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THE TRANS-SIBERIAN RAILROAD. ITS STRATEGIC SIGNIFICANCE IN VIEW--ETC(U)
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STUDENT RESEARCH REPORT

MAJ. GEOFFREY H. KLEB
THE TRAN-SIBERIAN RAILROAD
1975

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THE TRANS-SIBERIAN RAILROAD .
ITS STRATEGIC SIGNIFICANCE IN VIEW OF THE ONGOING
SINO-SOVIET CONFLICT AND ITS PROXIMITY TO THE
SINO-SOVIET BORDER .

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MAJOR GEOFFREY H. KLEB

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FOREWORD

This research project represents fulfillment of a student requirement for successful completion of Phase III Training of the Department of the Army's Foreign Area Officer Program (Russian).

Only unclassified sources are used in producing the research paper. The opinions, value judgments and conclusions expressed are those of the author and in no way reflect official policy of the United States Government; Department of Defense; Department of the Army; Department of the Army, Office of the Assistant Chief of Staff of Intelligence; or the United States Army Institute for Advanced Russian and East European Studies.

Interested readers are invited to send their comments to the Commander of the Institute.

RICHARD P. KELLY
LTC, MI
Commander

SUMMARY

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In this paper, the author, first developing the history of the border dispute between the Soviet Union and Communist China, traces the building and improvement of the Trans-Siberian Railroad and points out the strategic significance of the Railroad and its tributaries. While he does not deny the economic import of the railroad, he has shown that the railroad, in the past, has been employed for strategic supply and has been garrisoned with military troops and is being continuously improved and maintained for possible military use in the event of war between the Soviet Union and Communist China.

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THE SETTING

"To the Grand Duke Tsarevich:
Your Imperial Highness:.

Having given the order to build a continuous line of railway across Siberia, which is to unite the rich Siberian provinces with the railway system of the Interior, I entrust to you to declare My will, upon your entering the Russian dominions after your inspection of the foreign countries of the East. At the same time, I desire you to lay the first stone at Vladivostok for the construction of the Ussuri line, forming part of the Siberian Railway, which is to be carried out at the cost of the State and under the direction of the Government. Your participation in the achievement of this work will be a testimony to my ardent desire to facilitate the communication between Siberia and the other countries of the Empire and to manifest My extreme anxiety to secure the peaceful prosperity of this Country.

I remain your sincerely loving

Alexander

March 17, 1891."

Having given general directions in his letter to Nicholas, Tsarevich, Alexander II put into action his decision to build the Trans-Siberian Railroad from Samara, (Kuybyshev) on the river Volga to Vladivostok, on the Pacific Ocean. This was a monumental undertaking to say the least. After all, the straight line distance between these two cities is more than 4000 miles. What prompted such an undertaking more than 50 years after the first trains began puffing their short distances between urban areas in European Russia?

The answer to this question is a complex one involving a discussion of economics, history, geography, demography, and politics and military strategy. The development of the railroad system in European Russia had fairly well paralleled that of the rest of Europe and the United States. Russia's railroad net had progressed quite well, particularly between 1860 and 1870 with Moscow serving as the hub of the network. The following groups of railways were built: St. Petersburg-Moscow, 1843-1851; St. Petersburg-Vienna, 1853-1862; Moscow-Nizhnij-Novgorod, 1861-1862; Moscow-Voronezh, 1862-1869; Moscow-Vologda, 1862-1872; Moscow-Kharkov, 1866-1869; Moscow-Kiev, 1868-1870; Moscow-Warsaw, 1868-1871; Riga-Tsaritsyn, 1861-1871; Kiev-Konigsburg, 1870-1873; Moscow-Odessa, 1867-1869; Kharkov-Nicolaev, 1869-1873; Kharkov-Tagenrog, 1869; Voronezh-Rostov, 1861-1876; and Kharkov-Sevastopol, 1869-1875.¹

There were, up to this point, no railroads east of the Volga, and the first bridge across the Volga was not constructed until 1880. Siberia, or Asiatic Russia, was little known except as a great area for penal institutions and a fairly good source of fish and fur. Russians first crossed the Urals in the 1580's and, ultimately, reached the Pacific by 1640. Why did it take more than 2 centuries to "break Siberia open" to the quest of the settler? The answer to this question closely parallels that of the railroads question and will be discussed in similar fashion.

