



## Part 4 – Night Turns and Solitaire Play

**"Let your plans be dark  
and impenetrable as night,  
and when you move,  
fall like a thunderbolt."**

**-Sun Tzu**

*The nights were long and cold*

during the battle for Tolvajärvi. The battlefield was blanketed in total darkness for 16 hours a day. The sun rose at about 7:00 a.m., and set at 4:00 p.m., with about an hour of dusk lighting at either end. (*special thanks to Vesa Teräs for his research in this matter*)

The battle was also fought under a new moon. Navigating by night must have been extremely difficult, especially under the tree cover of the woods. Out on the frozen lakes, the whiteness

of the snow combined with light from the stars might have provided a bit of light. As if this wasn't enough to discourage troop movements by night, the nighttime temperatures plunged well below freezing!

Still, significant action took place at night.

Night turns in Red Winter are governed by several simple rules which combine to give rise to many strategic possibilities. These include: doubled movement allowances, Soviet bonfires, Finnish night raids, and die rolls for attrition on the Sub-Zero Loss Table (SZLT).

It was not always so. It took me quite a while to arrive at the current night rules.

As you may recall, daylight turns in Red Winter represent 90 minutes. Not so for the night turns. Originally, I tried playtesting the game with 90 minute night turns. Not only was the game too long (the nights seemed to last forever!), but units were far too active over the course of the night, accomplishing much more than what would have been historically possible given the weather and lighting conditions. I briefly considered inventing new rules to handicap the units and "reel them in" during night turns, but soon took pause to examine the direction of the game design.

*Below: Soviet soldier during the Winter War.*



My mantra from the beginning had been “simple mechanics that give rise to hidden layers of complexity”, so piling on special rules to cover night turns felt like a poor solution.

For the record, I tried several options before settling on a single, long, night turn. For a time, each night turn represented double the normal turn length—3 hours per night turn. With 16 hours of darkness, this still allowed too much freedom. I eventually tried two night turns per day, and I realized that I was getting much closer. But, there was still one major problem: opposing units could easily react to your movements during the first of the two night turns, heading off your grand flank marches and plugging holes in the lines before your forces could arrive to slip through them. Since the game thus far had no explicit fog of war rules (more on that later), I realized that two night turns per day wouldn't produce realistic results unless I incorporated new rules for dummy units, fog of war markers, and the like. So I was right back where I started.

It wasn't until several months later than I suddenly hit on the idea of limiting the nights to a single turn, and simply increasing units' movement allowances. I first tried increasing them by only two or three movement points, but quickly realized that the boost needed to be more dramatic if units were to achieve the same kinds of surprise maneuvers that marked the actual battle. Just as a reference point, I experimented with doubling the printed movement allowances. To my surprise, it worked beautifully.

I admit that simply doubling a unit's movement on night turns sounds remedially simple and even a bit suspect. I but I believe it works out very well in play. It encourages and produces exactly the kinds of maneuvers I was originally going for, and, of the methods we tested, it was by far the simplest method to implement.

Newcomers may be suspicious that units can move *further* at night than during the day, but an examination of the Turn Track will reveal that each night turn is 16 hours, compared to 90 minutes for day turns. So units aren't actually moving further—they're just less likely to be intercepted by opposing units.

It is worth noting that a unit must begin its night turn Action Phase free of enemy zone of control in order to use double movement. Units still qualify for road movement and strategic movement on night turns, meaning that they can really cover some ground if the enemy hasn't set up any “road blocks.”

As I did more playtesting using the new night rules, I realized another problem. With units now able to cross vast distances and potentially end up in the enemy's rear areas, I needed something to simultaneously discourage this sort of behavior, even while the double movement rule lured players into taking advantage of it. It was pretty obvious why every infantry company didn't perform ambitious night marches every night of the historical battle. It was cold. It was dark. They were exhausted. The men hunkered down at night around their bonfires or camp stoves and tried to stay warm. Units that moved around too much often became lost. Surely morale might suffer as well if ordered to do too much during the night hours. And that's not to mention factors such as frostbite, hypothermia, and desertion.

I decided the best way to handle the situation was to make night actions a gamble. Units could “push their luck” and try to gain the upper hand, but in doing so they risked taking attrition losses from the harsh weather conditions. And so the Sub-Zero Loss Table was born.

Sub Zero Loss Table (SZLT) (16.3)	
Roll one die at the conclusion of each night turn. All Russian stacks not marked with Bonfires (15.1) roll on this table, as do Finns marked with “skulls” (16.31)	
Die Roll	Result
1-3	1 step reduction
4+	no effect

Die Roll Modifiers: -1 on Frozen Lake, +1 for all Finnish units due to portable camp stoves

I call it a “table,” but in reality the mechanic is so simple that the actual table probably won't be needed once the players have used it one time. Much like the game's unit recovery mechanic, the sub-zero attrition loss routine will quickly be committed to memory. It works like this:

At the conclusion of each night turn, those units or stacks which participated in some sort of activity roll a single 6-sided die, with a 50-50 chance of suffering a step reduction. The Finns are more flexible in this regard. They can move

about freely during night turns, and they check for losses only if they conducted combats or night raids. Unlike the Soviets, the Finns had portable camp stoves. They were also better dressed for the weather. Qualifying Finns are marked with a “skull” marker as a reminder. All Soviet stacks that did not build bonfires must check.



If the die roll is a 1-3, the checking stack suffers a step reduction. On a 4-6, they are safe. There are only 2 possible DRMs. Finns receive a +1 for their camp stoves and winter clothing, and units on the ice receive a -1 (they are exposed to the harshest elements, and cannot build fires).

