

**STRATEGY
RESEARCH
PROJECT**

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

**AN ANALYSIS OF THE RUSSO-JAPANESE WAR:
IMPLICATIONS FOR MODERN WARFIGHTERS**

BY

**LIEUTENANT COLONEL GARY W. KIRK
United States Air Force**

DISTRIBUTION STATEMENT A:

**Approved for public release.
Distribution is unlimited.**

19990608 053



USAWC CLASS OF 1999

U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

DTIC QUALITY INSPECTED 1

USAWC STRATEGY RESEARCH PROJECT

**An Analysis of the Russo-Japanese War: Implications for
Modern Warfighters**

By

Gary W. Kirk
USAF

Col (Ret) Brian Moore
Project Advisor

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

DISTRIBUTION STATEMENT A:
Approved for public release.
Distribution is unlimited.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: Gary W. Kirk, Lt Col, USAF

TITLE: An Analysis of the Russo-Japanese War: Implications
for Modern Warfighters

FORMAT: Strategy Research Project

DATE: 7 April 1999 PAGES: 59 CLASSIFICATION: Unclassified

The Russo-Japanese War was the first major conflict to occur after the founding of the Army War College in 1901. While extensively studied at the time, it has been overshadowed in the warfighters historical lexicon by more modern and more "Western" conflicts. The implications from this first major war of the Twentieth Century still merit examination by the men and women who will prosecute war in the Twenty-First Century. Thematic historical constants; the effects of technological change on the battlefield, the will of the leadership and the psychological connection to their fighting forces, power projection, logistics, and economic effects, were all evident on the bloody fields of this war. How Russia and Japan, reacted or failed to react, in context to these time-honored themes teach important lessons to tomorrow's leaders. More importantly, they echo haunting warnings from the past that we must get it right or pay the ultimate price in the next war with the lives of future generations of Americans.

TABLE OF CONTENTS

ABSTRACT	iii
LIST OF ILLUSTRATIONS	vii
AN ANALYSIS OF THE RUSSO-JAPANESE WAR: IMPLICATIONS FOR MODERN WARFIGHTERS	1
HISTORICAL CONTEXT OF BOTH NATIONS PRIOR TO THE WAR	2
THE STAGE IS SET: IMMEDIATE CAUSES FOR THE OUTBREAK OF WAR	5
STRENGTHS AND WEAKNESSES OF BOTH NATIONS AS WAR BREAKS OUT	9
THE STRATEGIES	13
THE OPENING SALVOS: PRELUDE TO PEARL HARBOR	14
THE BATTLE OF THE YALU	18
ROAD TO PORT ARTHUR	22
THE BATTLE OF NANSHAN HILL	24
THE SIEGE OF PORT ARTHUR	27
THE DRIVE NORTH - A SEARCH FOR ANOTHER SEDAN	33
FINALLY A PARTIAL SEDAN - AT MUKDEN	37
THE BATTLE OF TSUSHIMA	39
THE PEACE OF PORTSMOUTH	41
APPLICATION OF TIME-HONORED THEMES	42
ENDNOTES	47
BIBLIOGRAPHY	51

LIST OF ILLUSTRATIONS

Figure 1 - The Far East Theater 1904	9
Figure 2 - The Battle of the Yalu	21
Figure 3 - The Battle of Nanshan Hill	26
Figure 4 - The Siege of Port Arthur	32
Figure 5 - The Battle of Liaoyang	35
Figure 6 - The Battle of Mukden	39

AN ANALYSIS OF THE RUSSO-JAPANESE WAR: IMPLICATIONS FOR MODERN WARFIGHTERS

As we approach the 21st century, just a few short months away, how can a war fought nearly 100 years ago have any significance for today's war planner? How can the Russo-Japanese War have any relevance to Army After Next, Force XI, Air Expeditionary Forces, Marine units assaulting beyond the beach, and Military Operations Other Than War? After all, this was the last war to be fought without submarines, airplanes, or tanks. However, fundamental technologies that shaped the battlefield of World War I were present in the Russo-Japanese War. Indirect artillery fire, the machine gun, the magazine load rifle, and barbed wire all stark symbols of the Western Front were on display in Manchuria. Additionally, the major belligerents of World War I had observers in both the Russian and Japanese camps who would subsequently hold key positions during the Great War. Sir Ian Hamilton who commanded British forces in the Dardanelles, LTC Max Hoffman, the German operations officer for The Eighth Army at the victory at Tannenburg, and Americans General Arthur MacArthur and John J. Pershing were among those who witnessed the employment of this "modern warfare".¹ Did they learn the right lessons? How did the trenches of Manchuria end up becoming the trenches of Western

Europe? Did they utilize their "strategic pause" appropriately? More importantly, are we preparing properly during ours?

HISTORICAL CONTEXT OF BOTH NATIONS PRIOR TO THE WAR

Japan—

Historically, all the way up until the middle of the nineteenth century Japan was an insular country, both geographically and culturally. As such, Japanese society found itself isolated from the influence of modernization. As a result, this society had not changed in centuries. Rigidly hierarchical, the Emperor was believed divinely chosen to reign over Japan. He was the symbol of the nation and object of loyalty for every Japanese citizen. Believed to be a descendant of the sun goddess he assumed the role of an object of worship in the nation's religion. By the middle of the 19th Century however, politics and Japan were changing. The Emperor still reigned, but did not truly rule. Instead power was exercised in his name, but conducted by a secession of powerful families or clans. The military of these clans was the samurai warrior, loyal to the clan rather than the state. Even as late as the mid-19th-century a samurai's skill was measured by his use of medieval weapons: the sword, spear, and bow.²

This insular society was about to get a rude awakening. When President Millard Fillmore addressed the Congress in

December of 1852 his simple statement would change Japan forever: "The general prosperity of our states on the Pacific requires that an attempt be made to open up the opposite regions of Asia to mutually beneficial intercourse."³ Consequently, in July of 1853 an American naval force under the command of Matthew Perry sailed into Tokyo Bay. This "opening" of Japan showed the Japanese just how far behind the rest of the world they were technologically, and showed the West that Japanese commerce was ripe for picking. Naval confrontations between American forces and the Japanese led to humiliating defeats. Other Western nations joined in to "carve up" the Far East. Japan found herself defenseless and forced to sign the "unequal treaties" which were very advantageous to the West and very humiliating the Japanese.

This insult from the West, led in 1867-1868 to a change of power in the Japanese government. Emperor Mutsuhito had his power restored and thus begun the Meiji era of Japanese rule. Meiji, means enlightened rule, and certainly this was the case for the next 30 years, as Japan began to make momentous changes. The samurai system was officially abolished in favor of a Western-style military built on conscription. Feudal institutions were outlawed. One of the first things the newly established professional Japanese military did was send observers to Europe -- to France, Prussia, and England.

Additionally, European military advisors were invited to Japan. As a consequence of this exchange, the Japanese Army was remade into a modern force emulating the most successful European military instrument, the Prussian Army. The Japanese Navy was remodeled after the British, and British naval training and British ships, were a normal sight in Japan by the end of the nineteenth century.⁴ With the birth of this modern military the Japanese leadership began to think about the world outside of their own borders. They were forced to develop a strategic vision for Japan and geography would dictate that their strategic vision centered on Korea. China during this period was being parceled into European controlled spheres of influence. Japan was determined not to let that happen to them. They saw Korea as a protective barrier against the Western powers and China. The Prussian advisor to Japan at the time, Jakob Meckel called Korea a "cocked pistol aimed at the heart of Japan."⁵ While the rate of change in Japan was astonishing, certainly no one believed the country could ever be equal to the European powers, but events were quickly going to determine that question.

Russia -

In 1830 bands of Cossacks crossed the Ural Mountains and opened Russian territory all the way to the Sea of Japan.⁶ By 1860 the Russian navy had a port for its eastern fleet at

Vladivostok. The only problem was that ice closed the port for three months every winter. Therefore, one of Russia's primary strategic objectives was to secure an ice free port further to the south. In 1861 the Russians invaded Tsushima a Japanese island in the straits of Korea. The British intervened not only with their navy but also with vigorous diplomatic protests. This outcry forced Russia to withdraw. But, the seeds of anti-Russian loathing had been sown in the Japanese mind. Russian pressure also forced the Japanese to abandon Sakhalin Island in 1875. Then, in 1891, Russia announced the building of a single track Trans-Siberian railway that would connect western Russia with Vladivostok. This seemed to confirm to the world Russia's determination to dominate in the Far East. The Russians deepened this world opinion by negotiating with the Chinese to run the Trans-Siberian railway through northern Manchuria. This then, let them lay claim to having security interests in Manchuria, and gave them an excuse to post troops there should they deem the railway to be threatened.⁷

THE STAGE IS SET: IMMEDIATE CAUSES FOR THE OUTBREAK OF WAR

Two major events led to the eventual war between Russia and Japan. These were the European powers reaction to Japan's war with China, in 1894-95 and the aftermath of the 1900 Boxer

