

**DEATH IN THE SNOW:  
AN EXAMINATION OF THE MILITARY FORCES,  
STRATEGIES AND TACTICS OF THE  
RUSSO-FINNISH WAR 1939-40**

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RUSSO-FINNISH WAR 1939-40

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An Abstract  
Presented to  
the Graduate Council of  
Austin Peay State University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

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by  
John Lawton Hager

July, 1976

## ABSTRACT

I propose to make an evaluation of the military aspects of the Russo-Finnish War, 1939-40. The evaluation will include the organization, armament and military thoughts on warfare of both the Finnish and Soviet Armies prior to the outbreak of the war.

Particular attention will be paid to the strategies and tactics employed by both sides during the early months of the war. The Soviet land forces had a very difficult time in the fighting north of Lake Ladoga because of the superior Finnish tactics. An investigation into the Finnish "Motti" type tactic will explain why a small Finnish force could stop and destroy a much larger Soviet force.

The early fighting along the Mannerheim Line will also be a point of interest in this paper. On this battle front the Finns were again outnumbered by the Soviet Army but were able to throw back the Soviet assaults time and time again. The Finnish concept of the mobile defense and the Soviet trust in the mass offensive came head to head in this battle area. The Finnish and Soviet tactics along the Mannerheim Line will be discussed with a view towards determining why the Finns were successful during the first few months of the war.

The Soviet Army was embarrassed by its poor showing in Finland by December, 1939. The top Soviet leaders changed both

strategy and tactics in their final and fatal assault on Finland that began in February, 1940. Why the strategy changed and how the Soviet tactics were employed on the battlefield will be a topic in this paper. It was during this phase of the war that the giant Soviet steam roller finally overcame the Mannerheim Line.

Finally, I propose to make a brief assessment of the Soviet and Finnish tactics and why one was superior to the other in the frozen lands of Finland. The effects that the war had on the Soviet Army training and organization will also be included in this paper.

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July, 1976

To the Graduate Council:

I am submitting herewith a Thesis written by John Lawton Hager entitled "Death in the Snow: An Examination of the Military Forces, Strategies and Tactics of the Russo-Finnish War 1939-40." I recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts, with a major in History.



Major Professor

We have read this thesis and recommend its acceptance:



Preston J. Hubbard  
Second Committee Member



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Accepted for the Graduate Council:



Dean of the Graduate School

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Finally, I would like to dedicate this work to the memory of my mother who died while I was attending Austin Peay State University.

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## Chapter I

### A Brief Diplomatic Background of the Winter War

In August of 1939, as Europe prepared for war, Finland prepared for the Olympic Games of 1940, which were to be held on her soil. Finland's two powerful neighbors signed a pact of nonaggression on the night of August 23, 1939. The Communist Soviet Union and National Socialist Germany were now allies. Finland was not happy to see the former enemies unite as friendly bed fellows. Finnish military leaders had hoped that the political antagonism between Germany and the Soviet Union would force each of them to bind their military potential against the other.<sup>1</sup>

The Finnish government was not overly concerned by the new political developments. The Soviet Union and Finland also had a treaty of nonaggression which had been signed in 1932. As a matter of fact, in 1934 both countries agreed to maintain the treaty until 1945. Even as Poland fell to the new partners in war, Finnish leaders remained calm. The Soviet Union informed the Finnish Government that even though they were taking part in the conquest of Poland, they

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<sup>1</sup>K. J. Mikola, Colonel, Finland's Wars During World War II (Mikkeli: Embassy of Finland, 1973), p. 6.

would continue to observe a policy of neutrality towards Finland.<sup>2</sup>

If the Finnish leaders had known of the secret agreement between Germany and the Soviet Union they would have been very concerned. In this agreement Germany declared herself to be politically disinterested in Latvia, Esthonia and Finland.<sup>3</sup> The Soviet Union was an ally of Nazi Germany, but they were concerned about the growing German military machine. The Soviet Union would need to acquire territory between herself and Germany in order to produce a buffer zone to protect Soviet land areas.

The Soviets were concerned that Leningrad was in an exposed position since Hitler could use Finland as a northern base and attack the Soviet Union. This belief that Finland was a dangerous gap in the defense of Soviet territory was not new. Peter the Great once wrote, "The ladies of St. Petersburg could not sleep peacefully as long as the Finnish frontier ran so close to our own capital."<sup>4</sup> The Soviet Union intended to bring a fundamental change in the Soviet-Finnish relations. Finland was to be made into a military ally. Latvia, Esthonia and Lithuania would also have to bow to the Russian wishes.

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<sup>2</sup>Ministry for Foreign Affairs of Finland, The Finnish Blue Book (Philadelphia: J. B. Lippincott Company, 1940), p. 12.

<sup>3</sup>Winston S. Churchill, The Gathering Storm (Boston: Houghton Mifflin Company, 1948), p. 393.

<sup>4</sup>Max Jakobson, The Diplomacy of the Winter War (Cambridge: Harvard University Press, 1961), p. 14.

The Baltic area had to be controlled so the Soviets could block the lines of entry into Russia from the West.

Estonia, Latvia and Lithuania individually received strong suggestions that they send their Foreign Minister to Moscow to negotiate trade agreements. The Soviets had no intentions of talking about trade agreements. The Estonian Foreign Minister was called to Moscow on September 24, 1939, and four days later a Mutual Assistance Pact was signed by the two countries. The Soviets established military bases on the Estonian islands of Oesel and Dago and also at the port of Baltiski. Latvia was called on next, and soon Soviet troops were installing coastal defense artillery guns near Ventspils. Lithuania also allowed Soviet garrisons to be stationed on her soil. The Soviet Air Force also had the right to occupy certain bases in each country. Now Germany's southern route to Leningrad was blocked, and about one half the Gulf of Finland had been shut to potential enemies of the Soviet Union.<sup>5</sup> Finland knew that she would soon be called to Moscow to discuss a mutual aid pact.

Finland's turn came on October 5, 1939 when they received a request to send a delegate to Moscow. The Soviet Union had saved the hardest job for the last. M. J. K. Paasikiva was appointed as the Finnish delegate, and he met with the Soviet negotiators on October 12

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<sup>5</sup>Winston S. Churchill, The Gathering Storm (Boston: Houghton Mifflin Company, 1948), p. 538.

in Moscow. The Soviets wanted the Finnish defenses on the Karelian Isthmus destroyed and all military troops evacuated from the area. They also wanted the port of Hanko on the Gulf of Finland to be garrisoned by five thousand Soviet troops. The Soviet Union also wanted other territory, in all 2,761 square kilometers, of Finnish soil. In return the Soviet Union would give up 5,529 square kilometers of some rather worthless forest land in Eastern Karelia.<sup>6</sup>

Except for the years after 1917, Finland's past has been dominated by foreign governments. First they had six hundred years of Swedish domination and then one hundred and eight of Russian. Yet the Finnish people are very independent.<sup>7</sup> The Finnish War of Independence after the Bolshevik Revolution had left a legacy of hate towards the Soviets, and the Finnish government was strongly anti-Communist. Any suggestion of military cooperation between Finland and the Soviet Union would have outraged the people of Finland. Also, if they gave up the defenses on the Karelian Isthmus, the Finns would have lost their most powerful defense against the Soviet Union. The Finnish people and their government would not bow to the Russian demands.

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<sup>6</sup>Vaino Tanner, The Winter War (Sanford: Sanford University Press, 1957), p. 29.

<sup>7</sup>"The Fiery Finns," Newsweek, December 11, 1939, p. 28.

The negotiations went on, but neither side would give as much as the other wanted. By November 3, 1939, it became clear that a deadlock had been reached. The Soviet Commissar for Foreign Affairs, Vyacheslav Mikhailovich Molotov, stated at the last meeting, "We civilians can see no further in the matter; now it is the turn of the military to have their say."<sup>8</sup> The Finnish delegation left Moscow shortly thereafter.

As soon as the negotiations had come to a halt the Soviet Union began an organized radio and press propaganda effort aimed at Finland. Mass meetings were held in factories throughout Russia that told the Soviet workers that Finland was evil and Soviet borders must be made safe. The Finnish Premier, A. K. Cajander, was called a scarecrow and a fool by the Soviet press. Pravda, the state newspaper, accused Finland of a "foul and dangerous game of trying to provoke war with the Soviet Union."<sup>9</sup> Soviet radio messages were also sent into Finland in hopes that the Finnish people would revolt and overthrow their government. One radio message stated, "If the Finns are going to force us to act we will strike and in a short time

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<sup>8</sup>John Erickson, The Soviet High Command (New York: Macmillan and Company, 1962), p. 542.

<sup>9</sup>"Finn Artillery Kills Russians, Moscow Claims," The Nashville Tennessean, November 27, 1939, sec. 1, p. 1.

defeat the enemy on his own territory."10

The world waited to see when rather than what the Soviet Union would do. A western reporter noted that in September Pravda had denounced the ruling classes and government of Poland for oppressing the people and that within twenty-four hours Soviet troops had marched into Poland. Now the reporter noted that Pravda was applying the same words to Finland. 11

Finland, which had a total population of about three million people, prepared to defend herself against the Soviet Union which had a population of over 150 million. The diplomatic talks were over, and now the military would settle the problem. An investigation into the general military situation of both countries should show the reader what chance of survival Finland had.

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10 "Moscow demands Finns Stage Revolt to Avoid Pole Fate,"  
The Nashville Tennessean, November 28, 1939, sec. 1, p. 1.

11 "Reds vs. Finns," Newsweek, December 4, 1939, p. 22.

## Chapter II

### Organization, Armament And Prevalent Military Situation of the Opposing Armies Prior to the Winter War

The Soviet Army at the start of the Winter War numbered close to four million men. There were 151 rifle divisions, 32 cavalry divisions and 38 mechanized brigades. The basic unit of the Soviet Army was the rifle division and these were all organized about the same. The entire manpower of the division was about 17,500 men. The division was usually divided into three regiments, and the regiments had three battalions. Each battalion was composed of three companies with three platoons each.

The typical Soviet infantry division was composed of:

- a. The commander and his staff
- b. 3 Infantry regiments
- c. 1 Field artillery regiment
- d. 1 Howitzer regiment
- e. 1 Antitank battalion
- f. 1 Reconnaissance battalion
- g. 1 Signal battalion
- h. 1 Engineer battalion
- i. 1 Tank battalion
- j. 1 Antiaircraft machine gun company
- k. 1 Chemical company
- l. Supply units <sup>12</sup>

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<sup>12</sup>Erkki Lahdenpera, Study of Soviet Tactics and Techniques  
(Fort Benning: The Infantry School, [1950]), p. 12.

The Soviet infantry division was heavily armed. There were 14,000 Mosin-Nagant M1891/30 bolt-action rifles in each division. This weapon was very similar to the United States Browning automatic rifle. The weapon had a magazine for fifteen 7.62 mm cartridges. This rifle did not function in extremely cold weather and even in above freezing weather needed careful cleaning and handling to keep it in operational working order.<sup>13</sup>

Each infantry division had 200 heavy machine guns of 7.62 mm and 6 heavy machine guns of 12.7 mm. Some divisions were still equipped with the Maxim M 1910 heavy machine gun that was used in World War I and fired a 7.62 mm round. The Maxim was fed by a canvas belt and worked comparatively well. It had a rate of fire of about 400-500 rounds per minute. The Maxim was clumsy to operate and heavy to move; it was also water cooled. The other heavy machine gun that fired a 7.62 mm round was the Degtyarev M1939. This gun was air cooled but not very reliable. The Degtyarev M1934 heavy machine gun was 12.7 mm and was used by the front line troops against enemy aircraft. The weapon could also be used against enemy troops on the ground.<sup>14</sup>

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<sup>13</sup>Ibid., p. 13.

<sup>14</sup>"Weapons of the Russo-Finnish War." Strategy And Tactics, July 1972, p. 32.

Each Soviet infantry division had over 30 mortars for use by the front line troops. The 120 mm mortar was a very good weapon and was effective in both cold and warm weather. It was mounted on a rubber-tired carrier which could be drawn by men or vehicles. The smaller 83 mm mortar was very effective in warm weather against troops on the move or troops who had not dug in. The 83 mm mortar was not very effective on snow covered ground since the snow absorbed a majority of its blast effect.<sup>15</sup>

Artillery forces are traditionally the Soviet Army's best employed and trained combat force. Artillery forces would play a key role in the Winter War. The artillery forces in an infantry division were half motorized and half horse drawn at the start of the Winter War.

Soviet divisional artillery was composed of three main types of guns, all of 76.2 mm caliber. The oldest of these guns was the M1902 which fired a 13.75 pound shell over 13,300 yards. The next oldest artillery type was the M1936 which could throw the 13.75 pound high explosive round over 15,260 yards. The newest model divisional artillery type was the M1939. The new model gun could not shoot as far as the M1936, but it had a higher muzzle velocity and could be

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<sup>15</sup>Erkki Lahdenpera, Study of Soviet Tactics and Techniques (Fort Benning: The Infantry School, [1950]), pp. 13-16.

used effectively against enemy tanks. For heavy artillery the Soviets had guns of 122 mm and 152 mm. The 122 mm gun fired a 55 pound shell over 20,000 yards and the 152 mm gun fired a 108 pound shell over 22,000 yards. The Soviets also used up to 14 inch coast defense guns in some areas of fighting in the Winter War. As far as numbers go, the Soviet infantry division could count on 38 artillery pieces of 75-90 mm caliber and 40 artillery pieces of 105-152 mm caliber being available to them at all times. <sup>16</sup>

Another combat arm that played an important role for the Soviet Army in the Winter War was the armored fighting vehicle, or tank. The Soviet infantry division could count on 40 to 50 tanks for combat duty. There were a large variety of tanks used by the Soviets during the Winter War. Most Soviet rifle divisions received the T26A tank or the T26B tank. The T26A weighed 8.5 tons, was armed with one machine gun and had 15 mm of armor protection. This tank had been bought by the Soviets from the British firm of Vickers in 1931 and mass produced in the Soviet Union. The T26A had a crew of three men, one commander, one gunner and one driver. The tank was operated by the use of a gasoline engine and could reach speeds of 19 miles per hour. <sup>17</sup>

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<sup>16</sup>"Weapons of the Russo-Finnish War" Strategy and Tactics, July 1972, p. 32.

