64

NAVAL WAR COLLEGE
Newport, R.I.

A COMPARISON OF THE WAR POTENTIAL OF THE U.S. AND THE U.S.S.R. IN RELATION TO THEIR PRESENT FOREIGN POLICY OBJECTIVES

TERM PAPER IB

Naval Warfare I, Class of June, 1956

30 January 1956

Cdr. R.M. Harper

NAVAL WAR COLLEGE
Newport, R. I.

A COMPARISON OF THE WAR POTENTIAL OF THE U.S. AND THE U.S.S.R. IN RELATION TO THEIR PRESENT FOREIGN POLICY OBJECTIVES

30 January 1956

TABLE OF CONTENTS

CHAPTER		
	FIGURES	iii
	TABLES	iv
	INTRODUCTION	v
I	PRESENT UNITED STATES FOREIGN POLICY OBJECTIVES	1
II	PRESENT USSR FOREIGN POLICY OBJECTIVES	10
III	THE DYNAMICS OF RESOLUTION	16
IV	GEOGRAPHY	22
	Size	22
	Position	22
	Topography	24
	Climate	24
V	POPULATION	26
	Size	26
	Groups	27
	Population Structure	28
	Education	29
	Distribution by Occupation	31
	Standard of Living	32
	Government Ideology	34
VI	NATURAL RESOURCES	36
	Agricultural Resources	36
	Mineral Resources	39
	Energy Resources	40
VII	INDUSTRIAL CAPACITY	43
	National Product	43
	Industry	44
	Transportation	47
VIII	ARMED FORCES	49
	Army	49
	Navy	50
	Air Force	50
	Personnel	50
	New Weapons	51
IX	SUMMARY AND CONCLUSIONS	52
BIBLIOGRAPHY		55

FIGURES

		PAGE
FIGURE 1.	Polar projection of the geographical areas of the USSR and the United States superimposed to display relative position and size.	23
FIGURE 2.	Primary geographical features of the USSR.	24
FIGURE 3.	Population growth for the US and USSR plotted on a logarithm ordinate to compare rate of growth	27
FIGURE 4.	Percentage distribution of population by age groups for the United States and the USSR, 1950. . . .	29
FIGURE 5.	Number of Engineering Degrees, US and USSR, 1940-1955	30
FIGURE 6.	Number of Advanced Science Degrees, 1938-1953, for US and USSR.	30
FIGURE 7.	Primary agricultural area of the Soviet Union and general areas where agricultural expansion is being attempted.	37
FIGURE 8.	Geographical distribution of Coal and Iron reserves of the USSR	46

TABLES

		PAGE
TABLE 1.	Comparison of the size and distribution, by percentage of the labor force of the United States and the USSR for the year 1952.	31
TABLE 2.	Average per capita consumption of various items in metric pounds during years 1934-1938. . .	33
TABLE 3.	Comparison of yield per acre of selected commodities for the US and USSR in metric quintals, 1950	38
TABLE 4.	Comparison of the self-sufficiency of the US and the USSR in major minerals	39
TABLE 5.	Comparison of the average post-war year, or year as indicated, production of various minerals for the US and USSR	40
TABLE 6.	Comparison of the production and estimated reserves of energy resources of the US and USSR as indicated by year.	41
TABLE 7.	Minerals: probable length of life, in years, of known reserves, under specific rates of consumption.	42
TABLE 8.	Comparison of the national accounts of the US and USSR, 1952-1953, or as indicated	44
TABLE 9.	Comparison of pig iron and steel production of the US and USSR for the year 1950, in million of metric tons	45
TABLE 10.	Comparison of percentage division of freight ton-miles by carrier for the US and USSR, in 1953-1954.	47
TABLE 11.	Comparison of the numbers and potential numbers of the armed forces of the US and USSR under varying conditions	49
TABLE 12.	Comparison of the number and types of ships possessed by the Navies of the US and USSR, 1955	50

INTRODUCTION

The magnitude of the subject which has been assigned for this discussion coupled with the dynamic nature of the material under consideration has precluded an extensive presentation of all facets in the space allocated. It has been a disappointment in the preparation of the material that complete and adequate treatment of individual subjects has not been possible. However it is considered that the objective of individual education and broader understanding has been achieved.