The historical idea that Siberia was only a land for exiles and was virtually uninhabitable had been refuted by testimony

from those who had lived there. Before the Emancipation of the Serfs in 1861, economic conditions were so bad among many of the Serfs that "they were coming to feel that a better life could be found in Siberia, but this was quite a new notion."² It had taken this idea some 200 years to sink in to the potential settler of Siberia. Of course physical and geographical factors played a most important role in the very slow settlement of the area. Siberia is crossed in the south by a long high mountain range which effectively keeps the warmth of the south from affecting the climate and contains the cold winds of the north in Siberia. The vast continentality produces extremes in temperatures and provides a very short growing season. The rivers in Siberia run from south to north into the frozen Arctic Ocean, virtually preventing any east-west travel except for portage between these rivers. In order to provide a comparison of that earlier portage route with the present Trans-Siberian Railroad, I include comments made by W. H. Parker in his book, An Historical Geography of Russia. "Yakutsk rather than Mangazeya was now the chief fur-collecting centre, and the main route back to Russia went: up the Lena, by portage to the upper Tunguska via Ilimsk, thence to the Yenisey at Yeniseysk, by portage to the Ob' at Naryn, up the Irtysh to Tobolsk, up the Tobol and Tura rivers, by portage across the Urals, and finally up the Kama and down the Vychegda to Solvychegodsk."³ (See Map #1).

The preceding, by way of introduction, provides a little insight into the background behind the building of the Trans-Siberian Railroad. There definitely were political reasons for the construction of such a railroad across the wilds of Siberia. In order to better understand these reasons, it would be best to explore the territory over which the Trans-Siberian Railroad traverses and take a look at the history of relations between Russia and China over the centuries and investigate in some detail the border dispute between these two giants of the East.

In the middle ages and up to 1689, numerous Russian explorers penetrated the areas along the present-day Amur and attempted to stake their claims for the Tsars. Representatives of the Manchu Dynasty frustrated their efforts. There had never been a defined common frontier between Russia and China. Both countries had made various claims; the Chinese basing their claims upon the travels of Ghengis Khan and the Russians upon the meanderings of her explorers. By 1689 representatives of the two powers met at Nerchinsk to mediate their differences.

At this time the Chinese had a very significant advantage, i.e., a 15,000 man army in the immediate area.⁴ They were able to literally dictate the terms of the treaty and the details of the boundary. The border defined by the Treaty of Nerchinsk is shown on the inclosed Map #2. Most important in this treaty was the fact that the Amur-Ussuri basin remained in the hands of the Chinese. This is one of the primary bases for the

Chinese' claim to that area today. However, as Tai Sun An said in his book, The Sino-Soviet Territorial Dispute, "For a century and a half after the Nerchinsk Treaty was signed, the Manchu Dynasty attained the height of its power. Yet its authorities paid little attention to the defense of the Amur frontier."⁵ In other words the Chinese effectively failed to settle and reinforce the area of the Amur-Ussuri, thus allowing the Russians to stake their claim in that area.

During the period following the Treaty of Nerchinsk until 1727, in spite of the obvious ascendancy of the Manchu Dynasty in the border areas, Russian explorers and cartographers continued their work. When the time came for negotiations, the knowledge of the area gave the Russians a distinct advantage.⁶ The Treaty of Kiahkhta and two protocols earlier in the same year, 1727, further defined the boundary from Manchouli and the Argun River westward to Lake Baikal (See Map #2). The Chinese in this treaty ceded to Russia around 40,000 square miles compared with more than 93,000 square miles under the provisions of the Treaty of Nerchinsk. Bear in mind that these treaties were signed during a period of Manchu ascendancy in these areas.

Later in the 18th century and into the 19th century, the decline and eventual decay of the Manchu Dynasty is evidenced by less and less pressure on the Russian negotiators. With this decline and decay the Russians began to press once again claims in the Amur-Ussuri area. All too late the Manchu government began to encourage settlement of that area in response to the stimulus of Russia.⁷

By the end of the Crimean War the Russians had a significant military and civilian force in eastern Siberia to compel the weakened Manchu Dynasty to negotiate. The result of this negotiation was the Treaty of Aigun, in 1858 (See Map #2). This treaty established the new Chinese-Russian boundary along the Amur River to the mouth of the Ussuri, thence north to the mouth of the Amur. Some 185,000 square miles were ceded to Russia under the provisions of this treaty.

The Russians did not end their land grabbing there. Major General Nikolai Nikolaevich Muravyev (then Governor General of Eastern Siberia) concentrated on the Ussuri lands and again took advantage of Chinese internal problems to force upon her the Treaty of Peking in 1860. Thus 133,000 more square miles of heretofore Chinese land was ceded to Russia and she was assured a large portion of the land washed by the Sea of Japan and a common border with Korea.