<sup>17</sup>Ibid., p. 32.

The T26B weighed 10.3 tons and could travel at speeds up to 17 miles per hour. It had 25 mm of armor protection for its crew of three men. The tank also had a 45 mm gun and 7.62 mm machine gun. This was the best light tank in use by the Soviets in the Winter War.<sup>18</sup>

The largest tank used by the Soviet forces was the T35. The T35 weighed about 45 tons and protected the crew with from 30 to 45 mm of armor plate. Not only was the tank large in size, but it also had ten crew men to operate it. There was one commander, three machine gun operators, one machine gun loader, two 45 mm gunners, two 45 mm loaders and one driver. The tank carried five 7.62 mm machine guns and two 45 mm cannon. The T35 looked like a monster with its five separate turrets, but it had poor cross road mobility. It was intended to be used in a break through role by the Soviets; however, the small V-12 gasoline engine was not powerful enough to move the tank through rough terrain.<sup>19</sup>

The Soviet Air Force is the last major combat arm we will examine. Soviet Air Force units that were supporting ground operations were attached directly to the ground force commander. The air force was divided into bombing regiments, fighter regiments and recon-

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<sup>18</sup>B. Perret, Fighting Vehicles of the Red Army, (New York: Arco Publishing Company, Inc., 1969), p. 15.

<sup>19</sup>Ibid., p. 45.

naissance regiments. Usually fighter regiments were attached to the ground force commander. All Soviet military fighter aircraft have an "I" in front of their number designation. The "I" stands for Istrebitel which translates into the word fighter. The I-15 Soviet fighter was used in the Winter War with some success. This plane was obsolete by 1939 but was used anyway. It was one of the few fighter biplanes that saw service during World War II.<sup>20</sup> The most used aircraft of the Winter War was the Soviet bomber, the SB-2. This was a dual engine monoplane and was very reliable. The Soviet Army could count on between 5,000 and 5,500 airplanes for operations in the West. Over 80% of the aircraft were of modern types, and of these 55% were bombers and 40% were fighters. Another 900 to 950 aircraft were being produced a month.<sup>21</sup>

Now that we have examined the size and composition of the Soviet Army as well as its armament, we shall turn our investigation to another aspect of the army. The principles of warfare that guided the Soviet Army into battle will be examined. The reintroduction of the commissar system and the purge of officers also heavily affected the Soviet Army and its ability to wage war. Both of these events

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<sup>20</sup>William Green, War Planes of the Second World War, Vol. 3. (Garden City: Doubleday and Company, Inc., 1961), p. 154.

<sup>21</sup>John Erickson, The Soviet High Command (New York: Macmillan and Company, 1962), p. 807.

will be briefly discussed with a view towards understanding how they affected the Soviet Army and its will to fight.

The Soviet Army of 1939 was guided by the offensive spirit. Over and over again the Soviets emphasized the tactics of offensive warfare. The field manuals of the Soviet Army directed that every unit of the army must carry the fight to the enemy. The enemy must not be allowed the freedom to operate on Soviet territory. The goal of the offensive spirit was to carry the fight to the enemy soil and defeat his army. The reasons the Soviets believed in the offensive spirit are:

- a. The huge manpower of the Soviet Union that could provide overwhelming numbers of combat troops
- b. The advancing war industry that clothed and equipped the large numbers of soldiers
- c. The revolutionary enthusiasm and dreams of world revolution of the leaders of the Soviet Union

The offensive allowed the Soviets to choose the time and place of attack on the enemy force. They would not allow the enemy to determine the time and place of attack. By attacking the enemy force, no matter where they may be, the Soviet Army hoped to throw them off balance and then push through them. Combined arms attacks by the infantry, armor and artillery were to be used to destroy the enemy.

Training for the offensive was often formal and did not allow the small unit commander any room to insert his battlefield leadership. Mass training was the order of the day while small unit training was

poor and inadequate at best. Because the training was formal and supervised many of the leaders became inflexible in their military viewpoints. Leaders could expect formal orders from their superiors that allowed no freedom of choice by the lower leader. The skills of basic warfare were lost to the average soldier because the leaders were more concerned with mass training and pleasing their higher bosses.<sup>22</sup>

The personal drive of Stalin to a position of unchallenged power involved the physical liquidation of all his potential rivals. The Soviet Army did not escape his wrath. Anyone who might someday challenge Stalin's leadership was a target and this included many army officers. A veritable blood bath that started in January 1937 and lasted for well over a year swept the army leadership. Stalin removed a whole generation of officers who did not owe their rank to him.<sup>23</sup>

It has been estimated that up to one half of all Soviet officers were involved in the purges. Khrushchev remembers, "after the annihilation of the Old Guard new men took over, and the Commis-

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<sup>22</sup>Erkki Lahdenpera, Study of Soviet Tactics and Techniques, (Fort Benning: The Infantry School [1950] ), pp. 24-26.

<sup>23</sup>Malcolm Mackintosh, Juggernaut, (New York: The Macmillan Company, 1967), pp. 85-96.

sariat of Defense became like a kennel of mad dogs."<sup>24</sup> All ranks were brought to fear for their lives, and the purge brought a drastic collapse of morale. The initiative of army officers at all levels became paralyzed. The new commanders were either mediocre leaders or had no experience in command. The only conclusion to draw is that the purges hurt the Soviet Army. The purges reduced the level of education, experience and ability throughout the officer ranks. These new leaders would lack imagination and make simple battle plans without regards to how many people might die. The purge of officers resulted in the younger, less qualified, but more party-oriented man in charge. This would have a direct and ill effect on Soviet combat operations, especially in Finland.<sup>25</sup>

The political commissar system which had been replaced by unity of command in 1934, was reintroduced into the Soviet Army. Now the commander shared his command with a political man. The military commander had his power severely restricted. He could not even move his troops out to the breakfast line without the political officers countersignature. This reintroduction of the commissar system lowered the morale and weakened the self confidence and in-

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<sup>24</sup>Nikita Khrushchev, Khrushchev Remembers, trans. and ed., Strobe Talbott (Boston: Little, Brown and Company, 1970), p. 163.

<sup>25</sup>John E. Jessup, "Soviet Military History--Efforts and Results," Military Review, June 1973, pp. 18-19.

initiative of what ever professional officers were left after the purge. It is clear that the purge and the commissar system resulted in a lack of faith and leadership in the Soviet Army.<sup>26</sup>

The Soviet Army of 1939 was large and equipped with modern weapons of war. It was an army that was tied to the theory of the offensive--an army that would not wait for an enemy to make the first move--an army that would attack with all its might into the enemy territory. Yet, for all its power in numbers of soldiers and numbers of weapons, it was an army that had internal problems. The small unit leader had little control over his men because of the commissar system. The men were untrained in individual combat methods. The leaders were in fear of their very lives because of the recent purge of officers.

In stark contrast to this huge Soviet Army was the small army of Finland. We will now turn our attention towards this Finnish Army to investigate its size, armament and theory of warfare.

During the first half of 1939, the Finnish Army, composed of regular troops, numbered less than 30,000 soldiers. In the entire country there were only 400,000 men that were suitable for front line duty and had received some military training. However, the small

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<sup>26</sup>Major General Stephan O. Fuqua, "Why the Russians Are Taking a Licking." Newsweek, February 5, 1940, p. 23.

nation only had enough military equipment to field an army of 275,000 men.<sup>27</sup> Most of the equipment was of World War I vintage. Maneuvers took place on the Karelian Isthmus in August 1939, and the small army gave an excellent account of itself. Prime Minister Cajander spoke to the army after the maneuvers. The Prime Minister congratulated the army on their successful maneuvers with the use of antiquated equipment. He stated that new equipment would have been, by now, "rusted and out of date."<sup>28</sup>

The Finnish Government had declared a state of national emergency on October 10, 1939, and began to mobilize her forces. The auxiliary organizations to the Finnish Army were the Civic Guard and the Lotta Svard. The Civic Guard were young men from local villages that formed together to make a village military unit. Thus each village had its own small guard force that could be called on to join the regular army force in very little time. Each man carried his own rifle, ammunition and uniform to his home where they stayed until called for active duty. When Finland did mobilize her forces, these men traveled in small groups to take their place on the front lines. Since they already had their uniform and weapon,

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<sup>27</sup>K. J. Mikola, Colonel, Finlands Wars During World War II, (Mikkeli: Embassy of Finland, 1973), p. 6.

<sup>28</sup>Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt (New York: E. P. Dutton and Company, 1954), p. 305.

they did not have to concentrate in one area to get their equipment. There was no large concentration of troops during mobilization for the enemy to bomb. Another advantage that the system of using the Civic Guard had was that each soldier knew the terrain he was defending. Since most Civic Guard soldiers grew up in the same area they were defending, they knew every bend in the road and every clearing in the forest. This knowledge could be of immense value to a defender of the land.

The other auxiliary organization of the Finnish Army was the Lotta Svard, or as they are more commonly called, Lottas. This organization was for women only. The Lottas were a patriotic society that dated back to the Finnish War of Independence. They took their name from the wife of a young Finnish officer that followed her husband along to the front lines in 1808. She became a folk hero by cooking, nursing and writing letters for the wounded soldiers. The Lottas of the Winter War put on their uniforms and took over the civilian jobs left behind by the Civic Guard. They also went to the front lines where they served with medical units, quartermaster units and signal units. The Lottas were also very effective airplane spotters. There were 140,000 women who joined the Lotta Svard and served Finland in her time of need.<sup>29</sup>

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<sup>29</sup>"Red Subterfuge in Finland Comes Back as a Boomerang." Newsweek, December 18, 1939, p. 17.

After the mobilization was complete, there were about 200,000 actual combat troops. These soldiers were placed in 12 divisions along with some independent battalions and companies. The Finnish infantry division was smaller than the Soviet infantry division. On paper, the Finnish infantry division consisted of about 14,400 men. However, in the field the division was never more than 11,500 men. The division was disproportionately strong in rifle armament and weak in about everything else. The major problem with the equipment in a Finnish rifle division was that there was not enough of anything. This may be said of the entire Finnish military force.

There were only 34 battalions of field artillery in all of Finland, and these were such old guns that only four battalions could fire at ranges over 10,000 yards.

There were no anti-tank sections in a Finnish infantry division because there was not one anti-tank gun in Finland.

There were no tanks in a Finnish infantry division except for a few old French Renault tanks. These tanks had a crew of two men and carried either a 37 mm cannon or two machine guns. It could travel at 6 miles per hour. By 1939 the Renault was very much obsolete, and the Finns only used these tanks for training.

There were only 100 anti-aircraft guns in Finland. 30

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30K. J. Mikda, Colonel, Finlands Wars During World War II, (Mikkeli: Embassy of Finland, 1973), p. 6.

The Finnish air force was not any better armed. The air force had about 75 planes that were able to fly combat missions. Most of these planes were either Fokker C.X fighters or Fokker D.XXI fighters. The Fokker C.X fighter was a biplane made of plywood and fabric. It carried a crew of two and could reach a top speed of 209 miles per hour. The C.X could absorb considerable punishment from enemy ground fire and still return to its home base.<sup>31</sup>

The Fokker D.XXI was also a biplane fighter, but it was more modern than the C.X. The Finns had bought seven D.XXI fighters from the Dutch in 1937. They also bought the rights to build the aircraft in their own state aircraft factory. By the end of 1939, 38 aircraft had been produced by the Finnish factory. The D.XXI could fly at 272 miles per hour and climb to 32,000 feet. Its top speed was just a few miles faster than the modern Soviet bombers. The D.XXI carried four 7.9 mm machine guns.<sup>32</sup>

The swastika was painted on all Finnish aircraft. The swastika was considered a good luck sign among the Baltic people. It was used by the Finnish Air Force long before Hitler adopted it as the Nazi emblem. Finland's first aircraft was a gift from Baron

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<sup>31</sup>William Green, War Planes of the Second World War, Vol. 7, (Garden City: Doubleday and Company, Inc., 1961), p. 75.

<sup>32</sup>Ibid., Vol. 1, p. 12.

Clarence Von Rosen. He gave the plane to Finland during her War of Independence in 1918. The good luck sign was already on the aircraft, and in honor of the Baron it is placed on all Finnish service aircraft.<sup>33</sup>

Although the Finns were not well equipped with the larger and more expensive weapons of war, they may have had the best small arms in the world. Most of the Finnish service rifles were based on the 1928/30 version of the Russian Mouzin rifle. However, the Finnish weapon was of a much higher quality than the Russian weapon. All these rifles were bolt action, single shot weapons that were chambered for the 7.62 mm rimmed cartridge. This was the ammunition that the Russian weapons fired which allowed the Finnish soldiers to fire captured ammunition.

The Finnish manufacturers made the best light machine gun in Europe. The Finnish Lahti Saloranta light machine gun was first produced in 1926 at the state rifle factory. The weapon was designed by Aimo Johannes Lahti, hence its name. The Lahti light machine gun was recoil operated, air cooled and could be fired both fully automatic or single shot. It weighed 23 pounds and fired the 7.62 mm rimmed ammunition. The Lahti was fed by a 75 round drum or a 20 round box magazine. Its rate of fire was 500 rounds per minute. Its simple design and quality construction coupled to make this weapon

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<sup>33</sup>"Reds Find Finns and Weather a Tough Combination to Buck", Newsweek, December 11, 1939, p. 21.

very reliable and effective.

Probably the most famous weapon of the Winter War was the Suomi submachine gun. This submachine gun proved its worth in the forests of Finland. Normal European type military tactics said that the advancing unit must fire at the enemy at as great a distance as possible. They should increase the volume of the fire as the forces closed in on each other. In the woods or in very close combat, precisely the opposite tactics must be used. The unit advancing through the woods should get as close as they can to the enemy without being seen before shooting. The firing should reach its peak instantaneously and last for only a short time. The ideal weapon should be easy to move, light to carry and fire rapidly. Normal bolt action rifles were not fast enough. A weapon was needed that sacrificed accuracy at great distances for speed and volume at short ranges.