Definitions relative to foreign policy and war potential have been provided in the directive for this term paper. These definitions have been adhered to in the selection of comparisons and in the evaluation of foreign policy.

The position which satellite nations occupy in relation to the Soviet Union, and the NATO and alliance nations in relation to the United States, with respect to economic integration and war potential consolidation, present an enigma which has no easy or permanent resolution when over-all comparisons are to be made. The defection of Yugoslavia, the shakey stature of NATO after the Summit Conference and the generalized terminology of most alliance documents, all point to the ambivalent position of nations caught in the maelstrom of dynamic and conflicting ideologies. Loyalties under these circumstances are transitory at best and are dependent upon day to day considerations. That the present alignment of nations would remain static during any of a number of different overt conflicts is not a reasonable assumption. Similarly, if the war potential of the present alignment of nations are compared, such a comparison is only valid at the time of comparison, and may be misleading in the ultimate conclusions which are gained. However the Soviet Union and the United States are the protagonists about whom other nations will be drawn to supplement the primary potential. With this in mind the war potential of only the United States and the USSR will be considered. These nucleus potentials are of primary importance and will only be modified to a slight degree by the affiliation of other lesser nations.

CHAPTER I

PRESENT UNITED STATES FOREIGN POLICY OBJECTIVES.

The present foreign policy objectives by which the United States is endeavoring to maintain a free and secure America in a free and secure world are a mixture of traditional objectives supplemented by recent objectives which have been required to substantiate the new role and position which the United States has assumed since World War II. Of these traditional objectives Foster Rhea Dulles has the following to say:

> The underlying aims of American Foreign Policy in the 1950's had not fundamentally changed from what they had been when the Republic was founded. National Security, as always, remained a first and basic consideration. There was still a very real concern over the promotion of trade and commerce in the interests of the nation's continuing prosperity. And there was also, as there had been throughout the history of the Republic, a strong popular conviction that American policies should be directed toward the defense of the freedom and the liberty of all people suffering under tyranny and seeking relief from foreign oppression.1/

Further thought about these traditional objectives brings the realisation that they are fundamental to the American concept of nationality and will persist as long as the United States remains an entity. National security and trade are common to most nations in varying degrees depending upon their origin and resources. Freedom from oppression for other peoples is strictly an American concept born of the philosophies which created this great country. It is generally diametrically opposed to the ego-centric and selfish concepts held by European nations, who through close association and intimate borders have throughout their history endeavored to reduce their neighbor in order to maintain themselves.

The recent foreign policy objectives of the United States, those required since World War II, and for the purpose of this discussion

---

1/ F. R. Dulles, America's Rise to World Power, 1898-1954. p.281.

the most important, have evolved as a means of meeting communist aggression, coupled with the need for maintaining a free world coalition. In order to adequately envision the significance of some of these objectives it is considered desirable to trace the developments which preceeded their evolution.

During the second World War and immediately thereafter the American people envisioned and interpreted the moralistic concepts and principles enumerated in the Atlantic Charter, The Declaration of the United Nations and the Moscow Declaration as the foundation of a participating and cooperating world family. The Moscow Declaration had elicited from Secretary Hull the following naive and over-optomistic declaration: (that with this understanding among the major powers,) "there would no longer be need for spheres of influence, for alliances, and balance of power." 2/ However the public and its officials were neither well informed or realistic in their thinking. They did not apparently realise that the complete overthrow of Germany and Japan would create power vacuums which in turn would foster internal disorder and fierce external competition for control of these areas. The American People and their officials placed their faith in the new order which they believed in the making due to the cooperative participation and the platitudes emenating from their allies during the war. However the years 1945-1947 showed that the American people and their form of government, when not faced with a crisis, were not prepared to deal with complicated world problems when the solution might conflict with minority or national interests at home. Their dominance in military power, their great Navy, the atomic bomb, their occupation forces and strategic world bases plus the economic and commercial advantage lulled the people and congress into a complacency which made the hard facts of world and especially European recovery very distasteful to handle when conflicting with the internal national interests. "The Americans