Rebellion in China. As mentioned earlier, Japan had recognized the strategic importance of Korea and was therefore concerned when rebellion broke out there in 1894. China and Japan both responded by sending troops to the peninsula. Japan had grown very nervous over the weakness of Korea and the prospect of other nations intervening in her affairs. Korea was fast becoming an essential Japanese sphere of interest. The Japanese Government therefore, asked China to initiate a number of reforms in Korea. The Chinese replied indignantly that affairs in Korea were of no concern to Japan. This was more than Japan could stand and led to the Sino-Japanese War. It was a short, indecisive war in favor of the Japanese as their modern European-styled army far outclassed the weak Chinese. The war only lasted eight months and under the terms of the treaty the full independence of Korea was recognized. Additionally, Japan gained Formosa and its minor dependencies the Pescadores islands, and the strategically important Liaotung Peninsula, upon whose tip lies the warm-water port of Port Arthur. Japan was pleased with its war results and was finally comfortable with its strategic position. Then however, the European powers became involved. Russia, in particular, was concerned over Japan's success, primarily due to the fact that Russia also had desires on Port Arthur for her own warm water port requirement. The Czar therefore, appealed to Germany and France and these

three great powers sent naval fleets into the area in conjunction with strong diplomatic pressures for Japan to withdraw. The Japanese Emperor felt he had no other recourse but to give in. The Japanese as one might expect were outraged as the jewel of Port Arthur was returned to the control of the weak Chinese government. This insult was further exacerbated in December 1897 when the Russian fleet appeared off the coast of Port Arthur. After three months, the Russian government had negotiated the lease of Port Arthur and the surrounding waters from China. To consolidate her position further, a year later Russia began a new railway connecting Harbin in northern Manchuria, a major railhead of the Trans-Siberian line, with Port Arthur.⁸

In the meantime, other European powers most notably Britain and France were also carving out chunks of China. This scramble for national territory led to the Boxer Rebellion in China, which was regarded by many Chinese as a necessary act of self-preservation. In 1900, the Japanese Chancellor and the German Ambassador in Peking were murdered. In June of that year the Legation area was attacked and besieged. This resulted in those affected nations, including Japan, sending troops to Peking. By 1902, order had been restored in the Chinese capital. The Chinese armed forces had been thinned out, reparations had been agreed to and the rebels had been punished. The European powers

then consolidated their interests in a series of bilateral agreements. Encouraged by mutual desire to see China and Korea retain their independence, Japan and Britain entered into the Anglo-Japanese Alliance in 1902. Britain was concerned over Russia's continued strength and position in the area so she saw an emergent Japan as a convenient ally. In April of 1902 a treaty was signed between China and Russia. In this treaty Russia agreed to pull troops out of Manchuria except for those necessary to maintain security of the railroads. The Japanese became concerned when Russia failed to follow her promises to remove these troops from Manchuria. Finally in January of 1904 Japanese diplomats in St. Petersburg agreed to recognize Manchuria as being outside Japan's sphere of influence, if in return, Russia would issue is similar statement relating to Korea. Russia failed to respond primarily because they did not believe that the Japanese could possibly prosecute a war against a major European power. The stage was set for Russo-Japanese war⁹ (Figure 1¹⁰).

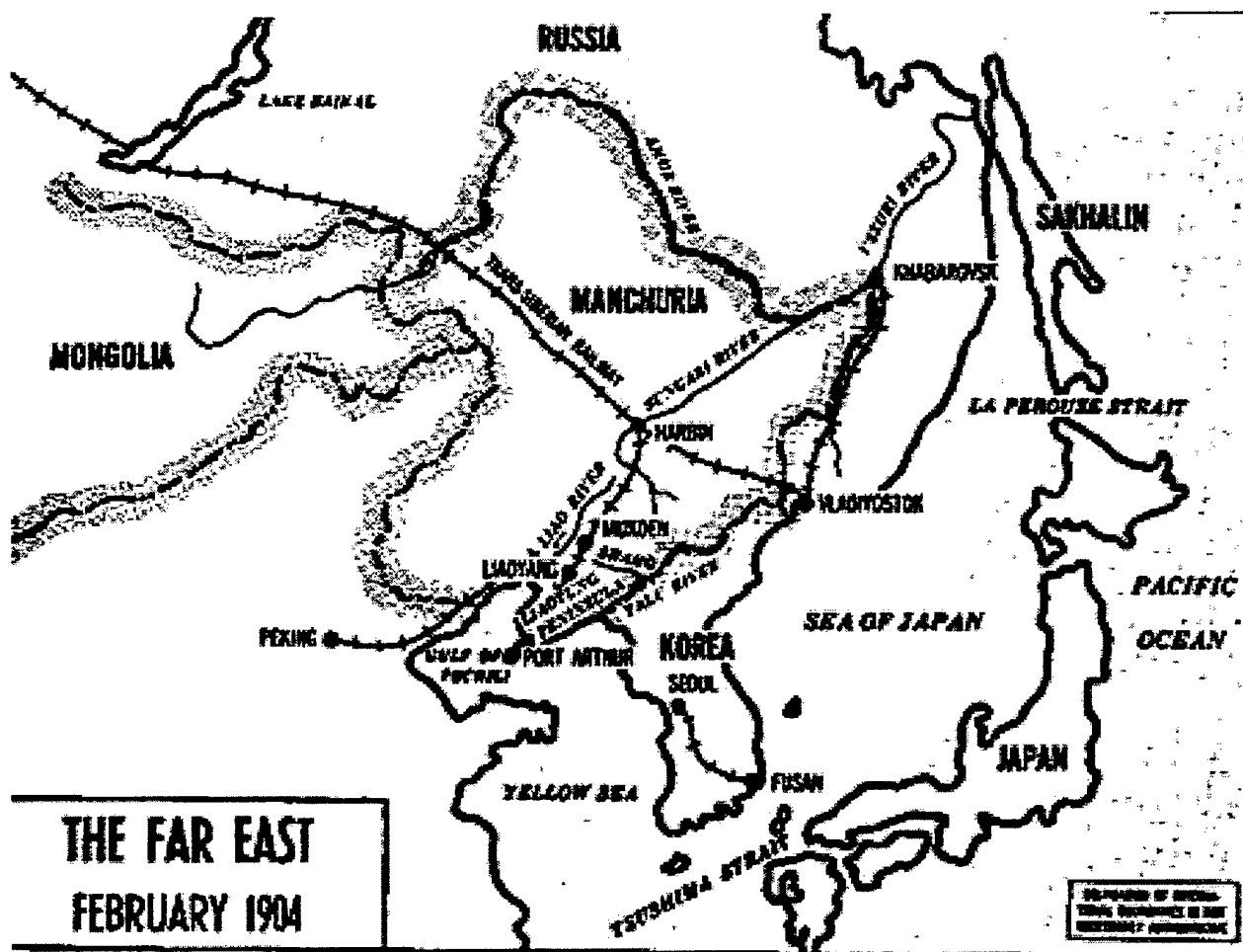


Figure 1 - The Far East Theater 1904

STRENGTHS AND WEAKNESSES OF BOTH NATIONS AS WAR BREAKS OUT

Japan had been concerned for a number of years about the growing encroachment of European nations particularly Russia. As noted earlier, she had begun in the 1870s to restructure politically, socially, and militarily. Conscription had been introduced and had taken effect by 1873. An intelligence network had been set up with many officers sent abroad to study. All

Japanese officers were required to speak at least one language other than Japanese. Secretly and systematically for years, the Japanese intelligence network had preceded to survey and map the whole of eastern Russia and Manchuria. At the outbreak of the war therefore, the Japanese had more accurate knowledge of the Russian held territory than the Russian officers who occupied it did. Many Japanese officers were fluent in Russian, while it is believed that not one officer in the entire Russian military could speak Japanese! As previously stated, Japanese Army officers were held to exceptional standards adopted primarily from the Prussian Army, while the Japanese naval system was modeled on the Royal Navy. By the time the war arrived the Japanese military had certainly adhered to Confucius' dictum that "one must make preparations before the rain falls."¹¹ The Japanese Army had made its leadership proud in the way it performed during the short-lived Sino-Japanese war, yet this was faint praise given the horrible shape of the Chinese military at the time.

Certainly, the Russians, with the world's largest army and third largest navy did not feel threatened by her potential adversary. Russia was three times the size of Japan in population strength - 140 million compared to 46 million Japanese. She was more than eight times larger than Japan in national revenue at 208 million pounds vs. 25 million pounds.¹²

The disparity however was less than one might have imagined in terms of numbers of men available for military service. This was due to the many loopholes in the Russian conscription system. The many exemptions did not allow full utilization of her enormous manpower reserves. If she fully mobilized, Russia could muster 4,500,000 fully trained men. However, since "Mother Russia" was never threatened during the war, total mobilization was never required. Only six of the twenty-five European army corps played an active part in the war. Russian strength in the Far East at the outbreak of the war is somewhat debatable due to large variance between the British and German official accounts. Certainly it was less than 150,000 men including railway security guards which numbered about 30,000, and some accounts puts the figure as low as 60,000.¹³

Reinforcement would be a very slow process due to the single-track Trans-Siberian railway, which had not been completed for a forty-mile stretch across Lake Baikal. Rail cars loaded with troops or equipment had to be ferried across the lake or in winter when the lake was frozen, pulled by horses.¹⁴ To place this logistical nightmare in perspective, a European Russian Army Corps needed 267 railway trains to move to the front.¹⁵

The Japanese Army consisted of about 850,000 trained men. If you counted all available untrained resources including

conscript reserve and those available for induction, the most Japan could hope to have in her army was just over 4 million.¹⁶ However, they had a huge logistics advantage, for as long as the Japanese Navy could keep open the vital sea lines of communication, reinforcement for the Japanese would be a short boat trip to the Korean peninsula.