During the period 1860-1881 there were numerous border incidents and protocols especially in the central asian portion of the border area. The Treaty of St. Petersburg, in 1881, more or less defined accurately the border which exists today. There remained only a few protocols to cover in detail the entire border so that, by 1895, the border was fully defined. All during this period and even into the 20th century, the Russians constantly attempted to increase their influence all along the border. In the far east, especially spurred on by the desire to develop the area economically, politically and militarily, they pushed for the right to build a shortcut for

the Trans-Siberian Railroad across Manchuria to Vladivostok. They extended this to include, in 1898, a railroad link through southern Manchuria to the warm water ports of Dairen and Port Arthur. As Tai Sung An so correctly put it,

"Needless to say, the principal objective of the above two railways was to spread Russia's political, economic and military influence in Manchuria. Only Russia's defeat by Japan in 1905 reversed this advance and caused the Russian sphere of influence to recede to the northern part of Manchuria. By the Treaty of Portsmouth of September 5, 1905, Russia was compelled to cede to Japan the southern half of Sakhalin Island, its territorial lease of the Liaotung Peninsula, the South Manchurian Railway, the great naval and industrial complex of Port Arthur and Dairen, and, above all, its predominant influence in Manchuria."⁸

Even after the temporary setback caused by the Treaty of Portsmouth, the Russians pressed for more influence in the Outer Mongolia area. One particular treaty of 1911, the Treaty of Tsitsihar, remains a problem to this day. "By taking advantage of the internal anarchy in China, Czarist Russia renegotiated the boundary by either moving the original pillars (nos. 58 to 63) or by constructing new ones. The Tsitsihar frontier generally encroached about five miles into China along a six-mile front. In addition, differing channels of the Argun were utilized by Russia for additional forays of up to fifty miles into China."⁹ China has maintained that the agreement was void because of lack of ratification.

After the overthrow of the Tsarist regime in 1917, the Bolsheviks were quick, in many cases too quick, to condemn Tsarist imperialism. One such condemnation is worthy of quote.

"We are marching to free the people from the yoke of military force, of foreign money, which is crushing the life and the people of the East, and principally of the people of China The Soviet Government has renounced all conquests made by the Czarist Government which took away from China Manchuria and other territories. The population of these territories shall decide for themselves to which country they would like to belong."¹⁰

Here is another primary basis for the Sino-Soviet border dispute. Further it was said that,

"The Government of the Russian Socialist Soviet Republics declares null and void all treaties concluded with China by the former Government of Russia, renounces all seizures of Chinese territory and all Russian concessions in China, and restores to China, without compensation and forever, all that had been predatorily seized from her by the Czar's Government and the Russian Bourgeoisie."¹¹

As China emerged from the lethargy of past centuries, its claims for the restitution of these areas are backed by her growing power. In China's eyes, Russian encroachment on Chinese territorial sovereignty continued long after the period of imperialistic expansion on the part of other European states had come to a close. The most notable example was the detachment of Outer Mongolia from Chinese control and its establishment as a 'People's Republic' in 1924. Also serving as a constant irritant was a long succession of border incidents in Chinese Turkestan, particularly in the Ili area. Under the Tsars, as well as the Bolsheviks, the Russians have been poor neighbors at best. The catalog of complaints has grown tediously long. The Communist victory in China and its entry into the World Communist System brought a temporary halt to the public expression of disagreements of territorial questions.

As the future would witness, after assuming power, the Soviets were not very long in maintaining the fair and honorable position referred to in the quotes on page 8. Again taking advantage of China's internal problems, this time with the invading Japanese, the Soviets further entrenched their influence in Sinkiang in the 1930's. There were periodic border incidents in Manchuria with Japanese troops. Soviet interest in the border areas was not lessened by World War II. It was merely relegated to a secondary role. As soon as she recovered from the initial problems engendered by the Nazi invasion in June of 1941, the Soviet Union began planning for eventual invasion into Manchuria. Even on the eve of the establishment of the Chinese Peoples Republic, Stalin was still making overtures to the Chiang government to try to deny the Chinese Reds access to the Sinkiang area.

Even after the establishment of the Peoples Republic of China, in 1949, Soviet interest in Chinese border lands has been evident. The two communist countries have jockeyed back and forth for 25 years each placing blame for border disputes and incidents upon the other. Soviet and Chinese sources are full of denunciations and innuendo. Each accuses the other of provocations. Each claims historical precedence when attempting to base a claim. There appears to be no let-up of the vitriolic tirades which fly back and forth across the border. Izvestiya on the 16th of May 1974 published an article in which the following was said: "If one looks back over the

history of Soviet-Chinese relations for the past 15 years, the fact that Mao Tse-tung, and his supporters deliberately and consistently made our relations worse and finally brought matters to a rupture between the C. P. S. U. and the U. S. S. R. becomes obvious."¹² In the Chinese newspaper Peking Review, on 29 March 1974 was issued a statement condemning an alleged penetration of Chinese territory by a Soviet helicopter. The following was said: "It must be pointed out that this is not an isolated incident. Over a long period, the Soviet authorities have frequently sent aircraft to intrude into China's border areas to disrupt the productive activities of Chinese inhabitants and engage in espionage."¹³ Especially since 1969 when border incidents became more or less routine, press comment has been almost a daily happening in this area. One can select just about any Soviet or Chinese source during this period and have a very good chance of finding some critical article concerning the border dispute.