---

2/ Dulles, op. cit., p.211.

continued to think of the United Nations as the beginning of an effective collective security system." 3/ As such they supported its actions and took a vital interest in the proceedings and conflicts within that organization. However in the trade and reconstruction policies for Europe, the Administration and the Congress differed drastically to the detriment of a recovering Europe. Congress by stopping lend-lease, UNRRA, U.S. price controls and restricting the Import and Export Bank loans, to mention only a few, during this period, increased the dollar gap between American shipments of food and supplies to Europe, and foreign imports and services to America. Conferences at Geneva and Havana in 1947 endeavored to reduce tariffs and promote trade in order to eliminate the dollar gap. The results of the first conference were partially successful though only partially implemented due to partisan congressional action, while ratification of the latter died in congressional committee. These negative aspects of foreign policy can be mainly attributed to public apathy for world situations while attempting to achieve what it considered American normalcy at home.

The year 1947 has been called the year of decision by some authors. It was in this year that Americans began to realize the the idealistic world order which they had envisioned, promoted and given lip-service was about to crumble in the face of aggressive communism and indecisive action at home. The withdrawal of the British from Greece was leaving a power vacuum in Greece and Turkey which had every indication of causing those two countries to capitulate to communism which was gaining headway through externally supported guerrilla uprisings. President Truman without consulting the United Nations asked congress for 400 million dollars in military and economic aid to stem the possible communist aggression in an area considered of strategic importance to the United States. In his message to Congress, President Truman is quoted as

---

3/ W. G. Carleton, The Revolution in American Foreign Policy, 1945-1954. p. 27.

follows:

> One of the primary objectives of the foreign policy of the United States is the creation of conditions in which we and other nations will be able to work out a way of life free from coercion.
>
> I believe that it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or by outside pressures . . .The world is not static and the status quo is not sacred. But we cannot allow changes in the status quo in violation of the Charter of the United Nations by such methods as coercion, or by such subterfuges as political infiltration. 4/

This statement of policy coupled with the declaration that the United States would aid strategic countries in danger of communist aggression has since been known as the Truman Doctrine.

Concurrently, the dollar gap on recovery aid had risen to the point where 11.3 billion dollars was owed the United States for goods and services, with the further need for aid constantly increasing. The possibility of European countries increasing their dollar credits to repay this unbalance was rapidly decreasing. The cumulative effects of this condition were not to be ignored and the American Government realized that its policy for European recovery would have to be revised. Many plans were considered and the partisan debates in Congress offer much interesting reading as to differing and selfish view points when this measure was on the floor. The plan adopted, commonly called the Marshall Plan, entailed the granting to European Countries of credits, outside of Europe, and loans. However, the amounts appropriated fell considerably short of the amounts requested by the participating countries in their preliminary cooperative plan. Russia and the bloc countries were asked to join, however the requirement that they provide statistics as to their economic conditions and plan cooperative recovery deterred their participation. The dynamic foreign policy debated in Congress on this issue elicited the following remarks from Senator Vandenberg:

4/ Dulles. op. cit., p.231

> The greatest nation on earth either justifies or surrenders its leadership. We must choose. There are no blueprints to guarantee results. We are entirely surrounded by calculated risks. I profoundly believe that the pending program is the best of these risks. I have no quarrel with those who disagree, because we are dealing with imponderables. But I am bound to say to those who disagree that they have not escaped to safety by rejecting or subverting this plan. They have simply fled to other risks, and I fear greater ones. 5/

Some of the nationalistic provisions appended to this bill by Congress negated the full effectiveness of this plan and caused resentment among the participating countries. One of the stipulations required that half of all goods shipped from the United States, wherever Federal stocks or financing were involved, must be moved in American ships. This one provision even today is causing difficulty in American relations and efforts to dispose of surplus stocks. An article by Felix Belair Jr. from Stockholm, Sweden is quoted in part to show the effect today.