Speaking of naval forces, by the outbreak of the war Japanese modernization had provided her with a very capable fleet. She possessed six modern battleships together with six armored cruisers all British made, as were the majority of her smaller vessels. The Russian navy on the other hand was considerably larger but was divided between the Baltic, Black Sea, and Far Eastern Squadron. The Far Eastern Squadron consisted of seven older battleships based in Port Arthur. In addition, they had three armored cruisers in Vladivostok. Interestingly, the Russians had five brand-new battleships in advanced stages of construction due to go to the Far East when the war started. Had the Japanese delayed, certainly the Russian navy would have posed a bigger threat. But the biggest difference in the fleets was what they did not have the ability to do - replace lost ships. The Baltic fleet and their robust economy, gave the Russian navy the ability, given enough time, to reinforce the Far Eastern Fleet. The Japanese had no ability to replace lost ships. This was a prominent factor in

determining the strategy of not only the naval engagements during the war, but ultimately the land strategy and the Grand Strategy of the Japanese.¹⁷

THE STRATEGIES

The Japanese military hierarchy had been greatly influenced by the Prussian military. As mentioned earlier most Japanese officers had trained in Prussia and Von Moltke, and Clauswitz had a huge impact on their strategic thinking. Many had been in Prussia during the Franco-Prussian war and had witnessed firsthand the decisiveness of the battle at Sedan. As the Russo-Japanese war began, the Japanese military recognized that to accomplish their objective of removing Russia from Korea and Manchuria, they would need to strike quickly and decisively against the Russian Army. Because of the huge difference in resources of the two nations, Japan could not allow herself to get caught up in a long war of attrition. They must find their own "Sedan" on the fields of Manchuria. The first requirement to accomplish this objective was to neutralize the Russian Far Eastern Fleet. This would allow them to gain control of the Yellow Sea and grant them free access to Korean mainland. Therefore, Russian Far Eastern Squadron at Port Arthur became the first priority. Once the Yellow Sea was open Japan could

land huge armies south of the Yalu and march north to defeat the Russian Army in the east before the Czar had time to reinforce.¹⁸

The Russian strategy on the other hand might best be described as no strategy. They were so sure that the upstart Japanese would not attack such a strong European power, that they gave little thought to such a contingency. However it was evident that from the Russian viewpoint, that the longer the war lasted the less likely Japan would be able to sustain the effort. Consequently, the Russians fought a series of defensive battles and holding actions, the very war of attrition that the Japanese had vowed not fight. Whether this was done due to some grand strategy or by necessity, or even possibly due to an inept officer corps, is debatable. Ultimately however, the reason for the Russian strategy is not as important as its effectiveness in eventually bringing Japan to the bargaining table.

THE OPENING SALVOS: PRELUDE TO PEARL HARBOR

Russia had ignored international pressure to remove all her troops from Manchuria following the Boxer Rebellion. Finally Japan had enough and on January 24, 1904 they broke off all diplomatic relations with Russia.¹⁹ This occurrence should have heightened tensions within the Russian military that does not appear to have been the case. The Russian first Pacific Squadron was woefully unprepared. Without a declaration of war,

on the night of February 8th, Admiral Togo led the Japanese I Squadron and the II Squadron, on a midnight raid to cripple the Russian fleet in Port Arthur. As an interesting historical footnote, Admiral Togo was leading this surprise raid from on board his flagship Mikasa whose battle flag would be temporarily retired following the war. This battle flag would not reappear until it was flying on top of the attack carrier Akagi at Pearl Harbor.²⁰

The biggest disadvantage of the harbor at Port Arthur was its small size and narrow access. The Imperial Russian fleet was notorious for its poor maneuvering of its huge battleships. Reportedly, it could take up to entire day to move the entire fleet either in or out of the harbor at Port Arthur. Consequently, it had become normal practice to anchor the fleet in the Roadstead outside the harbor. This would be the case on the night of February 8th when Admiral Togo sent ten heavy torpedo boats on their surprise attack. The Russian ships were set in three lines running east and west, five battleships in the inner line, two battleships and three cruisers in the middle line, with three cruisers and other duty ships in the outer line. The ten-inch gun fortifications stood worthless on this night, their mechanisms having been drained and their barrels smeared with grease to protect them from the rigors of winter. Few guns in the entire line of fortifications were in an

operational state. The fleet and the fortress gunners were on skeleton crews. The majority of the command staff was attending a party thrown that night by the Commander of the Russian fleet Vice-Admiral Oscar Stark. The temperature was ten degrees below zero and the moon would not appear in the skies until daylight.²¹

The signal came at 1150 p.m. for the torpedo boats to began their attack. The Russians were caught completely by surprise. Before anything could be done the Japanese torpedo boats had finished their attack and headed out to open sea. The battleships Retvizan and Cesarevitch, and the cruiser Pallada, were heavily damaged and ran aground as they tried to make harbor. They were unserviceable for months to come, but the Russian squadron was far from devastated. Admiral Togo led his I Squadron with some cruisers of the II Squadron to Port Arthur the following morning to try to finish the job. For over one hour the two sides exchanged fire at a range of over 9000 meters. Both sides suffered a few hits but no ships were disabled. Fearing to get closer to the shore fortifications, and cognizant that any losses to his fleet were irreplaceable, Admiral Togo led his fleet back to the open sea. The next day on February 10th, the Japanese Government declared war on Russia.²²

The opening surprise attack on Port Arthur had not been the decisive defeat of the Russian fleet that the Japanese had been

hoping to accomplish. However, Togo did have the Russians trapped in port where he knew he must keep them for the remainder of the war to allow Japanese troop ships free access to the Yellow Sea. Until the Battle of Tsushima, just prior to the war's end, most of the remainder of the damage done to naval forces on both sides was done by mines. In one of the ironies of war a Russian mine layer, having just completed a mining run outside the harbor, was blown up and sunk taking to the bottom the charts describing the mine field that it had just laid. Many ships were lost on both sides to mines prompting both governments to accuse the other of submarine warfare. History however attests to the fact that while both were developing submarines, neither had any operational subs during the war. Any chance the Russians might have had to break out from the Japanese blockade was lost on April 13. The inept Vice-Admiral Stark had been replaced by Admiral Stephan Makaroff, one of the preeminent leaders of naval tactics in the world. Indeed Togo himself had been a student of Admiral Makaroff's strategies. Under his command the Russian Fleet had been imbued with a new spirit. They were conducting vigorous sorties and making plans to break the Japanese blockade. But while returning from a chase of four Japanese destroyers on April 13th, the battleship Petropavlosk flying Makaroff's flag, hit a mine and was sunk in less than one minute. Not only did over 400 Russian sailors

perish with their beloved "Cossack" Admiral, but also the initiative to break the Japanese blockade died that day.²³

THE BATTLE OF THE YALU

With the Russian Navy bottled up inside of Port Arthur, the Japanese Armies could begin their assault on the mainland. Preliminaries to ground attack were actually taking place as the first shots had been fired in Port Arthur. Elements of Gen. Kuroki's 1st Army had begun landing at the Korean port of Chemulpo (modern Inchon) on 7-8 February 1904. This then, was the first of what would become a total of four Japanese armies, totaling over 250,000 regulars with 400,000 in reserve, that would prosecute the land campaign under the command of Field Marshal Oyama, the overall ground commander. The Russians in contrast had 100 infantry battalions, 35 cavalry squadrons, and 13 engineer companies, totaling 84,000 men. The Czar on Feb 20, named Alexey Nikolayevich Kuropotkin Commander-in-Chief, Ground Forces in the Far East. Kuropotkin, arrived in the Chinese city of Harbin on 27 March, following the three week journey required to get a soldier across the Russian empire, to find his 84,000 troops scattered over thousands of miles of Manchuria in remote garrisons and outposts. It was immediately clear to him that

his first operational strategy would be to play for time as he reinforced and consolidated his army.²⁴

By contrast, Oyama, and the Japanese war planners recognized that the key to victory was a swift destruction of the Russian Army. Not surprisingly then, the Japanese forces in Korea were practically unopposed as Kuroki assembled 1st Army during February and March and headed north. Russian Cossacks conducted a few minor raids against Japanese lead elements but no real engagements occurred until April when the Japanese reached the south shores of the Yalu river to find Russian forces defending the northern shore.