The Suomi submachine gun was such a weapon. The **Suomi** was only 34 inches long and weighed 11.3 pounds. Its 70 round drum magazine fired the 9 mm round at a rate of 800-900 rounds per minute. The 9 mm round was used by the Soviets for a majority of their pistols, and their ammunition could be fired in the Suomi. The barrel of the Suomi could be changed in a few seconds without the use of any tools which was an asset in prolonged fighting. The **Suomi** submachine gun was so noteworthy a weapon that it was adopted by the Swedish,

Swiss and Danish armies.<sup>34</sup>

The Finnish Army had very good small arms weapons, but as we have seen their heavy weapons of war were lacking. Not only were they weak in their numbers of soldiers and heavy weapons, but their supply of ammunition was also inadequate. At the end of November, the Finns had only a two month supply of ammunition for their rifles and machine guns. There was only a nineteen day supply of artillery shells for the heavy guns. The air force had a one month supply of aviation fuel for its aircraft.<sup>35</sup>

The small nation of Finland and its equally small army could not hope to launch an offensive military operation against anyone. The delay and the defense were the guiding principles of the Finnish Army. Trading time for space the army was to hold off any aggressor while the political leaders sought an end to the fighting. Failing to find a political end to the fighting, the Finns hoped to find an ally that would come to their aid. The only tactics the Finnish Army could hope to use with any success for any length of time were mobile defensive tactics.

A strong factor in the Finnish Army was the high quality of the officers. Many of these men were from the aristocracy and had

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<sup>34</sup>W. H. B. Smith, Small Arms of the World, (Harrisburg: Stackpole Books, 1973), pp. 128-351.

<sup>35</sup>Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt (New York: E. P. Dutton & Company, 1954), p. 324.

received training from German instructors during the struggle for independence. The most famous of all officers who took part in the Winter War was Gustaf Mannerheim. To the Finnish people Mannerheim was a hero, but to the people of the Soviet Union he was known as "Butcher Mannerheim." 36

Gustaf Mannerheim was born in Finland in 1876 to a Swedish speaking family and did not learn Finnish until he was fifty years old. Mannerheim had enrolled in the Finnish Cadet Corps when he was 20 years old, but he was soon expelled for disciplinary reasons. He then decided to make his career in Russia rather than Finland. He went to the Russian Cavalry School and was made a second lieutenant at the age of 22. After his marriage to the daughter of a major general, Mannerheim's advance was rapid. By 1904 he was a lieutenant colonel of dragoons and fought in the Russo-Japanese War. In 1913 he had become the commander of the Tsar's bodyguard. When World War I began he was a major general.

From 1915 to 1917 he was on the Rumanian front. On December 6, 1917, the Finnish Diet declared itself independent from Russia. Mannerheim commandeered a train and headed for his home. Finland soon broke into civil war and Mannerheim found himself

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36 "The Fiery Finns", Newsweek, December 11, 1939, p. 28.

leading the White Guard against the communist Red Guard. With the help of some Finns who had joined the German Army, the Jaeger Battalion, and 12,000 regular German troops, Mannerheim was in control of Finland by May 16, 1918.<sup>37</sup>

Mannerheim became the Regent of Finland after the war. He was awarded Germany's Iron Cross medal and according to Emperor William II, he was the first foreign military officer who had fought against Germany to receive such recognition.<sup>38</sup>

He retired to private life after he lost the election for President of Finland. He made frequent visits to England after this and was a guest of many of the English aristocracy. In 1931 Mannerheim was given a post that was especially created for him: Chairman of the Defense Council. Two years later he was made Finland's only Field Marshal. He organized the Civic Guard and made the government establish conscription. Mannerheim tried to strengthen the Finnish defenses, but he could not get the government to support the military with the much needed money. Mannerheim was close to resignation in November of 1939.<sup>39</sup>

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<sup>37</sup>"World War", Time, February 5, 1940, pp. 30-31.

<sup>38</sup>Marvin Rintala, Four Finns (Berkeley: University of California Press, 1969), p. 14.

<sup>39</sup>"Finland's Man of the Hour: Mannerheim", Current History, February, 1940, p. 48.

In summary, Marshal Mannerheim's authority in the Finnish Army was unconditional. He had studied the art of war under many conditions and circumstances. Mannerheim's extensive intellectual mind and his strong character traits made him a great military leader. He planned his war time strategy with great caution and deliberation before he took his course of action. Once he had made his decision, he carried his plan out with great enthusiasm. Marshal Mannerheim was the great corner stone of the Finnish Army.

The Finnish Army was an army that thought in terms of defense. Vital to Finland's defense against the Soviet Union was the line of defensive positions that the world was soon to know as the Mannerheim Line. The newspapers of many countries presented the Mannerheim Line as a powerful barrier of reinforced concrete that ran straight across the Karelian Isthmus. The press claimed that it was comparable to the Maginot and Siegfried Lines, and like them was impassable to any enemy force. This Mannerheim Line that the press created did not exist.

The myth of the powerful concrete Mannerheim Line still exists today, even though it was actually very primitive. The Mannerheim Line was built to withstand the so called infiltration attack that had developed at the end of World War I. It was built to stop the Hutier tactics of that era. Instead of being a line of fixed concrete forts like the Maginot Line, the Mannerheim Line was a

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complexity of small positions that became stronger and more numerous the deeper the enemy penetrates. The basic idea of the Mannerheim line was to allow the enemy to advance where resistance was the weakest and then launch a counter attack in strength where the enemy could be hurt the worst.<sup>40</sup>

The instinctive reaction of the Finnish people strengthened the Mannerheim Line in the summer of 1939. A popular movement broke out for volunteer work on all military fortifications. Thousands of people gave up their summer vacations to help the military. Roads were prepared to be blocked by building tall piles of granite stone that could be pushed on to the road. Granite rocks were also placed in the forest to stop enemy tanks or channel them into zones where they could be killed by Finnish soldiers.<sup>41</sup>

Even though this popular movement helped strengthen the Mannerheim Line it was still a very modest defensive line. The whole line was about 88 miles long and ran the width of the Karelian Isthmus. The line had 66 concrete pillboxes spread out over the 88 miles. Of the 66 concrete nests, 44 had been built in the 1920's and were out of date. Even the newer nests were not strong enough to

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<sup>40</sup>G. F. Eliot, "Finnish Line Breaks," Life, March 18, 1940, p. 34.

<sup>41</sup>H. B. Elliston, "On the Finnish Front," Atlantic Monthly, February, 1940, p. 247.

withstand the heavy cannon fire that the Soviets were sure to employ.<sup>42</sup>

The Mannerheim Line took every advantage of the natural defensive system that the terrain offered. It took advantage of the water, lakes, marshy ground and forests of the Karelian Isthmus. Any enemy force advancing into Finland would find its movements restricted by the defensive terrain and the Mannerheim Line. The courage of the individual rifleman on the Mannerheim Line would determine how long the line could repel an enemy assault. However, except for the flanks, the Mannerheim Line lacked an essential element vital to the strength of any defensive line. It did not have numerous and powerful supporting artillery fire. This lack of artillery and artillery ammunition was to prove a serious flaw in the defense of the Karelian Isthmus.<sup>43</sup>

The next aspect of the Winter War that we will examine is the terrain over which these two armies fought. The environment of Finland played a very large role in the strategy and military performance of both armies during the Winter War. Commanders of armies have always tried to use the natural terrain features of a land

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<sup>42</sup>Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt (New York: E. P. Dutton and Company, 1954), p. 325.

<sup>43</sup>"Fire Hose," Time, February 19, 1940, p. 25.

to their best advantage, and the commanders of the Winter War were not any different.

The terrain of Finland's 130,000 square miles, a country eight times the size of Denmark, is both geographically and topographically well suited for a defensive army. One third of all the land of Finland is located above the arctic circle. The numerous lakes in Finland could be used by any wise commander to strengthen his defensive plan.<sup>44</sup> Finland is covered with lakes and forests that dominate a majority of the country.

The greatest combat difficulties that the attacker had to face, due to the terrain of Finland, was the general lack of roads. There were few roads along the border, and those that were found were normally constructed of dirt or gravel. In the winter the roads were usually firm, but snow and ice severely limited their use.

Coupled with the general lack of roads was the vast and dense virgin forests of Finland. The forests were under no type of management, and thus the forest grew as a result of natural re-seeding. Young trees and old trees grew together to form an almost impenetrable mass of timber. The forest was a silent, trackless, desolate region to any one who came upon it for the first time.

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<sup>44</sup>"The Flying Finns," Newsweek, January 15, 1940, p. 19.

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The forest land began to thin out and became less dense from south to north. As the trees thinned out, the terrain became tangled with large granite rocks and groups of swamps, lakes and bushes. In the northern country the rocky ground was covered with slick reindeer moss. The bare mountain tops rose only a few hundred feet above the tree tops. The northern most region of Finland was a completely treeless tundra that ran into the coast of the Arctic Ocean. Survival in this region required strong men with natural talents taught by being born in the area.

These natural conditions in the frontier region between the Soviet Union and Finland affected the strategy and tactics of both forces. First both countries knew that the extensive pathless, wasteland could be passable only with difficulty. Operations conducted with large numbers of troops that had low mobility would not allow an invader to live off the land. Resupply would have to come over the few road networks or by air. The farther away from his supply base an invader traveled, the longer it took for his supplies to reach him.<sup>45</sup>

The huge Soviet military force was massing four of its armies along the border of Finland and the Soviet Union in late November,

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<sup>45</sup>General Waldemar Erfurth, Warfare in the Far North, (Neustadt: Historical Division U. S. Army, [1947]), pp. 12-13.

1939. Dedicated to the offense and armed with many of the large weapons of war, the Soviet Army knew they would have little trouble overrunning the puny Finnish forces. The internal problems of ill-trained soldiers and fearful officers had not yet risen to the surface.

The small Finnish Army, well trained but lacking any heavy weapons, stood along the border and prepared to defend its homeland. The positive attitude the army kept in the face of such overwhelming odds was fostered by the leadership of Marshal Mannerheim. The terrain favored the defender and hindered the attacker. Every Finnish soldier knew it would be his skill and bravery that would be needed to stop the aggressor that was sure to come. The people of Finland knew the Soviet Army would soon come crashing over their border, but they did not know how long they would have to wait. They would not have to wait long.

### Chapter III

#### The Outbreak of War

The Soviet Union needed some sort of an excuse to wage a war against tiny Finland. On November 26th, 1939, they created an incident that has become known as the Minila Shots. Viacheslav M. Molotov, the Peoples Commissar of Foreign Affairs and a member of the State Defense Committee, informed the Finnish envoy in Moscow of the incident. Molotov claimed that at 3:45 p. m. on November 26th, 1939, on the Karelian Isthmus, Finnish artillery had fired on Russian troops. He claimed that the artillery fire had killed three privates and one noncommissioned officer. He also claimed that seven privates, one noncommissioned officer and one sublieutenant had been wounded. Molotov then proposed that in order to avoid any more such incidents that Finnish forces be withdrawn 15 miles from the border.<sup>46</sup>

Mannerheim knew the Soviet Union would be seeking some sort of incident to start the war, and he had taken steps to reduce the chance that an incident could occur. Mannerheim had given orders that all activity on land, sea, and in the air which might serve as an

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<sup>46</sup>"Reds vs. Finns," Newsweek, December 4, 1939, p. 23.

excuse for Soviet provocation should be avoided. He also ordered all artillery batteries be moved back into Finnish territory beyond their range to reach the frontier. The Artillery Inspector of the Finnish Army was even sent to the Karelian Isthmus to supervise the carrying out of the order.<sup>47</sup>

The Soviet account of the shots was not true. The Finns had fired some mortars for practice that day, but all shots were accounted for. Urbo Sundvall, a Finnish frontier guard, and several observation posts were able to see the artillery shots hit. The shells exploded in an open field near the town of Minila about 800 yards from the frontier. The guards took a compass direction reading towards the direction from which the shots came and determined that they originated from the Russian side of the border. Sundvall reported that he saw 11 Russians standing in the open field before the shots were fired. He saw a horseman ride up to the group of Soviet soldiers, and then all 12 of them moved quickly towards the west. About ten minutes later, Sundvall heard two artillery shots followed by three more shots. A few moments later the shells exploded where the Soviet soldiers had been standing. After the last artillery round

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<sup>47</sup>Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt (New York: E. P. Dutton and Company, 1954), p. 315.

exploded, six Soviet men in uniform arrived at the impact site and inspected the area. In a couple of minutes they also left the spot. There were no dead or wounded soldiers to be seen.<sup>48</sup>

The Finnish high command ordered all its frontier guards and troops to withdraw one half mile from the frontier. Finland also offered to have the incident investigated by an international group to determine what really happened at Minila. The next day, November 27, Finland agreed to withdraw all her soldiers 15 miles from the frontier if the Soviet Union would withdraw all of her troops an equal distance from the border. The Soviet Union answered this offer by denouncing its non-aggression pact with Finland. On November 29th, 1939, Finland told the Soviet Union that she would agree to move all Finnish troops 15 miles from the border. The Soviet Union responded to this offer by severing all diplomatic relations with Finland.<sup>49</sup>

The Soviet Union wanted war--not just a few concessions from Finland. All Soviet Army leaves were cancelled for soldiers in the Leningrad military zone that adjoins Finland. Moscow radio called on the people of Finland to rise up against their leaders and overthrow the government, Moscow radio said, Finland would suffer the

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<sup>48</sup>H. B. Elliston, Finland Fights, (Boston: Little, Brown and Company, 1940), pp. 240-243.

<sup>49</sup>"Rabbit Bites Bear," Time, December 11, 1939, p. 26.

same fate as that of Poland. A western reporter in Moscow noted that the streets of Moscow were alive with excitement as they were two months before when the Soviet Union invaded Poland.<sup>50</sup>

Finland made one last effort to avoid war with her giant neighbor. A new cabinet was formed that Finland hoped might be able to come to some sort of agreement, short of war, with the Soviet Union. Risto Ryti was appointed as the new Premier and Vaino Tanner was made the new Foreign Minister. Juho Paasikivi was appointed as a Minister without portfolio. Moscow would not deal with the new government. The Soviet Union believed they could take over all of Finland in a few days. Officers of the Soviet Army were given instructions to be careful not to violate the Swedish border in their rush across Finland if a war did occur. Khrushchev remembers that almost everyone thought Finland would fall in a short amount of time. "All we had to do was raise our voice a little bit, and the Finns would obey. If that didn't work we could fire one shot," Khrushchev said, "and the Finns would put up their hands and surrender."<sup>51</sup> Soviet artillery leaders were told to plan for an operation against Finland that would last 12 days.