Note that each *stack* checks for a loss- not each individual unit. This subtle rule encourages players to realistically huddle units together prior to night turns. So the more large stacks you build, the fewer total losses you'll suffer, on average (also note that no more than three infantry companies can stack per hex).

The interaction of the double movement rule and the sub-zero loss rule creates an interesting conundrum for players. Ambitious players will want to accomplish as much as possible during night turns, while the sub-zero loss rules encourage players to huddle their units together into stacks in order to reduce total losses. Add to this mix Finnish night raids and Soviet bonfires, and you have a world of possibilities—the night turns almost become their own “game within a game.”

How to best set up for night turns during the prior dusk turn requires strategy in and of itself. Cautious players will want to carefully consider their positions during the dusk turn. The point here is to avoid unnecessary movement during the night turn for those units which will not be participating in any ambitious activities. For the Soviet player, this means forming stacks and possibly placing them where they will not be vulnerable to night raids (more on the raids to follow). If you wait until the night turn to do

this, you've waited too long since you are now susceptible to sub-zero attrition losses if you move your units.



*Note: All counter art is playtest art by Michael Evans.*

Soviet units can build bonfires to avoid sub-zero losses, but in doing so become choice targets for Finnish night raids. Historically, the Soviets built enormous bonfires on the night of December 8<sup>th</sup>, using entire trees. The glow of the fires was spotted by the Finns, and the resulting night raid took the Soviets completely by surprise (more on this in future entries).

Bonfires in Red Winter represent units that have “set up camp.” They are trying to rest and stay warm instead of performing other actions. The bonfire marker doesn't literally mean that the units in the marked hex have built a bonfire (though in many cases, they probably have). However, early in the battle the Soviets certainly *did* build enormous bonfires, and so the Finns receive a +2 DRM to their first night raid of the game. This simulates the element of surprise and the wanton excess demonstrated by the earliest Soviet fires, built without regard to a possible nighttime ambush. I was unable to locate any evidence of Soviets building bonfires after December 8<sup>th</sup>. My guess is that they probably continued to do so, but their fires were smaller and better hidden. They were probably built further from the frontlines as well. And wisely so.

As the Soviets, there are several factors to consider when deciding whether or not to build a bonfire. Considerations include: stack size, proximity to enemy units, likelihood of elimination due to sub-zero loss. If your units are already reduced, you'd better stay put and build a bonfire rather than take the 50-50 gamble of an eliminated unit. As previously mentioned, sub-zero losses represent a wide variety of maladies apart from just freezing to death. Units

which are destroyed by sub-zero losses are not necessarily killed—they have simply disintegrated, or they are too small to function as a company (in which case, they are probably absorbed into other units).

I haven't touched on night raids themselves yet. These will be covered in a future installment of the Diaries. In brief, the night raids allow eligible Finnish infantry units to travel large distances across the map in order to conduct an assault, possibly at increased odds, then return to their original hex (the counters are not actually moved).

*Below: Finnish ski troops on the move.*



By the time I felt satisfied with the outcome of the night turns, and convinced that all the rules justified their existence within the game, I had ended up with four separate, but interrelated, mechanics:

- Doubled movement
- Sub-Zero losses
- Soviet bonfires
- Finnish night raids

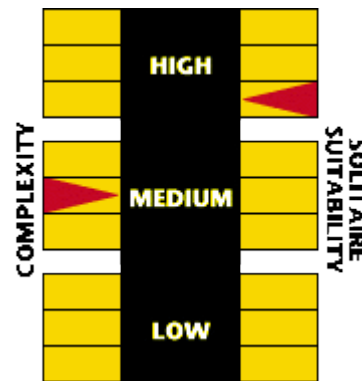
It is these that give the night turns in Red Winter their “flavor”. The rules pertaining to each of these are individually quite simple, but when taken as a whole, their interactions provide for a wide variety of strategies and considerations.

The end result of all this: The night turns nicely mirror the night actions of the actual battle. They also provide for good solitaire play.

## Solitaire Red Winter

Although designed primarily as a two player game, Red Winter is also ideal for solitaire play because there are no cards or hidden information of any kind. The "fog of war" comes in part from the units' generous movement allowances during the night game turns, and the Finns' ability to strike nearly any hex on the map via night raids.

These and other mechanics produce a game with continually shifting opportunities. Each side must exploit its enemy's missteps as they occur. Remaining flexible in turn to turn operations is at least as important as long term planning. This keeps the gameplay fresh for the solitaire player.



Optional fog of war rules are provided in the Play Book for players wishing to explore this. Optional rules and variant units will be the topic of a future Diary entry.

Back in July 2009, I contacted GMT regarding the solitaire rating for Red Winter. At this time, GMT had rated the game as moderately high for Solitaire Suitability. Following our discussion, GMT has adjusted the solitaire rating upwards to reflect that the game works very well when played solitaire. It was explained to me that only those games designed specifically for solitaire play achieve the highest ratings of 8 or 9. Given that logic, I think the new rating is dead on perfect. The new rating is 7 out of 9, pushing Red Winter into the "High Solitaire Suitability" category.

**Next time:** A word from assistant researcher Vesa Teräs.

Solitaire – Red Winter



# Solitaire

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"fog of war"

P500  
Briefing



## Red Winter

RUSSO-FINNISH WAR  
8-12 December 1939

Optional fog of war rules are in the **Play Book** for players wishing to explore this option.



Banner art by Rodger MacGowan