The Battle of the Yalu was to become an example of attitudes and leadership that would carry through the entire war. The Russians held excellent defensive positions along the northern shoreline, which included high ground from which they could watch the Japanese build-up. The Japanese, well trained in Clausewitz's dictum of bringing superiority to bear at a given point, spent much of April gathering intelligence, plying the river disguised as fishermen. Consequently, they had pieced together the Russian order of battle so completely that the estimate of Russian troop strength (which was 24,000) was off by only 1000. Intelligence on Russian gun totals and placement was even more exact (only off by two) at the start of the battle. This intelligence gathering was aided in large part by Russian

complacency.²⁵ Kuropotkin had issued orders to General Zasulich, the Russian Eastern Detachment Commander, to "delay and not become decisively engaged"²⁶ and to "hold with firmness and prudence."²⁷ Zasulich and his men, however, held the Japanese Army with contempt describing them as insignificant "monkeys".²⁸ His second in command at the Yalu declared that he would kill all the Japanese taking no prisoners.²⁹

Russian defenses were poorly arranged and spread out over 20 miles.³⁰ Kuroki correctly recognized that he must not allow the Russians to know where he would mass his troops for the river crossing, so the Japanese employed elaborate screens to camouflage movement. British observer, Ian Hamilton, was amazed to see "entire groves of trees appear and disappear overnight."³¹ Finally, on the nights of April 29th and 30th the Japanese crossed the Yalu six miles upstream from the heaviest Russian concentration, thereby exposing the Russian left flank. When daybreak came on May 1st seven Russian battalions were shocked to find three Japanese divisions 2000 yards away.³² The battle began at 0600, but in reality the Japanese had won before the first shots were fired. A preliminary artillery duel quickly silenced the totally exposed Russian guns. By 1000 the Russian troops were in full retreat, but not before two more aspects of future warfare were displayed. The Japanese assaults into the

heavily entrenched Russian defenses where machine guns could be brought to bear accounted for the majority of Japanese casualties during this battle.³³ Thus, the near-suicidal strategy of attacking such positions over open terrain was first witnessed. Secondly, the dogged determination with which the Japanese troops continued to push these assaults in light of withering fire displayed to the world a fighting spirit that would be on the world stage again in WWII (Figure 2³⁴).

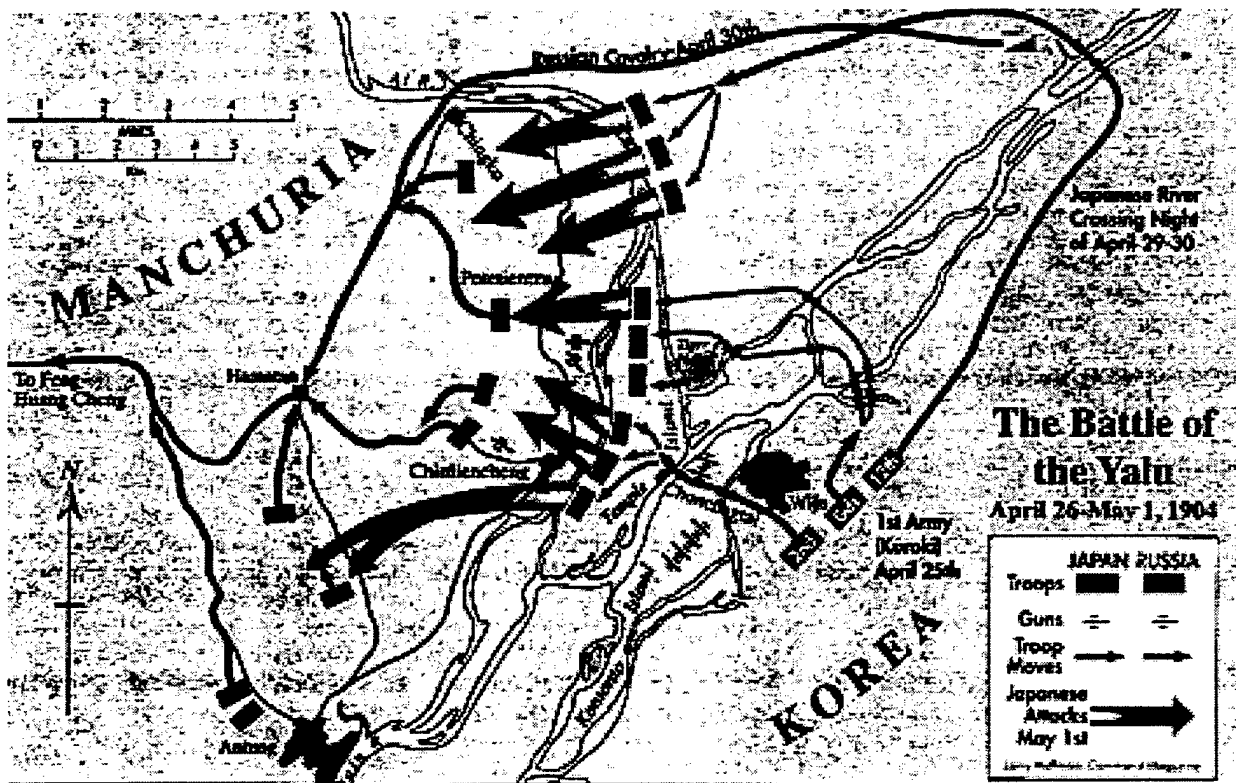


Figure 2 - The Battle of the Yalu

The Russians had lost between 3500-4500 men compared to Japanese losses of 1000-2000. Far more importantly to both sides however, was the resounding message sent to the world. For the first time in history, Orientals had fought Europeans on equal terms, using methods learned from the Europeans and they had beaten their teachers -- decisively!³⁵ Kuroki pushed his victorious army northwest where he would wait as three more Japanese armies were transported to Manchuria.

ROAD TO PORT ARTHUR

Fourth Army under General Kawamura landed thirty-five miles west of the Yalu. They would join with Kuroki for the drive north. Third Army under General Nogi landed at Yentai Bay and they would drive south to capture Port Arthur, just as Nogi had done ten years earlier in the Sino-Japanese War. In that conflict Port Arthur had fallen in one day. It was to be much different this time around. But the next major battle of the war would fall to General Oku and Second Army. They had landed unopposed only fifty miles north of Port Arthur while the blockaded Russian fleet refused to come out to challenge the landing craft for fear of being destroyed.³⁶

The strategy surrounding Port Arthur is interesting from both perspectives. From the Russian viewpoint, Port Arthur was key if they decided to bring the Baltic Fleet to the Pacific

theater. The Russian naval commander did not want to risk having his still fairly robust fleet totally destroyed, thereby, being unable to assist the Baltic Fleet when it arrived. The Russian decision to send the Baltic Fleet was equally difficult. It would take at best 63 days just to reach the Pacific and that estimate was predicated on perfect weather and no delays and it would take even longer to reach the objective area. Sixty-five thousand tons of coal would be required and the vast majority of that would have to be transported with the fleet by colliers. Additionally, despite the physical difficulty, there was the political decision that was equally, if not more, dangerous. Sending the Baltic Fleet halfway around the world would denude the European Naval defenses of the Empire at a time of great political volatility in both Europe and Russia.

From the Japanese perspective, Port Arthur represented a "drift" from the overall strategic objective at the beginning of the war. The Japanese wanted to decisively engage the Russian Army and crush them in a "Manchurian Sedan".³⁷ This was not going to occur with the 40,000 Russian troops at Port Arthur. Only by massing all of their forces and going north to meet the bulk of the Russian Army, could they hope to achieve this total victory. Remembering of course that speed was of the essence because of the huge difference in resource capability of the two warring nations. In their defense however, Japanese leaders

also believed that the Baltic Fleet might be dispatched to the Pacific, and so they wanted to deny them the use of Port Arthur and desired to "finish off" the Pacific Fleet - from the land. Additionally, they surely underestimated the time that would ultimately be involved in the capitulation of the city based on the ease of its fall ten years earlier. Lastly, there was the political desire to recapture the port to send a message to the West that Japan had righted, by military might, the wrong that the Western bullies had perpetrated when they had forced them out after the Sino-Japanese War. So consequently, the stage was set. The Russians would not evacuate. They would defend. And, the Japanese would not bypass, they would attack. But, before they could join that battle, another major obstacle lay in the Japanese path - Nanshan Hill.

THE BATTLE OF NANSHAN HILL

The Liaotung Peninsula narrows to an isthmus only two to three miles wide and dominated in the middle by Nanshan Hill. South of Nanshan is the Kwangtung Peninsula on the tip of which is Port Arthur. It fell to General Oku's Army to open the way for Third Army's march to Port Arthur by opening the heavily defended Nanshan isthmus. The Russian defenders had the high ground and were entrenched with their guns well camouflaged. The overall commander was General Anatoli Stoessel, but he was

in Port Arthur. Local command fell to Major General Fock. Fock had only 18,000 troops defending against Oku's 34,000-man army, but he had a huge advantage in ground.

The Japanese began their assault at 0530 on May 26th with a three-hour artillery bombardment supported by naval destroyers in Chinchou Bay. This was superb preparation fire according to the standards of the time. Due to the excellent Russian positions however there is little evidence that the bombardment had much effect on Russian defenses. As the shelling stopped, Oku committed all three of his divisions in German-style, tight formation frontal assaults. Reminiscent of the Franco-Prussian War. The open ground below the hill became a killing ground unlike anything seen in warfare. It was Pickett's Charge with modern weapons in the hands of the defenders. In some cases, whole Japanese battalions were lost. Yet, in what was becoming the trademark of the Japanese warrior spirit, still they came. The Russians had sewn the approaches with extensive landmines and Japanese volunteers threw themselves into the fields on suicide missions to explode the mines with their bodies to clear the way for those who would follow. Still, the attack was repulsed. After seven hours of bloody fighting, the Japanese had fought to within 500 yards of the Russians. At 1530, Oku ordered another general assault.³⁸ The Japanese 4th division waded into the bay in chest deep water to try to turn the

Russian left flank. Though observers recounted later that the water turned red with their blood, the 4th was successful in getting behind the Russian positions creating panic³⁹ (Figure 3⁴⁰).