It has become evident that there has been a border dispute between the Soviet Union and China, and there are at best strained relations between the two countries. Therefore the possibility of war between these two goliaths must be considered, as well as the type of war which might be fought. What role, if any, could the Trans-Siberian Railroad play in the event of war?

There are a number of factors which must be considered. First, what about the two armies facing one another. How much priority has each given to the border area and the dispute

thereon? The Chinese Army has been gradually placing her best divisions along the volatile border areas in Manchuria, Inner Mongolia and Sinkiang. This has been even more evident as the threat of U. S. forces diminished with that country's withdrawal from active participation in the Vietnam area. Estimates of Chinese strength in the Manchurian area alone run from 25 to 30 divisions, about 500,000 men. They are facing a Soviet force of about 20 divisions, around 250,000 men. The Chinese feel that a conquest by the Soviet Army of her land mass has little chance of success because of the vastly superior manpower capability she maintains. Additionally, the territory over which the war would rage should give strategic advantage to the defender. Resupply would be difficult at best and would involve a great deal of advance planning and stockpiling. This aspect of resupply and planning has occupied a great deal of Soviet time in the past, particularly during the Russo-Japanese War and in World War II. In the first instance, the existing railroad was severed quite early in the war and the possibility of resupply from European Russia was quite remote. There were insufficient forces in the area to secure the long stretch of track which lay very close to the border. As a result of territory lost at the Treaty of Portsmouth, the Tsar found it necessary to build a new link between Chita and Vladivostok. This longer line was not completed until 1916 and was, of course, single-tracked. During World War II as the Soviet Union emerged victorious on the European front, she was faced

with the task of transporting thousands of troops from Europe to the Far East in anticipation of the invasion of Manchuria. Because of the great distances involved and the limitations imposed by the single-tracked Trans-Siberian Railroad it took many sorties of railroad convoys months to transfer 27 infantry divisions and 3 division sized armored corps to the Manchurian front.¹⁴

Despite the success of the Manchurian operation in August of 1945, the Soviet High Command immediately recognized two very alarming problems. The first was the inadequacy of the Trans-Siberian Railroad, then single-tracked, to rapidly transport needed troops and supplies to the front. The second was the very close proximity of the Trans-Siberian Railroad to the border. It would be quite easy for Chinese guerillas to sever the line at any one of several places thus separating Vladivostok and the sea from the rest of the U. S. S. R. The inadequacy of the single-tracked line was immediately recognized and it has since been double-tracked. It was stated in 1970 that,

"Current railroad construction is being made in response to three types of needs: to facilitate the exploitation of large new mineral deposits in areas that have not been served by railroads previously; to complete links in existing lines that will provide necessary alternate routes for heavy flows of traffic between major regions; and to provide adequate access into and out of newly settled areas whose population densities and aggregate production have generated adequate demands for market outlets and incoming supplies."¹⁵

As is mentioned above, there have been numerous Soviet railroad projects officially designed to open new areas for exploitation of mineral wealth. This is only partially true. At no small cost the Soviet Union has a significant amount of track which runs parallel to the main Trans-Siberian line with spurs connecting one with the other. A military function for these tracks can be quite readily seen here.

"Clearly from a strategic point of view, the Soviet Union must feel its far east territories are vulnerable in the event of a war with China, as the present trans-siberian line runs less than 150 miles from the Chinese border for quite long stretches and the railway has always been the most important line of communication with west Russia. The new line will extend a branch of the present line round the north tip of lake Baikal to Komsomolsk, so that it will be separated from the Chinese border by further hundreds of miles of forest, marshes and mountains."¹⁶

The above quote was taken from an article describing the huge project BAM, or Baikal-Amur Trunkline (See Map #3). This ambitious project has been in existence for at least 30 years in some form or another. Basically it is the construction of parallel railroad lines to the existing Trans-Siberian Railroad and, then building connecting lines at strategic places along both lines. As the Soviets themselves put it,

"About 2,000 miles of permanent track will be laid to connect the present Taishet-Ust Kut and Komsomolsk-on-Amur-Sovietskaya Gavan lines. Where will the route pass? Branching off from the Trans-Siberian at Taishet (a long way to the east, it will rejoin it by the Tynda-BAM branch road which will run north to south), it will run north of Lake Baikal, cross Eastern Siberia and terminate in the Far East, reaching the Pacific via Komsomolsk-on-Amur."¹⁷
(See Map #3).