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<sup>50</sup>"Moscow Demands Finns Stage Revolt to Avoid Pole Fate," The Nashville Tennessean, November 28th, 1939, sec. 1, pp. 1-2.

<sup>51</sup>Nikita Khrushchev, Khrushchev Remembers, trans, and ed. Strobe Talbott (Boston: Little, Brown and Company, 1970), p. 152.

The Soviet Union decided to overrun Finland with the Leningrad Military District alone. The Leningrad Military District had about half a million men in its ranks and was composed of the following units:

Seventh Army

L Corps: 43rd, 90th, 142 Infantry Divisions  
 XIX Corps: 24th, 70th, 123 Infantry Divisions  
 X Armored Corps: 13th, 20th, 50th Armored  
 Brigades  
 Reserve: 49th, 138th Infantry Divisions, 35th,  
 40th Armored Brigades

Eighth Army

I Corps: 139th, 155th Infantry Divisions  
 LVI Corps: 18th, 188th Infantry Divisions,  
 34th Armored Brigade  
 Reserve: 75th Infantry Division

Ninth Army

Special Corps: 122nd Infantry Division  
 XXXXV Corps: 44th, 163rd Infantry Divisions  
 Group Rebola: 54th Infantry Division  
 Reserve: 88th Infantry Division

Fourteenth Army: 104th Infantry Division

Group Murmansk: Elements of 3rd Infantry  
 Division, 1st Armored Brigade, and ski  
 detachments

General Reserve: 50th, 100th, 136th Infantry  
 Divisions, 1st Artillery Division

Opposing this Soviet force was the Finnish Army of about 215,000 soldiers. The Finnish Army was composed of the following units:

Karelian Army

II Corps: 4th, 5th, 11th Infantry Divisions  
 III Corps: 8th, 10th Infantry Divisions  
 Screening Force: 7,000 soldiers  
 Reserve: 1st Infantry Division, 4th Infantry  
 Brigade

IV Corps

12th, 13th Infantry Divisions, 8th, 23rd  
 Infantry Battalions

Group Talvela: 12th, 112 Battalions

Group Northern: 14th, 15th Battalions

Group Lapland: 17th Battalion and 3 additional  
 Battalions

Reserve: 6th, 9th Infantry Divisions<sup>52</sup>

The Finnish Army planned to deploy the majority of their regular troops as a screening force on the Soviet border on the Karelian Isthmus. Mannerheim believed that the Karelian Isthmus was the most vulnerable axis of advance into Finland. The main body of soldiers were to man the defensive line along the isthmus. The

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<sup>52</sup>"Order of Battle: The Russo-Finnish War, December, 1939," Strategy And Tactics, July 1972, p. 30.

area from the Mannerheim line to the border was from 12 to 30 miles deep. In this zone the screening force was to engage the Soviet troops from defensive positions without losing the ability to move to the next position. Their job was to slow down the Soviet soldiers and inflict heavy losses on the enemy troops. On the frontier between Lake Ladoga and the Arctic Ocean, Finland hoped to use Civic Guard units and border guards to screen any Soviet force that wandered into the large forests. Mannerheim did not believe the Soviet Union would send very many troops into this area.

The Soviet Union planned attacks along the entire 800 mile eastern border of Finland. The largest army, the 7th Army, was to attack northward on the Karelian Isthmus and break through the Mannerheim Line. The 8th Army was to attack just north of Lake Ladoga to the west and later join with the 7th Army in the heart of Finland. Farther to the north, the 9th Army was to move west toward the northern end of the Gulf of Bothnia with the objective of sealing the border between Sweden and Finland. The 14th Army was to capture Petsamo and then proceed down the Arctic Highway to the south and joint forces with the 9th Army. Over 1,000 Soviet aircraft were to support the invasion.

During the early morning hours of November 30th, 1939, the Soviet Union claimed that tiny Finland had sent troops across the border to invade their peaceful nation. As the sunny and clear day

began, green rockets were seen bursting in the air, fired from the Soviet side of the border. A 30 minute Soviet artillery barrage started to pound the border area. Without a formal declaration of war the Soviet Army started its invasion of Finland at 8:00 a.m. November 30th, 1939.<sup>53</sup> The Winter War had begun.

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<sup>53</sup>"Northern Theatre," Time, December 11, 1939, pp. 23-25.

## Chapter IV

### Strategies and Tactics Employed During the First Three Months of the Winter War

The Soviet Union's strategy of a winter attack against Finland was essentially sound from the military point of view. In the summer months the innumerable lakes, forests, and marshy ground would have presented an even more difficult obstacle to the Soviet mechanized advance than the snow and ice did. At least in the winter the lakes and frozen ground would give the Soviets more terrain over which they could operate their machines of war. Yet, if the Soviet Union had looked at past winter military operations, they would not have been so confident of a quick and easy victory. Military operations in the winter months have always been costly undertakings. Hannibal lost over 50 per cent of his men crossing the Alps, and Napoleon lost close to 90 per cent of his army in his winter retreat from Russia in 1812.<sup>54</sup>

As the Soviet Army slowly pushed the Finnish screening force back to the Mannerheim Line, Moscow tried another trick to gain an advantageous position over the Finns. This new stratagem was to

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<sup>54</sup>"The Flying Finns," Newsweek, January 15, 1940, pp. 19-20.

set up their own Finnish government. On December 1st, 1939, the second day of the war, the Soviet news agency told the world that a Democratic Peoples Government of the Finnish Republic had been formed by the people of Finland. The new government of Finland was located in the town of Terijoki. Terijoki was actually a small frontier hamlet that had been evacuated by the Finns. Otto V. Kuusinen, the exiled leader of the Finnish Communist Party, was the President of the new government. Radio Moscow also announced that the new government would be transferred to Helsinki in a few days when the city was liberated. Stalin declared that Russia was not really at war with Finland since the Soviet Union recognized the Kuusinen government as the real government of Finland. The front page of several Soviet newspapers carried a picture of Stalin witnessing the signing of a mutual assistance and friendship treaty between the Democratic Peoples Government and the Soviet Union. Thus legally the conflict was a civil war. The Soviet Union was just supporting the new government and supplying them with troops and supplies. 55

The strategy to use the new government of Finland as a tool to gain an advantage over the Finnish people before any large scale

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55 "Red Subterfuge in Finland Comes Back as a Boomerang," Newsweek, December 18, 1939, p. 20.

military battles took place did not work. The Soviet Union refused to discuss the matter with the League of Nations and was soon expelled from that organization. Sweden and the United States offered to help mediate the question to help end the war, but the Soviet Union refused both offers. The Finnish people realized, because of the huge military attacks and the formation of the Kuusinen government, that their future as a free nation was hanging in the balance. They knew they were fighting for their existence now. By not declaring war, the Soviet Union also left the door open for other nations to supply Finland with military weapons and not be open to charges that they were helping the Finnish people in a war with the Soviet Union.

There were two main fronts in the Winter War and both must be examined separately in order to understand the tactics each side employed in the struggle. These two fronts were the front running from Lake Ladoga to the Arctic Ocean and the front along the Karelian Isthmus. First, I propose to examine the conduct of the war and the tactics used on the front from Lake Ladoga to the Arctic Ocean.

Soviet tactics were based on the idea that their mass of military men and equipment would allow them to surround and destroy any enemy force. The Soviet artillery would destroy the enemy fortifications; the aircraft would attack the enemy reserves; the armor forces would penetrate the defensive line; and the infantry would force its way into the gap and secure the enemy territory.

This was how the attack was to work; however, in the first months of the Winter War the plan was not put into practice because of several reasons. First, the terrain and thin road net works hampered movement. Secondly, the Soviet soldiers were not trained for war in a winter forest. Third, the Soviet leaders did not change their plans once they were made in order to conform to local conditions.<sup>56</sup>

One of the first Finnish tactics that disrupted the Soviet plan of advance was the use of land mines. Because the Finns did not have enough soldiers to stop the Soviet advance on all roads, they employed mines to be obstacles along the Soviet's avenues of advance. The mines were placed everywhere by the Finns. The front line correspondent to a Soviet newspaper sent his paper a story that was an admission to the effectiveness of the Finnish mines. "On every path and every road, every minute," the newspaper man said, "mines burst under tanks, mines burst under heaps of manure, under hay mows, a filthy trick at every step."<sup>57</sup>

Ice mines were also used to stop the Soviet soldiers. The Finnish ice mine was a four pound charge of explosives packed in a glass bottle. A hole would be bored into the ice and rows of the

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<sup>56</sup>Erkki Lahdenpera, Study of Soviet Tactics and Techniques, (Fort Benning: The Infantry School, [1950]), p. 39.

<sup>57</sup>"Red Subterfuge in Finland Comes Back as a Boomerang," Newsweek, December 18, 1939, p. 18.

mines, about 20 feet apart, would be set up to blow a 40 to 60 foot gap in the ice. This type mine can create obstacles out of frozen lakes or streams and close gaps between natural obstacles. The most effective use of the ice mine is to place one mine field close to the enemy shore line and another close to the friendly shore. The Soviet soldiers would be allowed to start across the frozen lake and then when they were in the middle both mine fields would be set off. The Soviet troops would find themselves marooned on the ice floe unable to retreat or go forward. Finnish soldiers could then finish the job at their leisure.<sup>58</sup>

The Soviet Divisions with all their equipment were road bound. As the Soviet troops advanced into Finland they soon found themselves being shot at by soldiers they could not even see. The key to the Finnish defense was mobility. All Finnish troops in this area were able to move over the frozen snow covered ground twice as fast as the Soviet infantryman because of their use of the ski. As the Soviets slowly advanced along a road, the Finns, a mile or so away, would build their own road parallel to the Soviet advance. These Finnish ski roads were made of trees covered with ice one foot thick. The Finnish patrols could cut side paths towards the Soviets whenever

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<sup>58</sup>Captain Frederick C. DeLisle, "Ice Mining--Army Style," Infantry, November/December, 1961, pp. 26-27.

necessary and could move extremely rapidly on the ice roads.

The Finns kept the Soviet troops tied to the roads by ambushing any patrols the Soviets tried to send into the forests. The Soviets soon found it better not to venture very far off the roads. The Finnish ski troops would then race up and down the flanks of the Soviet advance at will. They would near one section of the Soviet advance and, using their fast firing submachine guns, pour bullets into the convoy. The Finnish ski troops then would disappear into the forests.

The usual Soviet reaction to this hit and run tactic was to begin a heavy artillery bombardment of the forest where the shots had come from. They would then advance a short distance into the woods with fixed bayonets. Of course, they would find no one since the mobile Finns had long since deserted the area. The Finnish ski troops would, by this time, be concentrating their efforts on another section of the Soviet convoy. A few miles away and from the other side of the road the Finns would strike and the same results would take place all over again. A small body of ski troops, about 60 men, using these tactics could give the impression that large numbers of Finnish soldiers were hidden in the woods. The Soviet field kitchens and supply trains were the primary targets of the Finnish ski troops.

The night would not provide any comfort to the Soviet soldier. Soviet bivouac methods were not adequate, and in order to keep warm, the soldiers would huddle around large open fires. The cold, ill-

trained soldier thus became a great target for the mobile Finnish patrols.<sup>59</sup>

The Finnish ski troops were dressed in white overalls that made them almost invisible in the snow. They traveled very light, but what ever they could not carry on their backs was pulled by ski sledges. The ski troops carried their heavier equipment, such as their heavy machine guns and mortars, in these sledges. Their near noiseless movement and speed brought fear to the road bound Soviet soldier.

Long distance patrolling was also carried out by the Finns in this area of operations. The long range patrol offered the Finns excellent opportunities to attack headquarters, supply points and communication centers far in the Soviet rear. The long range patrol was very useful both for reconnaissance and raiding purposes. They often were able to give decisive intelligence information to the Finnish commanders which assisted in the security of the front line troops.<sup>60</sup>

All of these small Finnish groups could not stop the powerful Soviet advance into the area, even though they could slow them down.

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<sup>59</sup>V. A. Firsoff, Ski Track on the Battlefield, (New York: A. S. Barnes and Company, 1943), pp. 127-128.

<sup>60</sup>M/Sgt Alpo Marttinen, "Long Distance Patrolling Under Subarctic Conditions," [February 1950], Fort Leavenworth Library, Document Number N16899, Fort Leavenworth, Kansas.

By the second week of the war, the Soviets were still advancing, and the situation was becoming extremely critical. Mannerheim had to do something to stop the Soviet movement, and he took all of his reserves and sent them to the threatened sectors. A counter attack was needed to stop the Soviet advance, so the first major clash of the two armies began to take shape. The battle of Tolvajarvi would be an important battle for Finland's future.

The Soviet 8th Army was the most threatening of the drives into Finland, therefore it was to be the first target of the Finnish counter attack. The task was given to Colonel Ekholm who had seven battalions under his control. This force was named Task Force Ekholm in honor of its commander. The task force plan was to attack the superior enemy force from the front and both flanks. The counter attack was to take place on December 12. The two flanking movements were to start the attack first, and when the enemy weakened his center to cover his flanks, the main attack aimed at the Soviet center would start.

The Finnish attack was not supported by many artillery barrages, and they had to advance over quite a bit of open ground. Casualties were high from the start, but the Finnish soldiers pressed forward and in bitter fighting gradually gained a superior position. The task force commander made a bold decision and threw every reserve force and able bodied man he could find into the fight. The

commander of the Soviet 139th Infantry Division which was being attacked by the Finns panicked when he heard the battlefield reports. The Finns had overrun one regimental headquarters, disrupted Soviet artillery fire control, and now they threatened to breach his lines. The Soviet 139th Infantry Division was ordered to retreat by its commander. For the first time since the beginning of the invasion of Finland, a Soviet Division was forced to retreat. Swiftly the news spread throughout the Finnish Army and sent Finnish morale into orbit.