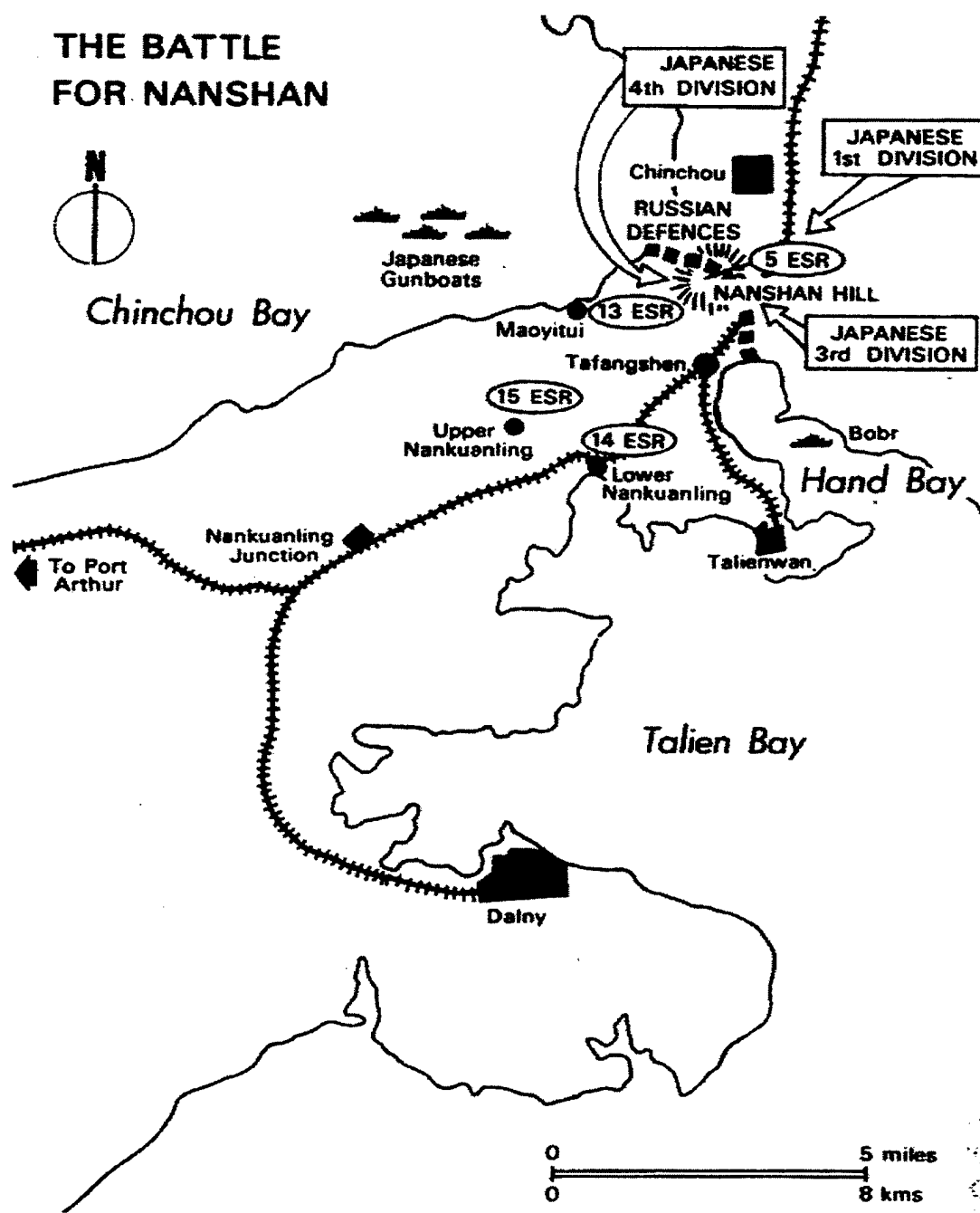


Figure 3 - The Battle of Nanshan Hill

Russian leadership was again shown lacking as Fock ordered an immediate and general withdrawal, which Stoessel approved. Only 3,500 Russian troops had actually been committed to the fight. Over 14,000 Russian reserves were never engaged. In retrospect, Nanshan Hill could probably have held for weeks, yet instead, the Rising Sun was flying on top of the hill at 1930 of the first day. Certainly it had been a costly victory for the Japanese, 5000 killed with an equal number wounded. Additionally, they had fired more ammunition in this one day, than in the entire war with China. This news jolted leaders in resource poor Tokyo. The Russian casualty figures were slight in comparison, 700 dead another 400 wounded, most of which occurred during the retreat! The way was now open for General Nogi to lead Third Army in the taking of Port Arthur. As he was boarding a transport to leave for the front, word came that his eldest son had died in the fighting at Nanshan Hill. His stoic reply "There is to be no funeral ceremony, no mourning until the end of this war, when my surviving son and myself will be among the mourners or the mourned."⁴¹

THE SIEGE OF PORT ARTHUR

The actual start date for the siege of Port Arthur is 27 July because that was the day on which General Nogi's 3rd Army sealed the Kwangtung Peninsula. Actual fighting during the

siege would occur in three distinctive phases, the first of which would start with the initial assault in the middle of August. Throughout much of the war Japanese leadership gets high historical marks, but Nogi's assault on Port Arthur can only be described as a failure to grasp the changes that had effected modern warfare. Once again, the Russians held a huge advantage in ground with defenses set up in the hills overlooking the port. Though not a well-coordinated defense, the terrain and months of preparation in entrenching and camouflage paid enormous dividends. The lines consisted of 42,000 defending troops spread over a twelve-mile area five miles deep. Attacking forces in Nogi's Army, after reinforcements arrived in November, would total over 100,000 men. Nogi's plan was a simple one. He had taken Port Arthur by storm with frontal attacks against the Chinese and he would do it again against the Russians. Nogi was quoted as saying that he was prepared to "lose a division" in every assault until Port Arthur was taken. He ordered the beginning of the battle on the morning of August 19th with the greatest artillery barrage that had ever been waged in history. This softening up was closely followed by infantry attacks over open ground. The resulting massacre slowed and then stalled the attack. Despite this overwhelming demonstration of the defensive power of modern troops in fortified positions backed up by artillery, Nogi was

unswayed and ordered renewed attacks on August 20-23. On the evening of August 23rd, Nogi realized the futility of continued frontal assaults and called an end to this phase of the campaign. The Japanese had suffered 15,000 casualties - approximately Nogi's division - and captured two outer redoubts for their effort!⁴²

There followed a period of time when the Japanese attackers went to ground and dug parallels and trenches and saps, and the tempo slowed to series of minor probes and skirmishes. Some progress was made as minor outposts were overrun. Nogi felt it was time to go for the big prize. Hill 203 afforded an unobstructed view of the harbor and guns placed there would bring the bottled up Pacific Fleet into range. He had ordered an assault on Hill 203 on September 20th, but after suffering 2500 killed and wounded, the assault was stopped. On October 26th, he ordered a general assault in the northwest to include Hill 203. After suffering another 4,000 casualties, the attack was once again halted. Finally, on November 26th phase two of the siege started in earnest with an all out assault. This time through trenches and tunnels that resulted in medieval-style hand-to-hand combat in many instances. After eight days, the Russians withdrew only to turn and launch withering counter-attacks. At last, on 5 December, Hill 203 was in Japanese hands. It had been taken at a very high price, 3000 Russian

losses, and 12,000 Japanese, but would immediately prove its worth. The Russian Fleet was now under direct fire from Japanese guns on the hill. In three days, five capital ships and numerous destroyers had been sunk. The last capital ship the *Sevastopol* made a run for it only to be swarmed on by Japanese torpedo boats. The Russian navy in the Pacific no longer existed!⁴³

Phase three was anticlimactic and goes back to the issue of Russian leadership. With the town under fire from Japanese guns and no sign of relief from either land or sea, General Stoessel surrendered the port while still possessing adequate defensive capabilities. In tribute to the fighting spirit of the Russian soldier, in spite of the incompetence of their leaders, it is interesting to note that Stoessel had to ask the Japanese for protection from the wrath of his own men. When the Japanese entered the city, they were shocked to find 600 guns, 34,000 shells, 35,000 rifles, 2,000,000 rounds of ammunition, and 33,000 men. This was so totally beyond the bounds of their own Bushido martial code that they were completely unable to comprehend why Stoessel had surrendered when he still retained so much fighting power. The Japanese had Port Arthur once again, but at huge cost. The Russians had 6,000 killed and 20,000 wounded. The victors on the other hand lost 14,000 killed, 36,000 wounded and another 30,000 hospitalized for sickness!⁴⁴

The fighting for Hill 203 had been so brutal that even hardened war correspondents were sickened by what they saw. Ashmead Bartlett wrote "There have probably never been so many dead crowded into so small a space...".⁴⁵ Interestingly the man most responsible for the slaughter, General Nogi, paid a high price indeed when he learned that his other son had been killed in the carnage of Hill 203 (Figure 4⁴⁶).