W. A. Douglas Jackson, in his book, The Russo-Chinese Borderlands, specifically refers to efforts on the part of the Soviets as early as before World War II to construct "a second Siberian railway, which would parallel the main route but run at some distance to the north of the Mongolian-Manchurian border."¹⁸ This railway was known as the Baikal-Amur Railway and was to "link Tayshet on the Trans-Siberian northwest of Irkutsk with the new port of Sovetskaya Gavan on the Pacific, almost due east of Komsomolsk."¹⁹ Note the similarity of this pre-World War II description to the description above in the November 1974 issue of Soviet Life. Ostensibly and officially, the reason behind the construction of project BAM is to tap the tremendous natural resources in the area and to "give impetus to the development of economic ties with Japan and other countries."²⁰ While it can be seen that economic reasons now play a large part in project BAM, it can be equally determined that economic ties with Japan played absolutely no role in the Soviet decision to construct the railroad just before World War II. The Soviets had been at odds with the Japanese at least since the disastrous Russo-Japanese War of 1904-1905. In the late 1930's, the Japanese had great visions of aggrandizement in the Far East in general and were expanding northward as well as southward. The Soviets have a great deal of military experience in the Far East area. In these engagements since the turn of the century they have suffered one very disastrous defeat at the hands of the Japanese in 1905 and have had two rather significant victories during World War II. It would appear that the Soviet Union is basing its plan of action in

the Far East upon the experiences gained at the expense of the Japanese in 1939 and 1945, and perhaps just as important, the lessons learned in 1905. Harrison Salisbury said the following:

"The Russians learned one major fact from the 1904-5 disaster against Japan: to fight successfully in the Far East you must muster superior forces and maintain them effectively at the end of a 4,000 mile land supply line. The inadequacy of the numbers of czarist troops brought into action against Japan was not as fatal as the inability of the incomplete Trans-Siberian Railroad to supply, reinforce, and provision the Czar's armies in Manchuria. And the task could not be accomplished by sea."²¹

After the Bolsheviks seized power, they were not long in strengthening their position in the Far East. There were periodic border clashes with the Japanese but the Soviets were aided by difficulties within the camps of those opposing them. Every attempt was made to establish an independent army with a base at Chita. Industries were built in the Far East, notably at Komsomolsk-on-Amur in order to cut the long travel distance along the Trans-Siberian Railroad.²² It was during this period between the two world wars that the Trans-Siberian Railroad was double-tracked and electrified to a great extent. As a matter of fact, during this period there were a great number of "volunteers" transported to the Far East to build cities, work on the railroads, work in factories and just work. This of course was exclusive of the many Soviet Army units which began appearing in the area. The Soviet Army was able to successfully defend its far eastern areas from Japanese small-scale attacks up through 1938. Finally as war became more imminent on a world-wide scale and the Japanese were becoming a

great deal more militant in their probes across the borders, the Soviet High Command decided to respond on a massive scale to increased Japanese offensive efforts in Mongolia, which was a protectorate under Soviet control.²³ Given a great deal of time to gather his supplies and offensive strength, Marshal Zhukov, recently assigned as Theater Commander, struck with 35 infantry battalions and 20 cavalry squadrons against a Japanese force of 25 infantry battalions and 17 cavalry squadrons on 22 June 1939 and, in the period of 4 days practically wiped out the opposing Japanese force. In Salisbury's words, "Zhukov's operation had been costly but was magnificently successful. The psychological effect on the Japanese was decisive. The Khalkin-gol defeat played a major role in discouraging the Japanese from any military adventures while Russia was so deeply engaged against Hitler in World War II."²⁴

Six years later, at the close of World War II, one of the lesser known campaigns of that war was conducted in the Far East by the Soviet Army against the remnants of the Imperial Japanese Army. In short, after the victory in the European theater, the Soviet Army transferred great numbers of men and equipment to the far eastern front in a comparatively short time of 2½ months. The Soviets built up a 1.8:1 advantage in men, a 4.8:1 superiority in armor, and a 1.9:1 advantage in tanks. "This enormous force required 136,000 railroad cars to move. During June and July 1945 between twenty-two and thirty trains daily were conveying men and munitions east of Lake Baikal."²⁵

There is no need to go into any great detail in describing Soviet military operations in general. The primary purpose is to point out the role that Soviet Railroads, particularly the Trans-Siberian, have played in the past and their influence in Soviet planning today. For a detailed look at the Soviet Manchurian operation of 1945, the Soviet Government publication Vtoraya Mirovaya Voyna²⁶ is recommended.

One should not think that the Sino-Soviet border conflict is confined to the far eastern regions. There are two other quite significant areas, Sinkiang and Mongolia. Of primary concern when we discuss the Trans-Siberian Railroad is of course the far eastern area because of the proximity of the railroad to the border. In Mongolia, however, the Trans-Siberian Railroad and its extension, the Trans-Mongolian Railroad are significant factors to be considered. The Trans-Mongolian Railroad runs south from Ulan-Ude, the present capital of Soviet Buryatia, located on the Trans-Siberian through Ulan Bator, the capital of Outer Mongolia, reaching the Chinese frontier at Dzamyn Ude. This railroad was completed in 1956 and the broad Soviet gauge continued some 60 miles into China to the city of Tsining. The Chinese, in 1966 tore up the broad gauge tracks back up to the border.²⁷ From this, the tactical value of this railroad is quite apparent. Harrison Salisbury, in describing a trip he took along the Trans-Mongolian Railroad, noticed a rather feverish pace of construction and also that the "builders" were not Mongolian but Russian!²⁸ He described also, in some detail, the "Voenny Gorodok" or Russian military base being constructed