The Finns pressed on after the retreating Soviet force for the next several days using the tactics of offensive patrols, probing attacks and limited offensive attacks. The Soviet 139th Infantry Division was in shambles, and the Soviet 8th Army's reserve, the 75th Infantry Division, was ordered to replace them on the front line.

By December 23, 1939, the Finnish forces had pushed the Russians behind a large river and were unable to pursue them due to their dwindling strength. Mannerheim then called the entire offensive to a halt and ordered the Finns to take defensive positions. The cost in Finnish lives was the highest of the entire war. There were 630 soldiers killed in the combat and 1,320 wounded. Over 30 per cent of the Finnish officers and 25 per cent of the noncommissioned officers had been either killed or wounded leading the attack.

The Soviet Army lost a far greater number of casualties.

The Finnish attack had killed 4,000 soldiers and taken 580 prisoners.

The victory at Tolvajarvi had stopped the major Soviet advance in this sector of the war and raised Finnish morale. The two factors that helped win this battle had been the esprit de corps and leadership of the Finnish forces. For their part, the Soviets had expected an easy victory. But they lost their esprit de corps when they encountered the tough Finnish resistance to their invasion. The Soviet leadership, because of the purges, had lost the flexibility required on the battlefield and lost control of their forces. Tolvajarvi was the first Finnish victory of the war, but it was not the largest or the last.<sup>61</sup>

The battles at Suomussalmi provide an excellent example of how a small Finnish force could contain and destroy a much larger Soviet force by using tactics that fitted the arctic terrain. The area around Suomussalmi was a wilderness. About 90 per cent of the area was covered with coniferous trees that formed an effective barrier to the movement of large masses of troops. The area also had very few roads over which the mechanized elements of the Soviet Army could move. Ice on the numerous lakes in the area was frozen solid and could be crossed by troops. The usual temperature around the

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<sup>61</sup>Allen F. Chew, The White Death, (Michigan: Michigan State University Press, 1971), pp. 41-59.

town of Suomussalmi was about 30 to 40 degrees below zero Fahrenheit, and the snow was three to four feet deep. Foot movement was very exhausting and slow. To make matters even worse for the attacking Soviet infantry, the average daylight sun was only five hours a day, and snow storms often hampered visibility even when the sun was out.<sup>62</sup>

The Soviet 9th Army had the mission of cutting Finland in half at the waist. The advance of the 9th Army was to be led by the 163rd Infantry Division. The 163rd Infantry Division was brought up to the Finnish border from its base in the Ukraine on narrow gauge railways and crossed the border without opposition in early December. The lack of roads in the area forced the Soviet Division to move in two columns along the only two narrow roads in the axis of advance. Slowly the Soviet troops pressed on over the frozen ground towards the deserted village of Suomussalmi. Soon the mobile, fast ski forces of the Finnish Army were harassing both columns. Once again the noticeable cross country movements of the Finns gave them the advantage over the road bound Soviets. Their white covered troops constantly attacked both columns of the Soviet advance, and the Soviet infantry, many of whom did not have proper arctic clothing, paid a

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<sup>62</sup>Victor Suomalainen, "The Battle of Suomussalmi," Military Review, December 1949, p. 55.

heavy price. As at Tolvajarvi, the small Finnish units could not stop the invaders unless more troops were given to them. By December 9, 1939, the two Soviet columns had captured the town of Suomussalmi and had joined forces.<sup>63</sup>

Mannerheim reacted to this threat by releasing from his reserves the 9th Infantry Division who arrived near Suomussalmi on December 10. The 9th Infantry Division had a total strength of 4,700 men which was only 40 per cent of the number of soldiers it should have had. The division was just being built, and more troops were joining every day. The Soviets had stopped in the town of Suomussalmi to attempt a reconnaissance of the area and to rest before pushing westward again.<sup>64</sup>

On December 11th, the small Finnish Division attacked the Soviet forces. The 9th Infantry Division was still very weak and did not even have any artillery guns with them. All the soldiers were excellent skiers, however. The Finns decided to attack the Soviet unit in its front while sending the main attack circling to the Soviet flanks. Ski units were sent as far as 30 miles into the enemy rear

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<sup>63</sup>V. A. Firsoff, Ski Track on the Battlefield, (New York: A. S. Barnes and Company, 1943), p. 130.

<sup>64</sup>Victor Suomalainen, "The Battle of Suomussalmi," Military Review, December 1949, p. 55.

area to cut off their supplies. The Finns had the element of surprise on their side by using these tactics. Using these tactics the counter-offensive was to last for 17 days. During this time the Finns attacked Suomussalmi and the roads leading to the town. Finnish patrols and raiding parties harassed the Soviet force continually and cut off its major road for supply. The Finns still did not have the combat power to destroy the large Soviet unit. The 163rd Infantry Division was not able to advance against the Finns, and its supplies were just about completely cut off.

The Soviet 44th Infantry Division was ordered to aid the 163rd Division by cutting through from the south. The 44th Division had no better luck than did the 163rd Division. As soon as it moved out along the road towards Suomussalmi, battalion size Finnish ski troops hit their flanks. The large scale raids hit the Soviet rear as well. Both day and night the raiders struck at will at the road bound Soviet force. Soon the 44th Division was also immobilized by these attacks and was forced to dig in to defend itself. They were stopped five miles from the town and the 163rd Division they were to rescue.<sup>65</sup>

Both Soviet Divisions were growing desperate. They could not advance or retreat and their supplies were not reaching them.

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<sup>65</sup>Ibid., pp. 58-59.

They would either starve or freeze to death in their present positions. The Finns would not attack their large units, but small Soviet patrols never returned.

The Finnish 9th Division was finally at full strength on December 22, and it was ordered to attack the 163rd Division's last supply line. The attack was successful, and now the Soviet unit was surrounded. The Finns then used the tactic of the elastic defense to further destroy the Soviet soldiers. Luring the Soviet troops into the wilderness and away from their dug in positions, the Finns allowed them to advance into a counter attack. On December 24 the 163rd Division attempted to break out of the trap it was in. The Soviet slow moving infantrymen were picked off by the ski mounted Finns as they fled their positions. Hundreds of the Soviet soldiers threw down their weapons and fled into the woods. Panic gripped the 163rd Division, and they broke up into small groups which were easy targets for the Finnish patrols. By December 30th, the entire division had been wiped out.<sup>66</sup>

The Finnish forces then turned their resources against the stalled 44th Infantry Division. The Finns first attacked the head of the Soviet unit and then allowed the Soviet infantry to push them back.

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<sup>66</sup>"Soumussalmi: Finnish Tactics in Action," Strategy & Tactics, July 1972, p. 28.

This extended the length of the enemy column and made the next tactic to be employed more effectively. This was the famous motti tactic that was used with very great success in the Winter War. The motti tactic was first to cut off all communications between enemy units and then encircle the unit. The enemy force would then be divided again and again by the aggressive ski troops of the Finnish Army. The word motti is a Finnish word meaning to enclose in frames as cords of wood. It was used by the Finns to describe the hit and run tactics by which the smaller Finnish forces could out flank, encircle and cut the larger Soviet columns to pieces.

The 44th Infantry Division could not gather its forces to help one another as the motti tactic was applied to them. As the Soviet unit lay strung out over five miles of road, the Finnish tactics took their toll. Soon the division was broken up into small groups of men that were unable to support each other. The Soviet soldiers took up defensive positions in the snow and waited their turn to be picked off by the mobile Finnish ski troops. By January 9, 1941, the 44th Infantry Division had ceased to exist as a military unit, and snow drifts began to cover the dead.<sup>67</sup>

The battles around Suomussalmi were great victories for the

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<sup>67</sup>Malcolm Mackintosh, Juggernaut, (New York: The Macmillan Company, 1967), pp. 118-119.

Finnish Army. The Soviet Army lost over 27,500 soldiers either killed in the fighting or frozen to death by the cold arctic weather. The Finnish Army also captured 1,300 Soviet soldiers in these battles. Some Soviet troops, lost in the woods, were taken prisoners. The entire equipment of both Soviet units was left on the battlefield and captured by the Finns. The Finnish Army had casualties of 900 dead and 1,770 wounded soldiers.<sup>68</sup>

The Finnish tactics made the most of the terrain and climate of the arctic region. Their mobility over the frozen snow was a key factor in their success. They used the terrain to channel the enemy into killing zones and also to cover their own movements. The cold weather was a hardship to the untrained Soviet soldiers, but to the Finns who had grown up in the area, it was not. While the Soviets were road bound, the Finns were able to maneuver almost at their own will. These tactics lowered the morale of the Soviet troops and encouraged the Finnish troops.

The Soviet Union would not admit the loss of these two divisions to its own people or to the world. Radio Moscow did broadcast a threat to the Finnish Army, however. The Soviet broadcast stated that unless the Finns gave back the weapons they stole from the

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<sup>68</sup>R. Ernest Depuy and Trevor N. Depuy, The Encyclopedia of Military History, (New York: Harper and Row, 1970), pp. 1054-1055.

Soviet Union during the battle of Suomussalmi, the Soviet Union would declare war on Finland!<sup>69</sup> This must surely have been one of the most horrible threats ever made by one country to another.

Elsewhere in the eastern zone of operations, the Soviet forces were stopped by the Finnish defensive tactics. The Soviet Union did try a new tactic when they tried to relieve one Soviet unit that was caught in a motti.

The Siberian Ski Brigade, composed of many professional sportsmen, was called into Moscow and given a splendid send off by the people. Their mission was to establish contact with the 54th Infantry Division that was surrounded by the Finns. The Siberian Ski Brigade was trained and equipped to fight in the forests under winter conditions, and the Soviet Union had high hopes for its success. There were 2,000 men in the unit and were led by Colonel Dolin. These were the best ski troops the Soviet Union could put into combat. On February 15 the Siberian Ski Brigade used a Finnish winter road to get through the Finnish lines and headed for the trapped 54th Division.<sup>70</sup>

The Finns soon became aware of the new Soviet tactic and

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<sup>69</sup>"Northern Theatre," Time, January 29, 1940, p. 34.

<sup>70</sup>John Landon Davies, Finland: The First Total War, (London: George Routledge and Sons, 1940), p. 57.

sent a force of approximately 300 ski troops to intercept the Soviet force. The Siberian Ski Brigade did well at first and destroyed some Finnish field trains on their way to the 54th Division. Colonel Dolin was killed during the first two days of the fighting, and his command and control of the unit was lost. Still the Soviet ski troops went on with their mission, but their advance security and reconnaissance of the area was very poor. The Finns set up an ambush along an open lake and waited for the Soviet ski troops to blunder into the trap.<sup>71</sup>

As the Siberian Ski Brigade moved across the frozen ice, they did not see the 300 Finns on the other shore line. When the Soviet unit was in the center of the frozen lake, with no cover to hide behind, the Finns opened up with their submachine guns. The Soviet ski soldiers tried to return the fire, but many of them had too much oil on their weapons, and the frigid weather caused many of the weapons to freeze. In a matter of minutes the ice of the frozen lake was stained red with the blood of the entire Siberian Ski Brigade.<sup>72</sup>

So ended the Soviet attempt to use ski troops in the Winter War. The tactics used by ski troops can be very useful in an arctic

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<sup>71</sup>Raymond L. V. Pearson, "Operations in the Taiga," Military Review, April 1957, p. 45.

<sup>72</sup>John Langdon Davies, Finland: The First Total War (London: George Routledge and Sons, 1940, p. 58.

type of war, but the Finns were much better trained in this type of war since they grew up on the ski. The Soviet Union realized the value of ski troops and their need to start training early in life. After the defeat of the Siberian Ski Brigade, a Moscow newspaper advised the youth of the Soviet Union to learn to ski.<sup>73</sup>

The Soviet Union was unable to resume any large scale offensives in the northern zone of operations after these heavy losses. By the middle of February, 1940, there was not much activity in this sector. The Soviet Union had failed in its mission to cut Finland in two. Mannerheim later wrote of the battles of Suomussalmi and Tolvajari, "they were to prove the most remarkable ones from the tactical point of view and because they were of decisive importance for the morale of the Finnish nation. Further they gave the most realistic picture of the pitiless conditions under which the Winter War was fought."<sup>74</sup>

Until the end of the war, the Soviet Union fought a defensive war on the arctic front. Most of the Soviet units were trapped. They were not able to break the Finnish lines on their own strength so they had to wait for reinforcements whose arrival the mobile Finns

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<sup>73</sup>"Northern Theatre," Time, January 15, 1940, p. 30.

<sup>74</sup>Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt (New York: E. P. Dutton and Company, 1954), p. 34.

prevented. The cold and hunger killed thousands of the Soviet soldiers. The Soviet Union's defeat in this area was great, and it would have been total if the Karelian Isthmus front had not tied down so many Finnish troops.<sup>75</sup>

As great as the Finnish victories in the north were, they were not the decisive battles of the Winter War. The fighting along the Karelian Isthmus would prove to be the decisive battles of the war. Both Finnish and Soviet tactics here were far different than the tactics employed in the north.

Initially the Soviet 7th Army had little trouble as they launched their attack up the Karelian Isthmus. The Finns had only border units equipped with weak artillery guns to slow down the Soviet attack. The Soviet divisions rolled over the terrain, and since the ground was not yet frozen, their tanks would sometimes disappear into the swampy land. The Finnish border guards had also placed mines on all the avenues of approach, and these also took their toll of the Soviet troops. The Soviet tactic used to clear large mine fields was very unusual. The Soviet infantryman were formed into a wide line of men who would join hands and start singing. The singing men would then advance into the mine field. As most Finnish mine fields were also

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<sup>75</sup>Robert B. Asprey, "The Winter War," Marine Corps Gazette, August 1958, p. 39.

covered by machine gun fire, the Finns had a regular turkey shoot amid the exploding mines that the Soviet troops stepped on. The losses to the advancing Soviet infantry troops were immense, but they did not seem to care.<sup>76</sup>

The Soviet tanks advancing on the Karelian Isthmus at first frightened the Finns. The Finnish Army had only a few old training tanks of its own and no anti-tank weapons at the start of the war. At the last minute before the start of the Soviet attack, Sweden had given the Finnish Army 50 Bofors 37mm anti-tank guns, and the Finns quickly produced another 50 guns. These guns could shoot a mile and were very effective, but they were very heavy and cumbersome to move.<sup>77</sup>

Special anti-tank units were formed in all the Finnish Army units to stop the Soviet tanks. The majority of these special units were armed with the Molotov Cocktail. The Molotov Cocktail was a glass bottle that was filled with a mixture of chloride of potassium and coal oil. The bottle was then thrown at a tank at close range by a Finnish soldier. Ignition of the bottle was started by an ampoule attached to the mouth of the bottle containing sulphuric acid. Needless

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<sup>76</sup>Erkki Lahdenpera, Study of Soviet Tactics and Techniques, (Fort Benning: The Infantry School, [1950]), p. 45.