Siege of Port Arthur: The Three General Assaults

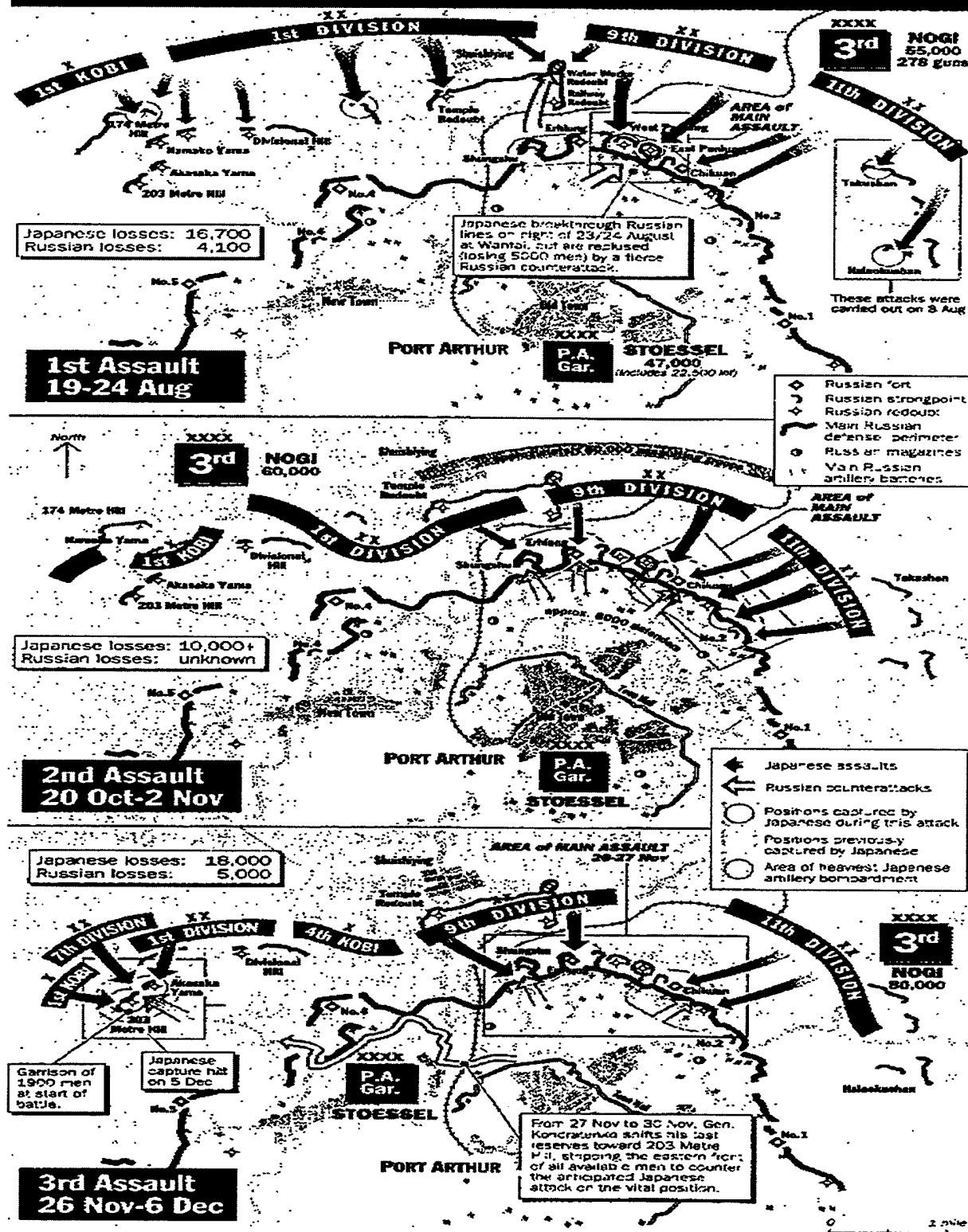


Figure 4 - The Siege of Port Arthur

THE DRIVE NORTH - A SEARCH FOR ANOTHER SEDAN

As the siege of Port Arthur unfolded, serious fighting was simultaneously occurring further north as the Japanese armies pressed forward. Under the overall command of General Oyama, The First Army advanced from the east, with The Fourth Army, now under command of Nodzu, in the center, and The Second Army which turned north after the victory at Nanshan, pushed up the rail line to the west, advanced to meet at the Russian positions at Liaoyang. General Kuropotkin, on the Russian side, was preparing fortifications to meet this Japanese advance. St. Petersburg had other ideas. Under pressure from the garrison at Port Arthur, and in desperate need of an offensive victory, the Czar ordered Kuropotkin into action to relieve the besieged forces at Port Arthur. Consequently, Kuropotkin ordered a force of 30,000 men under the command of General Stackelberg south with the unclear objective of drawing away some of the siege forces or, "perhaps" even retaking Nanshan.

Stackelberg headed south and was met by Oku's forces at Telissu. What ensued was a battle of relatively equal forces in which neither side had an advantage of terrain. Japanese use of maneuver, combined again with Russian mixed resolve, ensured the results. As Oku attacked the center to fix those forces in place, he ordered a flanking maneuver to envelop the Russians. After three days, though the Japanese were somewhat successful,

the Russian position was far from hopeless, but in a pattern that was becoming all too common for the Russian soldier, Stackelberg ordered a retreat. The Russians had suffered 2,500 casualties to the Japanese 1,000. But most importantly, to the morale of both sides, Asians had once again met Europeans on a level playing field, and the Asians had won.⁴⁷

The war now refocused on the town of Liaoyang, twenty-four miles south of the important rail junction at Mukden. Kuropotkin had fortified the city and concentrated his forces for a major defensive effort. He had fourteen divisions totaling 155,000 men arrayed across a line 40 miles wide. For Oyama and the three Japanese armies converging to meet him, this was a chance to destroy the Russian Army in a decisive battle. Japanese forces numbered 125,000 men in eight divisions. Liaoyang then would see the largest number of forces to battle than any previous time in history except one - Sedan. The battle began on August 26th with 2nd and 4th Armies conducting frontal assaults while Kuroki's 1st Army tried to flank the Russian left. By the 28th the Russian center which had held resolutely saw the left being pushed back and fearing a collapse and subsequent envelopment, requested permission to fall back. Kuropotkin approved a withdrawal to the secondary defensive positions. Oyama sensing that his "Sedan" was now within reach, pushed the attack. Renewed frontal attacks and further

advancement by Kuroki again threatened disaster. Again the Russians fell back this time inside the walled city itself. Though Japanese advances were impressive, it must be noted that while successful, Japanese tactics were also extremely risky as they left large gaps at times in the lines as they maneuvered. Kuropotkin's defensive mindset would not however, allow those gaps to be exploited. Oyama expected a determined defense from inside the city, but again the Russian commander surprised everyone when, fearing encirclement, he ordered a retreat to Mukden (Figure 5⁴⁸).

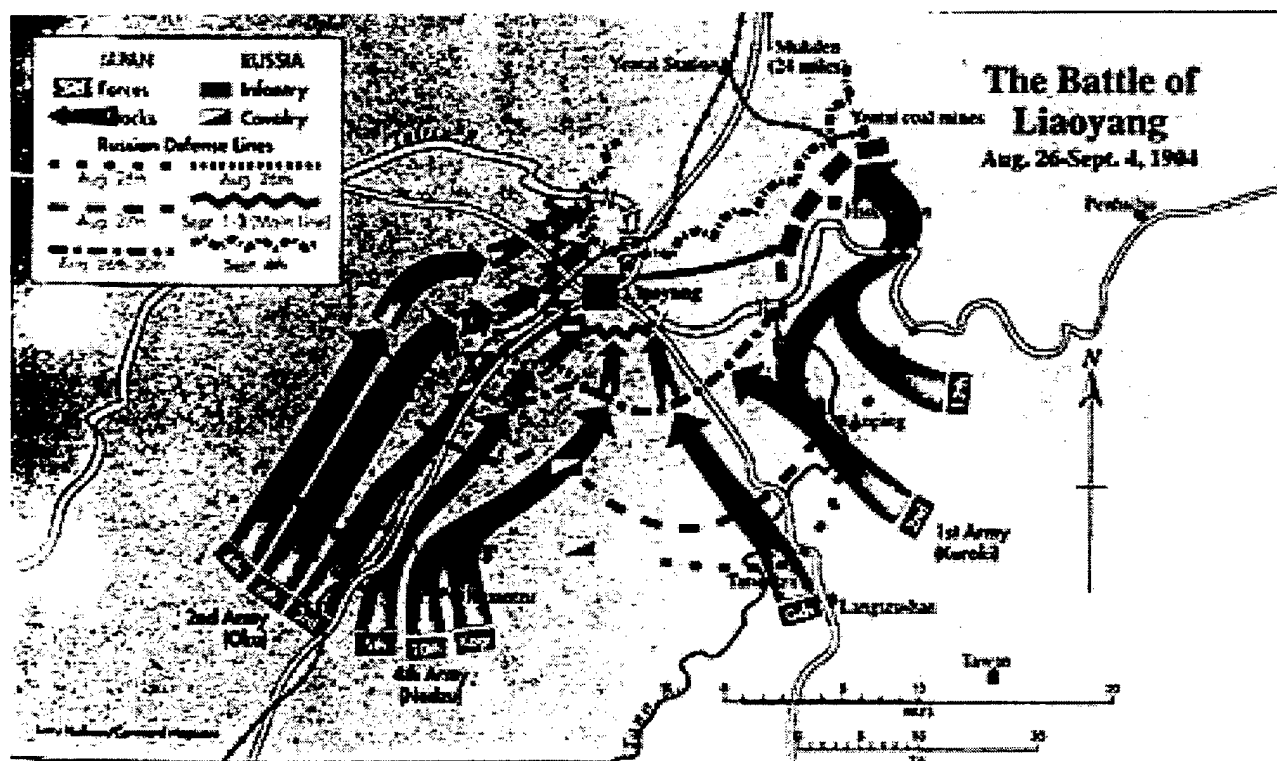


Figure 5 - The Battle of Liaoyang

By September 4th Liaoyang had been abandoned and the weary Japanese troops were unable to rapidly pursue the retreating Russians. The effort had cost the Japanese 23,000 troops, the Russians 15,000 and even though Oyama had won a decisive victory once again, it had not been complete. The Russian Army lived to fight another day. He recognized that he could ill afford to continue to trade casualties with the Russians. Winter was fast approaching. Supplies were low. Yet he was forced to continue the chase further north.⁴⁹