> The United States has the surplus stocks and has been trying hard to get rid of them. The Scandinavian countries need the supplies but are standing firm on the principle that what they buy, even for local currency, they have the right to transport.
>
> Sweden is a typical case. She needs coarse grains and other cattle feed because the summer drought halved yields . . . (and) as a result, cattle slaughter has been running about 70 per cent ahead of last year. Sweden has no beef cattle industry to speed of, and the excessive slaughter is cutting dairy herds to dangerously low levels . . . Some Swedish and United States authotities have estimated that some $50,000,000 of surplus cattle feed might be disposed of in this way in Sweden alone. 6/

The European Recovery Plan (Marshall Plan) at its inception had many faults and by American standards was not very successful. However it must be remembered that the American public in its expression of public opinion sides either with a black or white concept and there is only a very small percentage that consider the shade of gray that might result. The American public with its high moral standard of a

---

5/ Dulles., op. cit., p. 235

6/ F. Belair Jr. Ship Rule Snags U.S. Surplus Sale., The New York Times, 12 December 1955.

strict law of cause and effect must see immediate results. Such it was with the Marshall Plan, results were slow in becoming apparent and it was very expensive; it was not until 1950 that the balance of payments seemed nearing an equilibrium. Though it was considered by many in America as a waste of money, the value of this plan can possibly be measured by the actions it caused within the Soviet World. Economic integration of the Soviet bloc countries was immediately begun with each country instituting a number-year plan which included the nationalization of agriculture and industry. Further, the Comirform was again established and the attempt made to drive Western Powers out of Berlin by blockade. This resulted in the very successful and prestige gaining air lift operation.

The re-election of President Truman in 1948 in effect was a vote of confidence in the foreign policy objectives of the existing administration. In his Inaugural Address in January of 1949, however, he stressed most heavily among the major objectives of American Foreign Policy, the association of the free nations of the North Atlantic Area in a "collective defense agreement." 7/ This appeared to be the first indication, following the Vandenberg Resolution calling for collective regional agreements, of the American Government admitting the failure of the United Nations to provide a world collective security organization and that the United States must further seek to align itself with free nations of the European Area in order to deter communism and provide for collective security in case of attack. Such an organization, The North Atlantic Treaty Organization (NATO), was established by April of that same year with twelve member nations. It was established with a minimum of opposition or conflict in the United States but with considerable reservations and doubts expressed by the countries of Europe. These centered of course upon the type and amount of aid which would be furnished by the United States, the forces required of each

---

7/ Dulles, op. cit., p 242.

country, the number of American forces to be stationed in Europe, and the relative part that a reconstituted Germany would play. Many of these questions still remain unresolved however an additional three nations, including West Germany, have since been accepted into NATO and constitute the foundation upon which it is hoped to build a mutual defense against communism and communistic aggression. Other free European Nations have been excluded from NATO because of moral objections by primary member nations. However, reciprocating mutual defense pacts with other than objecting NATO Nations have effectively made these free Nations part of this coalition against communism. To implement the mutual defense pacts financially and provide the armaments of war the European Recovery Program (Marshall Plan) was changed to the Mutual Defense Assistance Program with approximately three quarters of the aid appropriations diverted as military aid.

Though the course of action for American objectives is fairly clear in Europe due to the organization and commitments which have been made, such is not the case in the Near East, Asia and the Pacific.