<sup>77</sup>"Bombers Over Finland," Newsweek, February 12, 1940, p. 26.

to say, this type of tactic required skill as well as courage.<sup>78</sup>

The main axis of the Soviet advance pushed the Finnish screening force to the Mannerheim Line after a one week march from the border. The large Soviet Army was now ready to break the Mannerheim Line and charge west to capture the Finnish capital.

In addition to its numerical advantage over the small Finnish Army, the Soviets had almost complete command of the air. The Soviet Air Force had bombed the Finnish capital of Helsinki on the first day of the war dropping 550 pound bombs on the city. The bombs killed ten and wounded 100 people of the city. However, Finnish anti-aircraft guns knocked down 25 per cent of the attacking Soviet planes. Other towns were bombed by the planes.<sup>79</sup> The Soviet planes also dropped incendiary bombs on the Finnish cities, and the house owners were asked to water their houses, inside and out, to form an ice insulation against these bombs.<sup>80</sup> Soviet airplanes strafed the Finnish front line troops whenever the weather allowed.

The Finnish people called the bombs Molotov bombs. The

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<sup>78</sup>Gustav Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt (New York: E. P. Dutton and Company, 1954), p. 328.

<sup>79</sup>"Reds Find Finns and Weather a Tough Combination to Buck," Newsweek, December 11, 1939, p. 21.

<sup>80</sup>"Northern Theatre," Time, December 11, 1939, p. 23.

The Molotov Bread Basket bomb was a huge bomb filled with hundreds of smaller incendiary bombs. The bomb would be dropped from the aircraft and would revolve as it fell. The sides of the big bomb shell would peel back allowing the smaller incendiary bombs to scatter over a wide area.<sup>81</sup> As the war progressed the supply of bombs to the airplanes decreased, and they were often forced to drop artillery shells instead of bombs.

Finnish civilians used the tactic of deception to lessen the airplane damage to their homes. The Finns would paint water towers to imitate factories and even used paper to create the illusion of windows on the buildings. The civilians that were able to leave the cities did so. Many visited friends or family who lived in the countryside.<sup>82</sup> The Soviet airplanes were not very well liked by the Finnish people who did not always treat the captured Soviet airmen with kindness. On one occasion when three of the many Soviet airmen were shot down in Finland, they had the unfortunate luck to drop into the hands of a mob in the city they had just bombed. The mob was made up of women and children who quickly killed all three Soviets with axes, pitchforks and shotguns.<sup>83</sup>

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<sup>81</sup>Robert A. Winston, Aces Wild (New York: Holiday House, 1941), p. 146.

<sup>82</sup>"The Brave Finns Face the Peace," Life, February 17, 1941, p. 82.

<sup>83</sup>"Northern Theatre," Time, December 11, 1939, p. 22.

As the Finnish anti aircraft weapons took their toll of Soviet air power, the Mannerheim Line defense was taking its toll of Soviet land power.

When the Soviet advance reached the Mannerheim Line, the Soviet leaders were not quite sure what to do. They had no real intelligence data on the line except they had heard that it was a powerful defensive line. Probing attacks were made but were easily thrown back by the Finnish defenders. Finally they decided to break through the Mannerheim Line by using their tanks to punch a hole in it and then fill the resulting gap with infantry troops. This tactic was sound from the military point of view.

Every morning for the next week or so the Soviet troops would noisily group for an attack in some open area. Finnish artillery rounds would disrupt their formation, but they stayed in the area. The Soviet troops were not very well trained for the operations they were about to conduct. Artillery fire would precede every attack and was fired in great quantities; however, they did not have any observers and their rounds were not very effective. Most artillery guns just pointed their guns toward the Finnish countryside and blasted away.<sup>84</sup>

The Soviet tanks would lead the advance towards the defensive

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<sup>83</sup>John Erickson, The Soviet High Command (New York: Macmillan and Company, 1962), p. 544.

line followed by the infantry battalions who were packed together in tight formations. The Soviet infantry fell far behind the tanks in the attack and were unable to provide covering fire for the tanks. The Soviet tanks had no radios except for the company commander's tank. A plan would be made before the attack, but once they started advancing, each tank was on its own.<sup>85</sup> The Finnish infantrymen would pick off the tanks as they came forward. Hiding in holes with a few Molotov Cocktails, a few men would wait for the tanks to pass and then attack them from the rear. Many tanks were captured or destroyed by this Finnish anti tank tactic. A few tanks might get through the defense, but they were unsupported and were either destroyed or thrown back to their own lines.

The infantry following far behind the tanks were not able to do much either. The Soviet infantry advanced over the open ground towards the Mannerheim Line in very close order movements. This tactic provided an excellent target for the Finnish machine guns which were hidden in the woods.<sup>86</sup> "We couldn't see them," one Soviet prisoner of war stated later. "I saw one after another of my comrades

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<sup>85</sup>B. Perret, Fighting Vehicles of the Red Army (New York: Arco Publishing Company, 1969), p. 93.

<sup>86</sup>Malcolm Mackintosh, Juggernaut (New York: Macmillan Company, 1967), p. 118.

killed. Still I couldn't see where the fire came from."<sup>87</sup> Firing wildly from the hip, the Soviet infantry did little damage to the Finns. After both the tanks and infantry had taken a beating, they gradually fell back to the starting point of the attack. It is interesting to note that the Finns would use the captured Soviet tanks against their enemy, but only after they had covered the tank with a white lime to camouflage the vehicle. The Soviet tankers were not that smart, and their tanks remained dark making them stand out in the snow covered terrain.<sup>88</sup>

Between the Finnish strong points on the Mannerheim Line, the Finns used war dogs as messenger carriers. The dogs were trained to ignore the sounds of battle and regardless of the weather were very reliable messengers. These dogs were even fitted with gas masks and could be trained to carry messages 15 miles. Other dogs were used as patrol dogs, watch dogs and dogs to pull supplies. Medical service dogs were used to search the battlefield for wounded soldiers. Like regular soldiers the dogs in service followed a schedule. They were trained to bring their own bowls to the cook house twice a day for their food. In camp each dog had his own little tent that he slept in.<sup>89</sup>

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<sup>87</sup>"Red Corps Routed by Finn Strategy," New York Times, January 11, 1940, sec. 1, p. 2.

<sup>88</sup>John Langdon Davies, Finland the First Total War, (London: George Routledge and Sons, 1940), p. 16.

<sup>89</sup>"Finlands War Dogs," Current History, February 1940, pp. 48-49.

Since the attacks on the Mannerheim Line were failing, the Soviets decided to try a new tactic to break through. They knew the tank led attack was not working so they thought the infantry led assault might do better. This tactic was started in the middle of December 1939. The general plan was the same as in early December, except that now the infantry was to punch a hole in the defense, and the tanks would then rush into the gap.

The same poor artillery barrage was fired, and the hapless infantry would wade into the open fields. Wave after wave of infantry soldiers advanced into the Finns machine gun fire and were mowed down in rows. Each wave advanced as far as it could and then fell back to be replaced by another wave of troops. Unhampered by the Soviet tanks, the Finns shot down the advancing Soviet infantry by the hundreds.<sup>90</sup>

The Finnish troops generally did not counter attack because the Soviet troops had not penetrated the line. Soviet infantry casualties in these attacks were about 50 per cent of the forces involved. The Finns did send snipers behind the Soviet lines. These snipers tied themselves to snow covered trees and, because of their camouflage, were completely invisible. They took a heavy toll of Soviet

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<sup>90</sup>"Northern Theatre," Time, February 26, 1940, p. 30.

troops who nicknamed the snipers cuckoos.<sup>91</sup>

By the end of December the Soviet High Command had had enough of this beating, and they called off the offensive. Stalin did not have a very happy birthday in 1939. His birthday was on December 21, 1939, and everywhere his armies were being beaten by the Finns. To make his birthday even worse, the Finns, who never did bomb a Soviet city, flew over Leningrad and dropped leaflets that stated, "This might have been a bomb."<sup>92</sup>

The failure of the Soviet mass assaults was a result of their tactics, leadership and men. The tactics were unbending and did not include the maneuvering of units on the battlefield. The tactics were based on the weight of material and masses of troops. The leadership stuck to formal plans made before the battle and would not change them to meet changing battlefield conditions. Leaders in the Soviet command could not make the quick change of plans type decisions needed to insure victory. Time and time again the Finnish command could, because of the simple Soviet plans, guess in what sector the next Soviet attack would come from and move more troops into that

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<sup>91</sup>Erkki Lahdenpera, Study of Soviet Tactics and Techniques, (Fort Benning: The Infantry School, [1950]), p. 46.

<sup>92</sup>"Lickings Taken By Red Army Spoil Stalins Birthday Party," Newsweek, January 1, 1940, pp. 14-15.

zone. The Soviet infantryman was a tough mass fighter but lacked initiative and could not fight independently. Because the average soldier was not very well trained, and for the other reasons mentioned above, the Soviets planned for the mass attack. This allowed the Finns to mow down row after row of the attacking troops with just a few machine guns.<sup>93</sup>

In January, 1940, the Soviet strength grew to 26 divisions with the addition of the 13th Army. The continued attacks on the Karelian Isthmus were conducted by only small Soviet forces. The purpose of these attacks was to weaken Finnish resistance, to reconnoiter the Mannerheim Line, and to prepare for the heavy assaults that would employ new Soviet tactics.<sup>94</sup>

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<sup>93</sup>Robert B. Asprey, "The Winter War," Marine Corps Gazette, August 1958, p. 45.

<sup>94</sup>Erkki Lahdenpera, Study of Soviet Tactics and Techniques, (Fort Benning: The Infantry School, [1950]), p. 47.

## Chapter V

### The Changing Soviet Tactics and the End of the Winter War

Something had to be done to win the Winter War before the Soviet Army lost all its prestige. The poor showing of the Soviet forces was headlined news throughout the world. This failure against tiny Finland encouraged anti-communist forces to send material aid to help Finland in her struggle. Not only aid but the rumors of outside intervention increased everyday. The Soviet Union realized that the war could not be allowed to drag on indefinitely, because there was always the possibility of active foreign aid to Finland. In late December the Soviet Union saw disaster overcoming its military forces unless something was done quickly. If the war were allowed to continue until April, the spring thaw would swallow up the heavy Soviet war machines and force a halt to the military operations for a few weeks. This halt would allow the Finns to consolidate their defense and might give the Allies a chance to send a force into Finland. This could not be allowed.<sup>95</sup>

The Soviet High Command realized that in order to win the

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<sup>95</sup>Robert B. Asprey, "The Winter War," Marine Corps Gazette, August 1958, p. 45.

war against Finland a much greater effort would be needed. The Soviet Armies were reorganized on December 26, 1939. The 13th Army was sent to the Karelian Isthmus, and a new front called the Northwestern Front was set up to control all the operations against the Mannerheim Line. Army commander S. K. Timoshenko was placed in charge of the troops on the Karelian Isthmus. Strategically the Soviet Union gave up the idea of the thrust to cut Finland in two. The new strategy would be to concentrate on the Karelian Isthmus. The Soviet's strategy was to use their great superiority of men and equipment for a decisive operation on the Isthmus, since this area offered the best chance of success.<sup>96</sup>

On December 28th a new directive was issued to the Soviet Army for operations against the Finns. The new directive was geared to instruct the Soviet Army on how to win against the Finnish Army. The directive stated:

1. Commanders on the Finnish front should not rush their troops into battle but rather they should proceed only after extensive preparations had been made.
2. The rear areas of the advancing units had to be secured against the Finnish ski patrols which had been causing such havoc with Soviet supplies.

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<sup>96</sup>Waldeman Erfurth, "Warfare in the Far North," (Neustadt: Historical Division U. S. Army, [1947]), p. 36.

3. Mass attacks by the infantry were to be stopped. The new tactics called for attacks by companies and battalions advancing in several attack groups. Ski troops were requested to make a detailed reconnaissance of the area to be attacked before the assault took place.
4. The blind use of artillery fire was to stop. All artillery guns were to fire only when they received targets from the front line commanders.
5. The pill boxes of the Finnish Army were not to be attacked by the infantry frontal assault. The pill boxes were to be smashed by artillery or tank gun fire before the infantry assaulted.
6. The sending of newly arrived divisions to the Karelian Isthmus straight into battle was forbidden. The new troops were to receive instructions on how to fight in this area before they were sent to the front lines.
7. Army staffs were told to ensure that the troops had enough weapons and clothing to fight under the condition of weather that existed on the isthmus.
8. Strict security over orders given was to be enforced, and greater secrecy in troop movements and dispositions was demanded.

Thus, a new strategy, a new front, a new command and new tactics were planned to overcome the Finnish defense.<sup>97</sup>

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<sup>97</sup>John Erickson, The Soviet High Command (London: Macmillan and Company, 1962), p. 547.

New weapons were also added to the Soviet forces that were to operate on the Karelian Isthmus. Armored sledges were made to be pushed or pulled by the tanks. The sledges were made like iron boxes with the top and one side missing. These iron sledges were able to protect up to 30 Soviet infantrymen from the Finnish small arms fire. New heavy KV tanks were added to the Soviet armored force. Bigger and longer-range artillery guns were put into position to blast the Mannerheim Line defenses.<sup>98</sup>

In order to raise the morale of the common Soviet foot soldier, the Soviet High Command began to award medals to the troops for bravery in combat. On January 16, 1940, 2,606 soldiers were awarded medals, and on January 25 almost a thousand more medals were handed out. These awards kept pouring in, and by the end of the war over 48,000 individuals were decorated for their brave military exploits.<sup>99</sup>

The weather that had aided the Finns during the first months of the war now was to come to the aid of the Soviet Union. By February the Finnish thaw usually began, and this would hinder Soviet movement. However, the weather stayed cold in January and

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<sup>98</sup>Malcolm Mackintosh, Juggernaut (New York: Macmillan Company, 1967), p. 121.

