Storm* lack the dramatic technological edge associated with AirLand Battle. But in fact they do, with a highly impressive feat of technology, ideally suited to their environment.

It's called a ski.



Arctic Storm
The Russo-Finnish Winter War, 1939-40
Published: 1992
Game Design: David James Ritchie
Game Developers: R. Berg & G. Billingsley
Art Director: Rodger B. MacGowan

 Haaglund 2-2-9	 20 4-2-5	 1x Ski 2 3-2-4
--	--	--

Contents: 200 die-cut Counters; One 22x34 inch Mapsheet; Rulebook and one Player Aid Card; One 10-sided die; Bookcase Box

Time Scale: Each turn = one week
Map Scale: 24 km. per hex
Unit Scale: Division/Brigade
Players: 1-2