all along the path of the railroad. All this feverish construction and influx of Soviet military was noticed after the Sino-Soviet border clashes along the Ussuri-Amur Rivers in the Far East. The intent of all this new construction was not being discussed, but, "looking at the concrete bunkers neatly nestled into the shoulder of a rank of hills facing south, looking at the radar complex installed on a mountain crest where it commanded all approaches, one could guess that this was something more than a simple supply dump or the headquarters of a civilian construction regiment."²⁹ Further indication of the intent of such construction became obvious from the shoulder tabs of the Soviet soldiers in the area. The bulk of the soldiers were "rocket and missile forces, artillery men, airmen, and tank men."³⁰ It appears obvious that this rail line, connecting the Soviet Union with the depths of Outer Mongolia is a vital key in the Soviet plan of action against China in the event of hostilities. Although travel is restricted in this area, those who have traveled between Peking and Ulan-Ude on the railroad have borne witness to the fact that there are major Soviet military concentrations all along the railroad route.³¹

There is one other rail line in Mongolia which connects the old Russian link to the Chinese Eastern Railroad with the city of Choibalsan, in Eastern Mongolia (See Map #3). In view of the foregoing it becomes apparent that, in the event of hostilities between the Soviets and the Chinese, the Soviets intend to employ basically the same tactics as in 1945 against the Japanese, a two-pronged attack from Mongolia and from the

Soviet Far East. In any case the Trans-Siberian and Trans-Mongolian Railroads would quite likely play a critical role in such a campaign.

A further note attesting to the other than economic motivation of the Baikal-Amur Trunkline is the fact that, despite the persistent requests of Soviet planners, the Japanese government flatly refused to provide any help, financially or professionally, in the construction of the railroad. Although the Japanese are very much interested in trade with the Soviet Union, and, indeed, provide a great deal of similar help in other areas in Siberia and the rest of the Soviet Union, they are also fostering warmer relations with Communist China. Any aid on the BAM line, located so near the Soviet-Chinese border and having such an obvious military significance could be interpreted by the Chinese as a definite step in favor of the Soviet Union.³² Such an action could significantly impair future Japanese relations with Communist China.

Further testament to the significance the Soviets attach to the Siberian railroads in general including the Trans-Mongolian, is the fact that during the period of the most violent border incidents, in early 1969, General V. F. Tolubko, a strategic missile man, was appointed to command the Far Eastern Military District.³³ He came to this job from the Siberian Military District which is also located on the Russo-Chinese border between the Trans-Baikal Military District and the Far Eastern Military District.

As has been previously mentioned, (see footnotes 29 & 30) at many of the construction sites along the railroad, there is hard evidence of radar installations and missile forces. The size of the equipment employed requires prime movers which can carry enormous amounts of weight. Throughout this area the best prime mover is the train since there is a paucity of airfields and highways. And it is the railroads which are being prepared and have been upgraded to do just that in the event of conflict with China. It is the military forces stationed along these railroads which will defend the railroads from attack, either all-out or guerilla.

In the border area Soviet anti-aircraft rockets have been deployed in Outer Mongolia since 1967, and since 1968 fixed sites with mounted rockets and mobile rockets with ranges up to 4000 kilometers have been deployed in the vicinity of Lake Buir Nuur, (See Map #3).³⁴ Additionally since 1969 there have been two divisions in Outer Mongolia³⁵ ostensibly to provide support and security for the troops manning the railroad sites in Outer Mongolia. "For the past several years, as can be seen from Soviet geographical maps of the area, the railroad line from the city of Choybalsan, which had already previously been connected with the Soviet Trans-Siberian Railroad, has been extended to the city of Tamsagbulag, situated in the region of Lake Buir Nuur."³⁶

In conclusion, it is the opinion of the writer that the Trans-Siberian Railroad has, to the present day retained its strategic significance which has been developed in the years

since its construction. Parallel and trunk lines extend its capabilities and increase its importance. The Trans-Siberian Railroad and its branches, in the absence of sufficient airfields and highways in the border region (on both sides of the border) would be a main artery for reinforcement and insertion of new elements of attack in the event of general conventional or limited nuclear war with Communist China.

TABLE I

GROWTH OF SIBERIAN POPULATION, 1622-1921

<u>Year</u>	<u>Natives</u>	<u>Russians & Foreigners</u>	<u>Total</u>
1622	173,000	23,000	196,000
1662	288,000	105,000	393,000
1709	200,000	229,227	429,227
1737	230,000	297,810	527,810
1763	260,000	420,000	680,000
1797	363,362	575-800	939,162
1815	434,000	1,100,500	1,534,500
1858	648,000	2,288,036	2,936,036
1897	870,536	4,889,633	5,760,169
1911	972,866	8,393,469	9,366,335
1921	-----	-----	11,070,000

Table from Arved Schultze, Siberian: eine Landeskunde; Breslau, 1923, p. 167. (Extracted from The Great Siberian Migration, by Donald Treadgold, p. 32.
 Figures do not include Central Asia.