<sup>99</sup>Allen F. Chew, The White Death (Michigan: Michigan State University Press, 1971), p. 144.

February. Finland's weather dropped to 58 degrees below zero in late January 1940. This was the lowest temperature since 1878. In Moscow it was 49 degrees below zero. The cold weather kept the ground frozen and aided Soviet tank movement. The Bay of Viipuri remained frozen to the extent that tanks were able to move over the ice. The Soviets could use the frozen bay to out flank the Mannerheim Line if the weather stayed cold.<sup>100</sup>

In the mist of this military build up and reorganization the puppet government Otto Kuusinen was dropped by the Soviet Union. The Soviets now knew their strategy to conquer all of Finland was next to impossible, and they would have to seek some sort of treaty with the established government of Finland. The people of Finland had not joined the puppet government, and its existence would hamper any sort of talks with the Finnish government. The Finns had asked the Soviet Union under what terms the war could be ended. Molotov said that before answering this question, the Peoples Government of Finland would be asked for their opinion. This prompted the last message the world would ever hear from the puppet government, "The Peoples Government expressed the view," Molotov stated, "that in order to put an end to the bloodshed and to ameliorate the

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<sup>100</sup>"General Winter," Newsweek, January 29, 1940, p. 21.

condition of the Finnish people, a proposal to terminate the war should be welcome."<sup>101</sup> The Peoples Government of Finland was never heard of again.

The Finnish Army was growing smaller every day because of battle casualties. The Finns were desperately trying to replace the soldiers who had been killed or wounded. There were many sources that the Finns tapped to replenish their army. Convicts who were in Finnish prisons were released, if they were serving light sentences, to join the war effort. Men up to 46 years of age and other men who had once been rejected for a physical incapacity were also taken into the army.<sup>102</sup>

Foreign volunteers were of much value to the Finnish Army. The vast majority of the foreign volunteers came from Sweden. Swedish newspapers carried full page advertisements for men to join the volunteer force and help Finland. "Now the world knows what it is to be a Finn," the advertisement said. "It is your duty to show what it means to be a Swede!"<sup>103</sup> Over 8,000 Swedish volunteers fought for Finland in the Winter War. These men were formed into an independent unit to which 725 Norwegian volunteers were attached

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<sup>101</sup>V. M. Molotov, "The Meaning of the War in Finland," Soviet Foreign Policy, April 1940, p. 15.

<sup>102</sup>"Northern Theatre," Time, March 4, 1940, p. 32.

<sup>103</sup>"Volunteers for Finland," Life, February 5, 1940, p. 16.

and fought as the Swedish Volunteer Corps. The Soviet newspapers alleged that many of these volunteers were poor unemployed men who committed suicide upon reaching Finland and learning the circumstances under which they were fighting.<sup>104</sup> Actually the Swedish Volunteer Corps fought bravely and well in the Winter War.

Prior to December 25, 1939, 50 volunteers from the United States arrived in Finland. These men were the first wave of 800 Americans who came to fight for Finland. Led by Captain Albert Penttila, these first 50 men went into action the day after their arrival in Finland. These men were mostly young service veterans that did not require extensive training. The initial American force frequently operated behind the enemy lines and fought well. "They have not quite got used to the cold," Captain Penttila said, "but I am molding them into the finest raiding party of the north."<sup>105</sup>

Altogether 11,500 volunteers from almost 30 nations arrived in Finland during the Winter War. Their aid to Finland was more of a sign of world approval of the Finnish cause than a military factor in the actual war.<sup>106</sup>

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<sup>104</sup>"News from Moscow," New York Times, February 6, 1940, sec. 1, p. 15.

<sup>105</sup>James Aldridge, "U. S. Finns Fighting North of Ladoga," New York Times, February 6, 1940, sec. 1, p. 10.

<sup>106</sup>Max Jakobson, The Diplomacy of the Winter War (Cambridge: Harvard University Press, 1961), p. 273.

The Finns were also running low on ammunition for their small artillery units. Other military supplies were being rapidly depleted. Rifles, mortars, cannon, hand grenades, mines and military radios were sent to Finland by nations that believed in the Finnish stand against the Soviet Union. Military aircraft and the pilots to fly them were received from Italy, Denmark, England, France and the United States.<sup>107</sup>

The Finns used many of the captured Soviet weapons and ammunition during the last months of the war. The Finns would scatter leaflets over the Soviet held territory that offered deserting Soviet soldiers money if they brought their weapons with them. Prices ranged from 100 rubles for a pistol to 10,000 rubles for a tank. The largest of the cash offers was for a Soviet airplane. "Finland will pay 1,000 U. S. dollars for each airplane received," one Finnish leaflet stated, "plus free transportation for the pilot to any place in the world."<sup>108</sup> One artillery shell captured by the Finns had been made by the Germans and sold to the Japanese. The shell had been captured by the Soviets in Manchuria. Ultimately the Finns captured

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<sup>107</sup>Eloise Engle and Lauri Paananen, The Winter War, (New York: Charles Scribners Sons, 1973), pp. 153-157.

<sup>108</sup>"Northern Theatre," Time, January 15, 1940, p. 30.

the shell, put a new fuse on it, and fired it at the Russians. 109

A new tactic employed by the Soviet Forces was the use of parachute troops. Prior to the Soviet renewed offense, they made several parachute landings. The Soviets were the first nation to demonstrate parachute forces when they employed these troops in army maneuvers in 1935. The value of these troops was that they were to be used to disrupt enemy communications and attack rear area supply points. The parachute troops were not very successful in the Winter War since most of them were captured soon after landing in the snow. Only small patrols were dropped from the Soviet bombers, and they had no affect on the outcome of the war. This was the first use of parachute forces in the history of modern warfare. 110

The final and gigantic Soviet offensive on the Karelian Isthmus began at 12:45 p.m. on February 1, 1940. The objective was to break the Mannerheim Line. The Soviets planned to pin down the entire line with shallow attacks and heavy artillery fire. When the Finns were tied down by these attacks, the main concentration of attacking troops would break through in a narrow sector of the line. 111

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109 Sir Walter Citrine, My Finnish Diary (Harmondsworth: Penguin Books Limited, 1940), p. 100.

110 "Parachute Troops Fail Soviet So Far," New York Times, January 5, 1940, sec. 1, p. 2.

111 K. J. Mikola, Finlands Wars During World War II (Mikkeli: Embassy of Finland, 1973), p. 16.

After a six hour artillery barrage and air attacks by about 500 airplanes, the Soviet assault groups attacked. The artillery fire was directed by observation and was very accurate. The Soviet assault groups worked well together, and for about ten days the entire isthmus was subjected to heavy probing attacks. These probing attacks were not intended to break through the Mannerheim Line but rather to seek out Finnish weak points. The artillery barrages were intense, and on some sectors of the line the artillery guns were lined up hub to hub. On a single day the Soviets would fire 300,000 shells per day into the Finnish defenses. On the vital Summa sector, over 15,000 artillery shells per mile of front line rained down on the Finnish defenses.<sup>112</sup> The serious orthodox use of artillery fire to cover the infantry advance and destroy fixed positions had been rediscovered by the Soviet Army.

On February 11, 1940, the artillery gave the Finnish defenses a final battering while Soviet bombers dumped tons of high explosive bombs on the line. The assault groups then went forward. Each assault group was composed of a rifle and machine gun unit, two mortars, two or three snipers, not less than three tanks, one flame throwing tank and a squad of sappers. When one group became

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<sup>112</sup>"Finlands Verdun," Life, February 26, 1940, p. 22.

pinned down, they would be withdrawn and a new group came forward. When the assault group made a penetration, the larger infantry units following them would pour into and expand the gap. The Finns counter attacked, but unlike the Soviets they did not have the fresh units to replace battle tired soldiers. The Soviet assaults were much better coordinated than they had been in December 1939. By February 14, 1940, the first defensive zone of the Mannerheim line had been broken, and the Finns retired to a new position 20 miles to their rear.<sup>113</sup>

The new positions of the Finnish Army's defensive plan was not fortified. The Finns held this line for ten days of intense battle with the giant Soviet forces. Then this line broke and the Finns, who had been fighting without rest, had to retreat to the rear position of the Karelian Isthmus. The last line of defense was longer than the other lines had been, but the terrain was good for a defense.<sup>114</sup>

On February 21st, a heavy blizzard struck the Karelian Isthmus and stopped all military operations for 3 days. The Soviet forces used this break in the combat to withdraw the leading divisions of the assault and replace them with fresh troops. On February 28th, the

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<sup>113</sup>John Erickson, The Soviet High Command, (New York: Macmillan and Company, 1962), p. 550.

<sup>114</sup>K. J. Mikola, Finlands Wars During World War II, (Mikkeli: Embassy of Finland, 1973), p. 16.

fresh Soviet troops launched a new assault on the tired and dwindling troops defending the area. The final battle of the war was planned to attack towards the city of Viipuri with the main force and attack across the Gulf of Finland and Viipuri Bay with another force to encircle the Finns. 115

There was a precedent for an attack across the frozen Gulf of Finland and Viipuri Bay. Peter the Great's Army had marched 80 miles across it in March of 1710. 116 The Finns used what few airplanes they had to bomb the advancing Soviet forces as they crossed the open ice. As the Soviet forces neared the coast, the Finnish machine guns took a heavy toll on the infantry. After three days of heavy fighting, the Soviets established a hold on the coast and were making attacks near Viipuri.

The Soviet forces on the frozen land were also making progress. The Finns tried to slow the Soviet advance by flooding the fields around Viipuri, but the Soviet infantry continued to move forward through the waist high ice cold water. The last Finnish reserves were pulled out of training centers to help, but they were not enough.

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115 Malcolm Mackintosh, Juggernaut, (New York: The Macmillan Company, 1967), pp. 122-123.

116 Allen F. Chew, The White Death, (Michigan: Michigan State University Press, 1971), p. 179.

By March 5 Mannerheim reported that serious resistance was not possible due to the lack of manpower and ammunition. On March 9th the Finnish Army was utterly exhausted, and Viipuri was falling, house by house, to Soviet troops.<sup>117</sup> Finland's President said, "If the world ignores us in our need, we have no choice but to fight to the last man."<sup>118</sup>

The world was not ignoring Finland. Britain and France were interested in stopping Swedish iron-ore from reaching Germany, and they thought Finland's request for aid might help them do this. If they went to the aid of Finland, they would land in Narvik and move overland towards Finland. Most of the Allied troops would be used to block the iron ore routes not to help Finland. If Finland accepted the offer of Allied help, Finland could become a second front in the world war. Finland had its finger on the trigger that could send the Allies into a war with the Soviet Union and Germany.<sup>119</sup>

The Finns estimated that Allied forces could not arrive in time, and even if they did, they were not trained for arctic warfare. The Soviet Union did not want to push Finland into a situation where

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<sup>117</sup>Malcolm Mackintosh, Juggernaut, (New York: The Macmillan Company, 1967), p. 123.

<sup>118</sup>"Northern Theatre," Time, February 26, 1940, p. 30.

<sup>119</sup>Douglas Clark, Three Days to Catastrophe, (London: Hammond, Hammond and Company, 1966), p. 180.

Finland would request the Allied help because they did not want to be at war with the Western Powers. The threat of Allied aid and not the actual military aid was what Finland wanted. Finland used the threat to save her independence in the face of military defeat.<sup>120</sup>

The terms of the peace treaty were harsher than the demands the Soviet Union had made of Finland prior to the war. Finland lost 22,000 square miles of territory. The Soviet Union took Finland's second largest city Viipuri; her port of Petsamo; strategic Hanko; and the entire Karelian Isthmus. Over 450,000 Finns were left homeless because they would not live under the control of the Soviet Union. The Finnish government agreed to the terms because their military machine could do no more against the mass of the Soviet Army. The harsh terms for peace was signed on March 12, 1940, and the fighting was to stop at 11 o'clock in the morning on March 13, 1940.<sup>121</sup>

Most of the people of Finland learned that the country had signed the peace with the Soviet Union from the radio. Lord Haw Haw, the renegade British announcer, broadcast the news over the Hamburg radio. The Germans were the first to announce the news to Finland and the world. After 104 days of intense fighting, the Winter War

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<sup>120</sup>K. J. Mikola, Finland's Wars During World War II, (Mikkeli: Embassy of Finland, 1973), p. 18.

<sup>121</sup>Eloise Engle and Lauri Paananen, The Winter War, (New York: Charles Scribner's Sons, 1973), p. 143.

was over. The fighting died down on March 13th until fifteen minutes before the cease fire was to take place. The Soviets launched a terrific artillery barrage that was futile in a tactical sense but killed many soldiers needlessly. At 11 o'clock all fighting stopped, and all over Finland their country's flag was lowered to half mast.

In a final message to his men Mannerheim said:

"I am as proud of you as if you were my own children. . . Your heroic deeds have roused admiration of the world, but after three and one half months of war we were still almost alone. . . We have paid to the last penny any debt we may have owed the West."<sup>122</sup>

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<sup>122</sup>"Peace in North, What in West," Newsweek, March 25, 1940, pp. 21-22.

## Chapter VI

### Assessments and Conclusion

Total casualties during the Winter War can not be given with any certainty. The Soviet Union admits to 48,745 men killed and 158,863 men wounded.<sup>123</sup> However, this is a gross underestimation of the casualties suffered by the Soviet Union. No one will ever know the true loss of the Soviet Army unless the Soviet Union releases new data on the war, which is not likely. The snow of Finland and time have covered the true number of Soviet dead that fell in Finland. Nikita Khrushchev, who served as the political member of several military councils during the Winter War, has said the Soviet Union lost as many as one million soldiers in the war.<sup>124</sup>

Finland reported her losses as 24,923 soldiers dead or missing and 43,557 wounded.<sup>125</sup> This figure is probably close to the true number of casualties suffered by Finland during the combat.