After a month of inactivity Kuropotkin realized that the siege at Port Arthur and action in Manchuria had Oyama's forces and supplies stretched very thin. This, with additional pressure from St. Petersburg for an offensive encouraged the Russian commander to launch an offensive the first week in October. The Russians had been reinforced at Mukden with fresh troops, from Eastern Russia, and this advance saw a force of 220,000 men head down the rail line on the Japanese left. Kuropotkin's plan was a mirror image of the one used by Oyama at Liaoyang, while Oyama was planning a similar maneuver. Thus, these two great forces were both applying pressure to the center while trying to force the opponents left. In effect, pushing each other in a clockwise circle around a tumultuous middle. The battle of Sha-ho as it would be known, ground itself to a stalemate on October 12th though the Russian Commander had yet to

employ more than two-thirds of his forces still held in reserve. Oyama for his part was resigned to merely blocking the Russians from interfering with Port Arthur, and dug in for the winter. Kuropotkin too dug in and history had its precursor to WWI - two huge forces occupying trench lines running for miles, separated by only 200-300 yards. Sha-ho cost the Russians 41,000 casualties, 11,000 of which were killed. Oyama lost 4,000 killed and another 16,000 wounded. Both forces were happy to pause, and watch Port Arthur.⁵⁰

FINALLY A PARTIAL SEDAN - AT MUKDEN

After the surrender of Port Arthur on January 2nd 1905, Kuropotkin knew that he must act before Nogi forces could be redeployed to join the fight in the north. He launched an offensive on Jan 26th, which had initial success but then, stalled and died after a Japanese counter-offensive. He tried again on February 21st but again with little gains.

Finally, on February 27th Nogi's 3rd Army arrived from Port Arthur. In Addition, Oyama had another surprise for the Russians to contend with. While Kuropotkin thought he was facing four Japanese armies, Oyama had constituted a Fifth Army, under the command of General Kawamura, placing it in a position to threaten the Russian left flank. This combined with the fact that, unlike the German doctrine they had been taught, Oyama

screened The 3rd Army behind The 2nd Army, allowing room for maneuver. Thus, when the offensive was launched into Kuropotkin's center with three Japanese Armies, the 3rd and 5th Armies attacked both flanks in a double-encirclement. The battle that ensued for the next two weeks was intense. Some units were engaged for an entire week at a time without a break. On March 9th when 3rd Army was collapsing the Russian right flank, Kuropotkin again ordered a retirement to the north. Thus when 5th Army and 3rd Army closed the bag the next day on March 10th, no Russian troops were inside.

The Russians had not been destroyed, but they had been mortally wounded. Oyama's "Sedan" had cost the Russian Army 97,000 casualties - 26,000 dead. They had lost over one-third of the forces engaged! Yet, in the midst of this great victory, it was the Japanese who were reeling from the war effort. Mukden had cost them 45,000 casualties and that was a far greater percentage of her total available manpower than the Russian losses. On 16 March, the Czar relieved Kuropotkin of his command, but there was little enthusiasm left for this "eastern" war with the Russian Revolution of 1905 brewing. In Tokyo also, the picture was grim. The Japanese were winning every battle, but could not destroy the Russian Army. Both sides were looking for a way out, but one major battle remained though this one would not be on land⁵¹ (Figure 6⁵²).

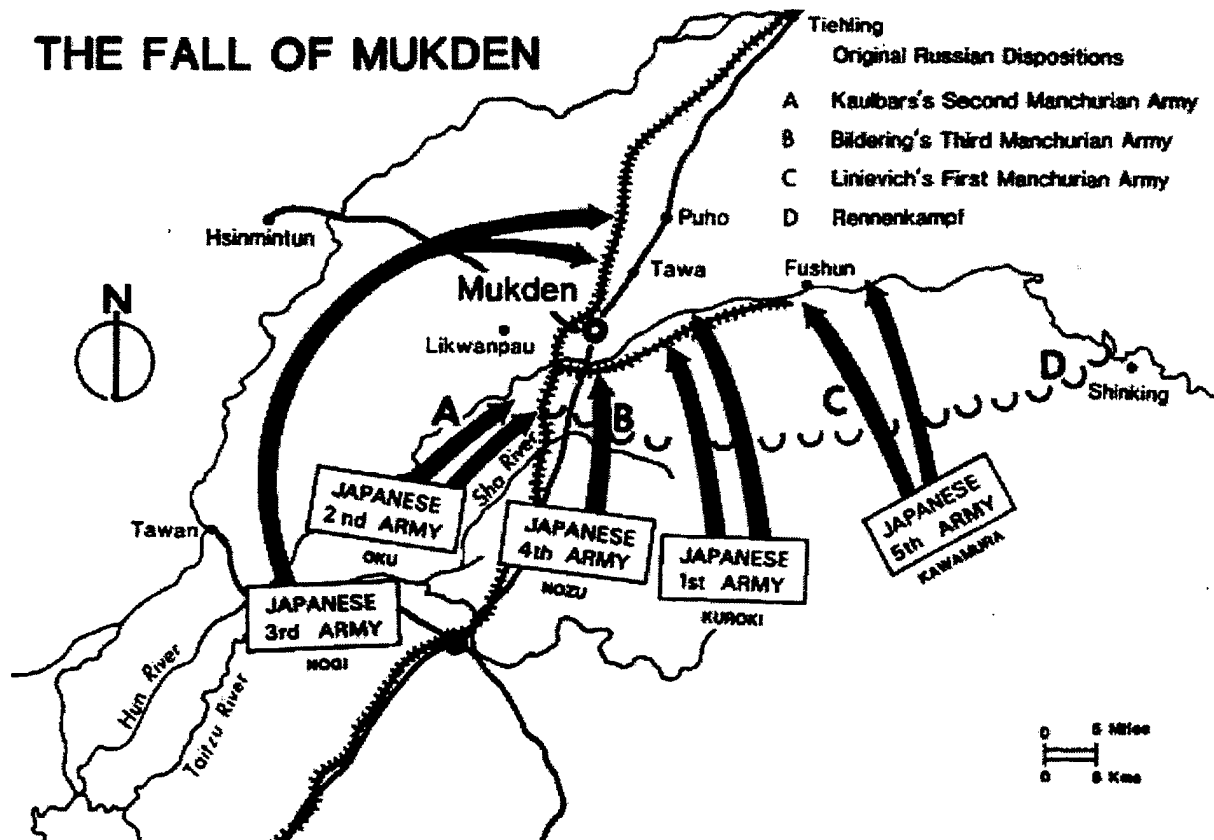


Figure 6 - The Battle of Mukden

THE BATTLE OF TSUSHIMA

Though this final naval battle had little effect on the total outcome of the war, there is no disputing its political significance in bringing both parties to the peace table. It is also significant in naval history, as it ended up being one of the most decisive naval defeats, by any navy, of all time. The stage was set, when after pressure from both the general public and the Admiralty, Russian leadership formed the Second Pacific Squadron in the summer of 1904. This fleet would combine some

modern capital ships with some of the older ships of the Baltic Squadron. The biggest problem they would face however was a severe shortage of sailors so they sailed with a ragtag collection of experienced and woefully inexperienced seamen. They left the Baltic in October of 1904 on what would become a torturous journey to the Pacific. There were no Russian ports along the entire route, and between coaling difficulties, mechanical problems (the new ships had not been tested before sailing) and inexperienced crews, they were destined to not reach Japanese waters until May of 1905. Morale was extremely low as word had reached them that Port Arthur had long ago fallen to the Japanese. Their destination would now be Vladivostok, 500 kilometers further north. Admiral Togo wanted to ensure that they did not get there. So on May 27th when a Japanese cruiser spotted the brightly-lit hospital ship accompanying the Russian Fleet, Togo moved into the Strait of Tsushima to intercept them.⁵³

The rout that followed was as one-sided as any battle has ever been. Over the next two days, the Japanese lost 3 torpedo boats and 117 men. The Russians on the other hand suffered the loss of 8 battleships, 4 cruisers, 3 destroyers, 7 auxiliaries and 4830 sailors. Only 3 Russian ships out of this entire flotilla would ever see the Port of Vladivostok, the armed yacht *Almaz* and two destroyers. The last Russian threat was gone.⁵⁴

THE PEACE OF PORTSMOUTH

No other fighting had been conducted following the Battle at Mukden though both sides were planning their next moves. Increasingly however, both sides were looking for an excuse to end the war. When President Theodore Roosevelt offered to host a peace conference in Portsmouth, New Hampshire both sides attended. The Japanese demanded reparations and wanted Sakhalin Island back. The Russians scoffed at reparation payments since Japan had started the war. They also negotiated giving up only the southern portion of Sakhalin. Both sides agreed to withdrawal from Manchuria except for legitimate Russian interests concerning the Trans-Siberian railway. Russia recognized Japanese interests in Korea and ceded them all of the Liaotung Peninsula and Port Arthur.