The Korean War, which presented a myriad of conflicting policies and actions for all nations throughout its entire course, established the United Nations' principle that force would not be tolerated in the settlement of international disputes. Speculation is often expressed as to the outcome if Russia had been present in the Security Counsel when the Korean action was voted and had vetoed such action. Would the United States have countered this aggression alone? A review of the time schedule during these critical days seems to indicate to the author that such would have been the case and that the United States would have abandoned the veto-ridden Security Counsel in order to establish this principle for all of the free nations to view. The lack of long term objectives during this action has been most confusing to the free nations of the world, however the restraints imposed in order to limit the conflict, though unpopular with some peoples of the United States,

generated a great deal of confidence in the United States and the United Nations by free governments throughout the world.

The support of the Chiang Government on Formosa as to territorial integrity and to represent the Chinese people in the United Nations has raised many eye-brows in the free world and caused a closer integration of the Soviet and Red Chinese Governments. Though the United States has acted positively in this situation it has never acknowledged the exact position that Formosa is to play. The failure to recognize the Red Chinese Government as a government in fact has been a moral issue with the United States and has required circumvention in many instances in order to complete common business. One such instance is the prisoner exchange conferences held in Geneva.

The United States has, since the formation of NATO, retained the initiative in the formation of mutual defense treaties and alliances with most nations throughout the free world. Many of these are simple defense alliances but many of them also provide for economic assistance. The Point Four Program was originally designed to provide economic aid and technical assistance to free nations throughout the world. Technical assistance has always been strong, however the financial aid and capital investment has fallen far short of expectations due to the need for armament throughout the world. Latin American Republics have faired very poorly under this program. It has been said of this program:

> Increasingly Congress put the emphasis on foreign armament programs. Economic assistance declined, technical assistance lagged and capital investment programs were ignored. 8/

Current world developments and the renewal of the "Cold War" have not caused the United States to change its objectives. It is anticipated that any future counteractions will be taken within the framework of present day objectives.

The Foreign Policy Objectives of the United States, as they exist today, can be divided into two broad catagories. There are those which

---

8/ Carleton, op. cit., p. 75.

are traditional and nationalistic in their origin and those which are the product of the current world situation. These latter however can be divided again into two catagories: those which can be considered as designed to maintain the international position of the United States in its cooperative role and those designed to combat, contain and eliminate communism as a world dominating form of government and ideology. In essense they can be listed as follows:

Foreign Policy Objectives of the United States.

A. Traditional.

1. To maintain the national security of the United States and its democratic form of government.

2. To promote trade and commerce in the interests of the United States' continuing prosperity.

3. To defend the freedom and the liberty of all people suffering under tyranny and seeking relief from oppression.

B. Current.

1. Long Range.

a. To support the United Nations as a world organisation.

b. To provide technical and economic aid to underdeveloped countries of the world.

c. To convince world nations of the objectives and peaceful intentions of the United States.

d. To convince world nations that the democratic way of life is superior and a goal for which to strive.

e. To conduct a foreign policy which will minimise misunderstanding among friendly nations.

2. Short Range.

a. To support and strengthen the North Atlantic Treaty Organisation.

b. To honor the mutual assistance pacts in the Americas and the Pacific.

c. To provide economic and technical aid to nations as assistance in their struggle against communism.

d. To uphold the principles of meeting aggression with forceful defence such as had been applied in Korea.

f. To oppose and halt communist military and ideological advances throughout the world.

CHAPTER II

PRESENT USSR FOREIGN POLICY OBJECTIVES

As a prelude to integrating Soviet Foreign Policy Objectives, it is interesting to quote a conversation which John Scott reveals took place at a Berlin cocktail party shortly after World War II. A Soviet Major General, of previous acquaintance, took him aside from the general conversation and stated the following in opposition to the tenor of existing thought.

> Before the war, the world was a simple, forthright place. There was capitalism on one side and Communism on the other. The two were irreconcilably hostile . . . Then along came that maniac Hitler, with all those irrelevancies and all that nonsense. He got history completely mixed up. We Russians found ourselves fighting on the same side as the British imperialists, who should have been our enemies. Things got thoroughly confused. Now, fortunately, Hitler is dead, the Nazis have been defeated, and we can get back on a sound, solid historical foundation. You and we are enemies. We are going to prepare for a conflict which each will try to win. The position is clear and we could be honest men. Yet there are those stupid Lieutenant Colonels over there talking about cooperation. Aren't they silly? 1/

Statements such as this and the following made by Jurij Gudin-Levkovich when questioned by U.S. News and World Report offer interesting speculation.