TABLE 2

POPULATION OF CITIES ALONG THE TRANS-SIBERIAN RAILROAD

Novosibirsk	1,161,000
Kubyshev	1,047,000
Chelyabinsk	874,000
Omsk	821,000
Ufa	773,000
Krasnoyarsk	648,000
Irkutsk	451,000
Vladivostok	442,000
Khabarovsk	437,000
Tomsk	339,000
Chita	242,000
Komsomolsk-on-Amur	218,000
Petropavlovsk	173,000

Paul . Lydolph, Geography of the U. S. S. R., (New
York: John Wiley & Sons, Inc., 1970), pp. 657-659.

FOOTNOTES

¹Article, "The Commerce of the Siberian Railway," Scientific American, 30 April 1904, p. 346.

²Donald Treadgold, The Great Siberian Migration, (Princeton: Princeton University Press, 1957), p. 6.

³W. H. Parker, An Historical Geography of Russia, (London: University of London Press, 1968), p. 111.

⁴Tai Sung An, The Sino-Soviet Territorial Dispute, (Philadelphia: The Westminster Press, 1973), p. 29.

⁵Ibid., p. 31.

⁶Ibid.

⁷Ibid., p. 33.

⁸Ibid., p. 45.

⁹Ibid., pp. 46-47.

¹⁰Ibid.

¹¹Ibid., p. 50.

¹²O. Borisov, "Who is Preventing Normalization?" (KTO MESHAET NORMALIZATSII) Izvestiya, 16 May 1974, p. 2.

¹³Article, "Chinese Government Lodges Strong Protest With Soviet Government," Peking Review, 29 March 1974, p. 5.

¹⁴J. Malcolm Mackintosh, "The Soviet Generals' View of China in the 1960's," in Sino-Soviet Military Relations, ed by Raymond L. Garthoff (New York: Frederick A. Praeger, 1966, p. 186.

¹⁵Paul E. Lydolph, Geography of the U. S. S. R., (New York: John Wiley & Sons, Inc., 1970), pp. 563-564.

¹⁶London Times, January 14, 1970.

¹⁷Ivan Yurchenko, "BAM Railroad 2000 Miles Long," Soviet Life, November, 1974.

¹⁸W. A. Douglas Jackson, The Russo-Chinese Borderlands, Princeton: D. Van Nostrand Company, Inc., 1968), p. 59.

¹⁹Ibid.

²⁰Yurchenko, op. cit.

²¹Harrison E. Salisbury, War Between Russia and China, (New York: Bantam Books, Incl. 1970, p. 128.

²²Ibid.

²³Ibid., p. 131.

²⁴Ibid.

²⁵Ibid., p. 32.

²⁶S. P. Platonov, ed., Vtoraya Mirovaya Voyna (Second World War), (Moskva: Voennoe Izdatel'stvo, 1958), Maps 28-31.

²⁷Salisbury, op. cit., p. 125.

²⁸Ibid., p. 124.

²⁹Ibid.

³⁰Ibid.

³¹Ibid., p. 126.

³²Joseph J. Baritz, Lecture, U. S. Army Russian Institute, Garmisch, 20 March 1975.

³³V. F. Tolubko, "Zhiviyot Slava Geroyev," (The Glory of Heroes Lives) Krasnaya Zvezda, 6 August 1969, p. 3.

³⁴Hans-Jurgen Eitner, article in Die Welt, 1 October 1968 and 4 March 1969, and Der Spiegel, No. 12, 1969, p. 130 and No. 13, 1969, p. 142.

³⁵The Institute for Strategic Studies, London, The Military Balance, 1969-1970 and 1971-1972.

³⁶Joseph J. Baritz, "The Kremlin's Policy to Provide for the USSR's National Security Vis-A-Vis Chinese Threat," 6th Annual Soviet Affairs Symposium, 27-30 September 1972, Garmisch, Germany, p. 108.

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APPENDIX A.