On 14 October representatives of the Czar and the Emperor signed the Peace of Portsmouth and the war was officially over⁵⁵ (Roosevelt won the Nobel Peace Prize for his efforts).⁵⁶ In Japan, there were riots in the streets when the terms of the agreement were announced. Infuriated citizens felt the enormous sacrifices of their sons blood was worth far more than was given. The military on the other hand was pleased to be out of the quagmire of the great Russian frontier. Practically speaking, they were at the limits of their resources and the Russian Army was still alive and growing.⁵⁷ Finally, though not

the decisive victory they were seeking, Japan had emerged on the world stage. From now on, she would be a leading actor in the Far East and throughout the world. Her armies had forever dispelled the notion of the inferior Oriental soldier while Admiral Togo's fleet had gained Japan recognition as a major Naval power.

APPLICATION OF TIME-HONORED THEMES

The Russo-Japanese War has oft been described as the first "modern" war. Certainly, never before had such great masses of troops been brought into the field of battle. Nor had the other side's capacity to kill huge numbers of the enemy quickly ever been seen on this scale. This then frames the time-honored themes. First, what were the effects of technological change and how did it affect the battlefield?

The machine gun and increased firepower by artillery revolutionized the ability of entrenched soldiers to inflict casualties on each other. The Japanese most often on the attack bore the brunt of this lesson during the war.⁵⁸ Though we might criticize them for being slow to react to these modern weapons, as they conducted mass frontal attacks in the face of lethal weaponry. What about the European nations who would replicate these disastrous tactics many times over in World War I? Some British observers in Manchuria learned the wrong lesson by

positing after the war that Japanese courage and will to fight was the answer to the modern killing fields.⁵⁹ How many needless lives were lost in Gallipoli from wasteful frontal attacks before courage took a back seat to flying steel? Are we learning to true nature of how technology is changing tomorrow's battlefield? Is the correct message that we can fight sanitized wars from afar with machines? Is the "digitized battlefield" the correct application of technology?

The will of the leadership and its psychological effect on the fighting forces has probably nowhere in history seen two more contrasting foes. Repeatedly Russian leaders adopted a conservative approach to battle that dearly cost their troops in terms of morale. Never in history have there been more retreats by the numerically superior force or from such excellent ground. Strategically, whether on purpose or accidentally, this approach was instrumental in bringing Japan to the bargaining table. They could not kill what they could not catch, and with all of Eastern Russia to retreat into, the chase was hopeless. By contrast, the Japanese approach to ruinous charges over open ground into heavy fire, while tough on attrition, was big on morale building. The World had witnessed the fanaticism that drove Japanese troops to fight with such dedication to duty. We had before our eyes the forerunner to the fanatical spirit of WWII Kamikaze pilots and fight-till-the-last-man ground forces

so evident in our war in the Pacific. Are we learning the lesson of will of the leadership and its psychological impact on troops? One might argue that our aversion to casualties, our CNN wars, and the low esteem with which many in the military hold our civilian leadership *could* have a profound impact in the next major war. Morale is a tricky thing to properly capture, but has political-correctness dulled our sense of TEAM? If so, what future cost might we have to pay due to our attempts to sanitize the military establishment? It is a special man or woman who will make the ultimate sacrifice for their country. We must ensure our "policies" do not drive warriors away and replace them with choirboys.

Power projection, logistics and economic effects were critical in the prosecution of the Russo-Japanese War. Russia's long supply lines vs Japan's shorter one's shaped early strategy. Certainly Russia's economic might and far greater resource rich status effected Japan's ability to continue the fight. What of our situation today? Certainly we have the strategic reach capability to fight anywhere in the world, but do we want to? Japan reached the limits of their logistics and resources and though an unpopular decision to make, stopped the war. Can we make the unpopular decision and refuse to police the world because our military is stretched too thin? Can we say no in Kosovo? Bosnia? Burkina Faso? Do we recognize our own

limitations and state them? Is the two Major Theatre War concept still a realistic scenario with our undersized force structure? As military leaders, we must tell our government and our people what our limits are. It is no longer acceptable to have a "Can Do" attitude. Sometimes it takes more moral courage to have a "Can't Do" attitude! Is that time now?

WORD COUNT = 8990

ENDNOTES

¹ Dolph Carlson, "The Russo-Japanese War," Lecture, for The Western Front Association of Southern New York, October 1998, page 2-3 of transcript, cited with permission of COL Carlson.

² Ibid., 4-5.

³ Ibid., 5.

⁴ Ibid., 5-6.

⁵ Ibid., 6.

⁶ Ron Bell, "The Russo-Japanese War, 1904-05: The Land Campaigns," Command, November-December 92, 10.

⁷ Richard M. Connaughton, The War of the Rising Sun and Tumbling Bear (NY: Routledge, 1988), 1-4.

⁸ Ibid., 4-7.

⁹ Ibid., 7-11.

¹⁰ Robert L. Kirwan, "Japanese Strategy in the Russo-Japanese War," Military Review, February 1971, 77.

¹¹ Connaughton, 12.

¹² John N. Westwood, The Illustrated History of the Russo-Japanese War (Chicago: Henry Regnery Co., 1974), 26.

¹³ Connaughton, 15.

¹⁴ Kirwan, 76.

¹⁵ Connaughton, 16.

¹⁶ Ibid., 13.

¹⁷ Westwood, 26.

¹⁸ Kirwan, 77-78.

¹⁹ Bruce W. Menning, Bayonets Before Bullets: The Imperial Russian Army, 1861-1914 (Bloomington, IN: Indiana University Press, 1992), 155.

²⁰ Connaughton, 22.

²¹ Ibid., 29-31.

²² Ronald L. Tarnstrom, The Wars of Japan (Linddborg, Kansas: Trogen Books, 1992), 29.

²³ Connaughton, 34-44.

²⁴ Bell, 11-12.

²⁵ Connaughton, 53-55.

²⁶ Menning, 157.

²⁷ Westwood, 41.

²⁸ Connaughton, 53.

²⁹ Westwood, 41.

³⁰ Bell, 13.

³¹ Menning, 158.

³² Westwood, 41-42.

³³ Ibid., 41-44.

³⁴ Bell, 12.

³⁵ Menning, 158.

³⁶ Westwood, 44-45.

³⁷ Kirwan, 76-77.

³⁸ Bell, 11.

³⁹ Connaughton, 75-76.

⁴⁰ Ibid., 66.

⁴¹ Ibid., 76-77.

⁴² Bell, 15.

⁴³ Ibid., 16.

⁴⁴ Ibid., 16.

⁴⁵ Menning, 171.

⁴⁶ Bell, 17.

⁴⁷ Ibid., 18.

⁴⁸ Ibid., 18.

⁴⁹ Ibid., 18-19.

⁵⁰ Menning, 179-184.

⁵¹ Bell, 19-22.

⁵² Connaughton, 228.

⁵³ Westwood, 104-112.

⁵⁴ Tarnstrom, 44.

⁵⁵ Bell, 22-23.

⁵⁶ Westwood, 125.

⁵⁷ Bell, 23.

⁵⁸ Keith Neilson, "That Dangerous and Difficult Enterprise: British Military Thinking and the Russo-Japanese War," War and Society, October 1991, 24.

⁵⁹ Ibid., 20.

BIBLIOGRAPHY

- Bell, Ron. "The Russo-Japanese War, 1904-05: The Land Campaigns." Command, Nov-Dec 92, 18.
- Carlson, Dolph. "The Russo-Japanese War." Lecture. For The Western Front Association of Southern New York, October 1998. Cited with permission of COL Carlson.
- Connaughton, Richard M. The War of the Rising Sun and Tumbling Bear. NY: Routledge, 1988.
- Kirwan, Robert L. "Japanese Strategy in the Russo-Japanese War," Military Review. Feb 1971, 77.
- Menning, Bruce W. Bayonets Before Bullets: The Imperial Russian Army, 1861-1914. Bloomington, IN: Indiana University Press, 1992.
- Neilson, Keith. "That Dangerous and Difficult Enterprise: British Military Thinking and the Russo-Japanese War." War and Society. October 1991, 24.
- Tarnstrom, Ronald L. The Wars of Japan. Linddborg, Kansas: Trogen Books, 1992.
- The War Department. Epitome of The Russo-Japanese War. Washington D.C.: Government Printing Office, July 1907.
- Westwood, John N. The Illustrated History of the Russo-Japanese War. Chicago: Henry Regnery Co., 1974.