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<sup>123</sup>V. M. Molotov, "The Meaning of the War in Finland," Soviet Foreign Policy, April 1940, p. 12.

<sup>124</sup>Nikita Khrushchev, Khrushchev Remembers, trans. and ed. Strobe Talbott, (Boston: Little, Brown and Company, 1970), p. 155.

<sup>125</sup>Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt, (New York: E. P. Dutton and Company, 1954), p. 370.

Finland, which conducted the war with great skill and courage, has no reason to try and cover up its casualties.

The myth of the Mannerheim Line defense was begun by the Soviet Union because of their poor military performance during the Winter War. Claiming the Mannerheim Line was built under the supervision of foreign experts on the model of the Maginot Line, Molotov said the Soviet Army had overcome a very difficult task. "The Red Army has smashed the Mannerheim Line and thereby covered itself with glory," Molotov continued, "as the first army to force its way under most difficult conditions through a deep, powerful zone of perfectly modern military fortifications."<sup>126</sup> As we have discovered earlier the Mannerheim Line was not as Molotov has observed but rather a weak defensive line whose strong points were terrain and climate. France believed the Soviet reports and thought the war had proven the power of a strong defensive line like the Maginot Line. Thus the inefficiency of the Soviet Army in breaking through the Mannerheim Line was covered up by the Soviet propaganda machine.

There can be stated several reasons for the dismal failure of the military operations that the Soviet Union launched upon Finland.

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<sup>126</sup>v. M. Molotov, "The Meaning of the War in Finland," Soviet Foreign Policy, April 1940, p. 9.

A contemporary author of the time noted the extraordinary morale of the Finns and the poor morale of the Soviet soldiers. This same author also saw the strong influence of the Finnish leadership upon their men in battle as a reason for the Finns' success. He also saw that the Finns were able to take advantage of the cold weather and road bound Soviet columns in the north to win battles. 127

All of these reasons are true but a closer examination also shows many more defects in the Soviet Army. The Soviet infantry was not able to fight well in the forests of Finland. Their training was for mass formations over open ground, not individual combat in dense woods. They seemed unable to maneuver on the battlefield. Likewise their weapons were not suited for close combat. The single shot bolt action rifle did not provide enough fire power against the Finns' submachine guns.

Soviet armored forces were not used well on the battlefield. Stiff, formal plans did not allow the tanks either to create a gap in the Finnish lines or exploit a gap made by the infantry. Each tank tried to complete its mission but received little or no help from the other tanks in the formation. If the master plan did not go right the tank commanders were at a loss for what to do next. The Finnish

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127 Stephen O. Fuqua, "Why the Russians are Taking a Licking," Newsweek, February 5, 1940, p. 23.

terrain did not allow the tanks the freedom of movement they would have liked. The many lakes, streams, marshes and woods gave the tanks few avenues of advance towards the Finnish lines. These few avenues were protected against tanks by Finnish mines and anti tank units. Over one half of the Soviet tanks used in the Winter War were either captured or destroyed by the Finns. One quarter of the entire Soviet Armies armor was thus lost in this war. 128

The Soviet use of airplanes was not a decisive factor in the war. The airplanes helped bomb and strafe military targets and contributed to the battle, but they were not a decisive factor in the battle.

The decisive combat arm that broke the Mannerheim Line was the artillery. Soviet artillery was not employed properly during the early stages of the war, but as the combat continued, the artillery improved and increased. The Soviet use of mass artillery fire directed by front line troops was instrumental in battering down the Finnish troops. 129

On the other side of the ledger the Finnish Army employed its forces wisely during the war. The Finns had equipment that was

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128Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans. Count Eric Lewenhaupt, (New York: E. P. Dutton and Company, 1954), pp. 368-369.

129Stephen O. Fuqua, "The Russo-Finnish War in Retrospect," Newsweek, March 25, 1940, p. 30.

suited for combat in the snow. Warm clothes covered with white cloth blended their bodies into the snow. The Finnish weapons were good for close in fighting and the training of the Finnish soldier made him a soldier capable of independent action. The mobility of the Finns allowed them to use the terrain to its best advantage. The Finns would scatter to move and assemble to fight. By using their mobility the Finns could scout the enemy position, conceal their own movements and strike the Soviet forces at their weakest position. 130

The basic and fatal Finnish military weakness was that they had few artillery guns and ammunition. The Finnish soldiers were well trained and led, but there were not enough of them to fight a country as large as the Soviet Union. However, if the artillery had been stronger, it might have been able to break up the Soviet supply lines that fed the huge war machine and thus stop the assaults before they began.

The Soviets learned from the Winter War and took steps to improve their military forces. A new system of military rank was introduced, and the political commissar system was abolished. The rules for discipline were rewritten and were made very strict. The unit commander now was the sole man in charge of his unit and was

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<sup>130</sup>Stephen O. Fuqua, "Indian Fighting on the Finnish Fronts," Newsweek, January 15, 1940, p. 22.

responsible to train his unit. Combined arms attacks were taught to all units, and individual training for the Soviet infantryman improved. 131

The Soviets also misread a lesson in the Winter War that would affect their future military operations. The battles for the Mannerheim Line impressed Soviet leaders and influenced the training of troops and Soviet tactics. One Soviet general stated, "We ceased to deal seriously with mobile combat against mobile mechanized units of great striking and firing power."<sup>132</sup> The Soviets were binding themselves to a defense and would have to retrain under the mobile guns of Hitler's panzers. It was an expensive mistake.

Probably the most significant result of the Winter War on the Soviet Union was the Soviet Army's loss of prestige, in the world's eyes. Germany watched the Winter War with glee. The huge Soviet Army had been stopped and almost defeated by the Finns. How could such a paper giant stand up to the well oiled German military machine? There can be no doubt that Hitler was influenced by the poor Soviet military actions in Finland. Nikita Khrushchev concluded, "Our

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<sup>131</sup>Malcolm Mackintosh, Juggernaut, (New York: Macmillan Company, 1967), pp. 124-127.

<sup>132</sup>Seweryn Bialer, ed., Stalin and his Generals, (New York: Western Publishing Company, 1969), p. 137.

miserable conduct of the Finnish campaign encouraged Hitler in his plans for the blitzkrieg, his Operation Barbarossa."133

In conclusion, the examination of military forces, strategies and tactics of the Winter War has shown the Soviet Union employing its huge army in mass offensive assaults on Finland. The Soviet military planned that all conflicts be waged outside the Soviet Union and would be won by masses of troops and equipment. Little consideration was given to individual training, terrain features, or movement on the battlefield. The Soviet mass would overcome all.

In contrast, the Finnish Army was well trained in individual combat, well led, and it employed the strategy of the defense. It was not a static defense but a defense that took advantage of terrain and movement. It was the Finns' mobility against the Soviet immobility that made them the tactical victors in the Winter War. The Soviet mass finally won out over Finnish mobility but only after suffering many defeats. The superiority of mobility over mass was proven during the Winter War.

Gustav Mannerheim summarized the meaning of the Winter War:

"May coming generations not forget the dearly bought lessons of our defensive war. They can with pride look back on the Winter War and find courage and confidence in its

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133Nikita Khrushchev, Khrushchev Remembers, trans. and ed., Strobe Talbott, (Boston: Little, Brown and Company, 1970), p. 156.

glorious history. That an army so inferior in numbers and equipment should have inflicted such serious defeats on an overwhelmingly powerful enemy, and while retreating, have over and over again repelled his attacks, is something for which it is hard to find parallel in the history of war. But it is equally admirable that the Finnish people, face to face with an apparently hopeless situation, were able to resist a feeling of despair and instead, to grow in devotion and greatness. Such a nation has earned the right to live."<sup>134</sup>

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<sup>134</sup>Gustaf Mannerheim, The Memoirs of Marshal Mannerheim, trans., Count Eric Lewenhaupt, (New York: E. P. Dutton and Company, 1954), p. 217.

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## APPENDIX

### TREATY OF PEACE BETWEEN THE REPUBLIC OF FINLAND AND THE UNION OF SOVIET SOCIALIST REPUBLICS

#### Translation

The Government of the Republic of Finland, of the one part,  
and

The Presidium of the Supreme Council of the Union of Soviet  
Socialist Republics, of the other part,

Being desirous of bringing to an end the hostilities which have  
broken out between the two States and of creating permanent peaceful  
relations between them,

And being convinced that the creation of definite conditions for  
their mutual security, including guarantees for the security of the  
cities of Leningrad and Murmansk and the Murmansk railway, is in  
the interests of both Contracting Parties,

Have decided that for this purpose the conclusion of a Peace  
Treaty is essential and have therefore appointed as their Plenipoten-  
tiaries:

#### THE GOVERNMENT OF THE REPUBLIC OF FINLAND:

Risto Ryti, Prime Minister of the Republic of Finland,  
Juho Kusti Paasikivi, Minister,  
Rudolf Walden, General,  
Vaino Voionmaa, Professor.

#### THE PRESIDUM OF THE SUPREME COUNCIL OF THE UNION OF SOVIET SOCIALIST REPUBLICS:

Vjatsheslav Mihailovitsh Molotov, President of the Council of  
Commissars of the U.S.S.R. and Commissar for Foreign  
Affairs,

Andrei Aleksandrovitsh Shdanov, Member of the Presidium of  
the Supreme Council of the U.S.S.R.,

Aleksander Mihailovitsh Vasilevski, Brigadier;

who, having exchanged their credentials, found in due and proper order, have agreed upon the following provisions:

#### ARTICLE 1.

Hostilities between Finland and the U.S.S.R. shall be immediately concluded according to the procedure defined in the Protocol attached to the present Treaty.

#### ARTICLE 2.

The frontier between the Republic of Finland and the U.S.S.R. shall follow a new boundary line by which shall be incorporated in the territory of the U.S.S.R. the whole of the Karelian Isthmus, the city of Viipuri and Viipuri Bay with the islands thereof, the western and northern coastal area of Lake Ladoga with the towns of Kakisalmi and Sortavala and the church village of Suojarvi, a number of islands in the Gulf of Finland, the territory east of Markajarvi and the church village of Kuolajarvi, and parts of the Rybachi and Sredni Peninsulas--in conformity with the map attached to the present Treaty.

The exact delimitation and establishment of the frontier line shall be effected by a mixed committee of representatives of the Contracting Parties, which shall be appointed within ten days of the signing of the present Treaty.

#### ARTICLE 3.

Both Contracting Parties undertake to refrain from all acts of aggression directed against each other, and undertake not to conclude any alliance or to become parties to any coalition directed against either of the Contracting Parties.

#### ARTICLE 4.

The Republic of Finland agrees to lease to the Soviet Union for thirty years in consideration of an annual rent of eight million Finnish marks to be paid by the Soviet Union, the cape of Hango and the surrounding waters within a radius of five nautical miles to the south and east and three nautical miles to the west and north thereof, and a number of islands situated therein, in conformity with the map attached to the present Treaty--for the establishment of a naval base capable

of defending the access to the Gulf of Finland against aggressions; and in addition for the defence of the naval base the Soviet Union is granted the right to maintain there at its own expense armed land and air force units of the necessary strength.

The Government of Finland will withdraw within ten days of the entry into force of the present Treaty the whole of its armed forces from the cape of Hango, and the cape of Hango with the islands appertaining thereto will pass into the administration of the U.S.S.R. in conformity with this Article of the present Treaty.

#### ARTICLE 5.

The U.S.S.R. undertakes to withdraw its military forces from the Petsamo area which the U.S.S.R. voluntarily ceded to Finland under the terms of the Peace Treaty of 1920.

Finland undertakes as provided in the Peace Treaty of 1920, not to maintain warships and other armed vessels in the waters adjoining the Arctic coast belonging to it, with the exception of armed vessels of less than one hundred tons, which Finland may maintain there without limit, and a maximum of fifteen war vessels or other armed ships, the tonnage of which may in no case exceed four hundred tons.

Finland undertakes, as provided in the said Treaty, not to maintain submarines and armed aircraft in the water mentioned.

Finland further undertakes, as provided in the said Treaty, not to construct on this coast any naval harbours, naval bases or naval repair yards, which are larger in size than is necessary for the said vessels and their armament.

#### ARTICLE 6.

The Soviet Union and its nationals, as provided in the Treaty of 1920, are granted free right of transit via the Petsamo area to and from Norway and the Soviet Union is granted the right to establish a Consulate in the Petsamo area.

Goods transported via the Petsamo area from the Soviet Union to Norway, likewise goods transported via the said area from Norway to the Soviet Union, shall be free of all inspection and control, with the exception of the control necessary for the conduct of transit traffic; nor shall Customs duties or transit or other charges be imposed.

Control of the above mentioned transit goods shall be permitted only according to the established practice in such cases in international traffic.

Nationals of the Soviet Union who travel via the Petsamo area to Norway and from Norway back to the Soviet Union, shall be entitled to unhindered passage with passports issued by the due authorities of the Soviet Union.

With due observance of the general provisions in force, unarmed aircraft of the Soviet Union shall be entitled to maintain air traffic between the Soviet Union and Norway via the Petsamo area.

#### ARTICLE 7.

The Government of Finland grants to the Soviet Union goods transit rights between the Soviet Union and Sweden, and for the development of this traffic by the shortest railway route the Soviet Union and Finland regard as necessary the construction, each on its own territory, and if possible in the course of the year 1940, of a railway connecting Kandalaksha with Kemijarvi.

#### ARTICLE 8.

With the entry into force of the present Treaty, trade relations between the Contracting Parties shall be renewed and for this purpose the Contracting Parties shall proceed to negotiate regarding the conclusion of a Trade Agreement.

#### ARTICLE 9.

This Peace Treaty shall enter into force immediately after its signature and shall later be ratified.

The exchange of instruments of ratification shall take place within ten days at Moscow.

The present Treaty is drawn up in duplicate in the Finnish, Swedish and Russian languages, in the City of Moscow on March 12th, 1940.

Risto Ryti  
J. K. Paasikivi  
R. Walden  
Vaino Voionmaa

V. Molotov  
A. Shdanov  
A. Vasilevski.