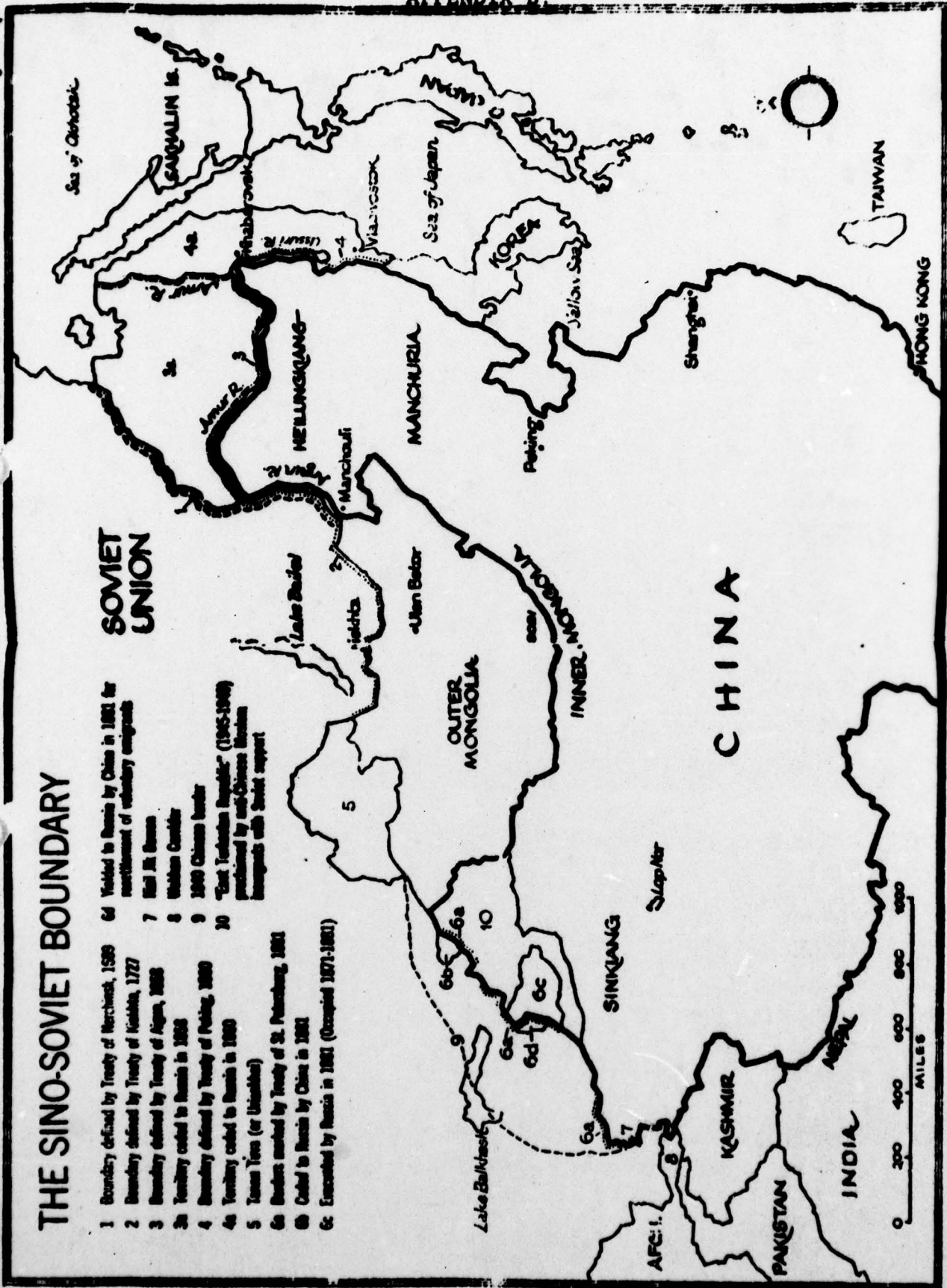
MAP # 1

Power Lines from Siberia to European Russia
Before Trans-Siberian Railroad



THE SINO-SOVIET BOUNDARY

- 1 Boundary defined by Treaty of Nerchinsk, 1689
- 2 Boundary defined by Treaty of Khabarovsk, 1727
- 3 Boundary defined by Treaty of Aigun, 1858
- 3a Territory ceded to Russia in 1858
- 4 Boundary defined by Treaty of Peking, 1909
- 4a Territory ceded to Russia in 1909
- 5 Tumen River (or Ussuriysk)
- 6a Border marked by Treaty of St. Petersburg, 1901
- 6b Ceded to Russia by China in 1901
- 6c Executed by Russia in 1901 (Occupied 1871-1901)
- 6d Validated to Russia by China in 1901 for resettlement of voluntary emigrants
- 7 Red 3th River
- 8 Ussuriysk
- 9 1000 Chinese border
- 10 "East Turkestan Republic" (1945-1949) proclaimed by anti-Chinese Moslem insurgents with Soviet support



APPENDIX C.

MAP # 3

TRANS-SIBERIAN RAILROAD & TRIBUTARIES

Trans-Siberian Railroad
Chinese Railroad
Project B.A.M.
Trans-Mongolian Railroad

Komsomolsk on Amur

Verkh-Baykalskaya

Khabarovsk

Darkhovostok

Irkutsk

Harbin

Qinghai

Taining

Peking

Ust-Kut

Ulan Ude

Chita

Choybalan

Ulan Bator

Tayshet

OUTLINE MAP-U.S.S.R.