> Yes, the goals of Communism never change. Communist dictatorship, first through Stalin and now through Khrushchev, strives to achieve world domination - - gradually, piecemeal. The methods did not change after Stalin, but Khrushchev is trying to put the free world to sleep with assurances of peaceful intentions. 2/

It would appear to the casual observer making a preliminary investigation into the intentions of the USSR, to indicate that World War III was about to take place within the next year or two. That Soviet military forces, advanced weapons and factory capacity, if the daily newspapers are to be completely believed, have reached such a state of readiness that Europe and America can expect an attack momentarily unless they can retaliate instantly or anticipate such aggression before it begins.

1/ J. Scott. Political Warfare, p. 47.

2/ Loc.cit., 16 December 1955., p. 54.

Such does not appear to be the actual case, but a thumb-nail review of the Communist Genesis and History will show that if the conditions are very favorable, the opportunists in the Kremlin could make such a situation come true. The best Western efforts are directed to ensuring that these conditions will never be allowed to exist.

When the Bolshevik form of government had its inception, Russia was in an extremely weak condition. It had been completely defeated by the Germans and its Czarist form of government overthrown primarily by its own sheer incompetance and degeneracy. The ascending government was socialistic in its concepts though its strength of character, if such can be applied to governments, was not precise or definitive in the course it choose to take. This government was deposed and supplanted by the Bolsheviks. All Allies, including the United States landed troops on Russian soil, supposedly to protect Allied war supplies previously given to Russia, but actually their purpose was to resist the growth of such a radical form of government and to give moral assistance to a more liberal form of government if such were strong enough to rise. These actions definitely tended to gain the animosity of the new Bolshevik government and implant the fear of foreign intervention. It was a government composed of an exceedingly small minority imposing its will over the entire country. The basic concepts of this new government were dedicated to the ideologies of world communism. It was quite a surprise to the leaders of this new government that their revolutionary movement had not been followed in other countries throughout the world.

The Soviet leaders, when they found that Russia was the only country of the world which had succumed to a Communist Revolution, were faced with the tumultuous and prodigious task of transforming a backward agrarian country and economy into an advanced communist society which would be a model for all of the supposedly hostile world to view. This had to be accomplished in a minimum of time. The inferred attitudes of

surrounding governments made it imperative that this new economy be as self-sufficient as possible and that external interference and intercourse be held to a minimum. There was everything to do at once and these leaders took the bold step of trying to accomplish just that, regardless of the cost in lives or effort. The magnitude of some of the tasks and the methods employed are reminiscent of the utter disregard for human effort and misery that was present in the building of the pyramids. Following Lenin's counsel, they used deceit and guile, molding their morality to fit the pattern of expediency. Industrialization and heavy industries were the latest to have made their appearance in the evolution of the Western World, consequently all effort was made to establish and develop these industries first. This was done without regard for the underlying consumer needs which had developed these industries. The imposition of this accelerated economy and industrialization produced results never possible in a free and balanced economy in such time.

Politically, the basic aims of world communism were continually advanced on a world-wide basis both overtly and covertly. Within the country the rough shod methods of a police state were eliminating opposition and imposing the will of the leaders. Diplomatically , then as now, their actions seemed to pattern those of a recalcitrant juvenile delinquent. Their antagonism toward other forms of government and their refusal to admit the existance of compatable forms of capitalism, coupled with their background of bargaining from an inferior position gives assurance that they will never engage in a real diplomacy of compromise.

The Soviet General quoted in the first part of this chapter appears to be very right in his statement that Hitler confused the order of things. This may not be true from the American point of view, but it is certainly justified when viewed in relation to stated communist objectives. That the Russians did as well in World War II as they did after their initial defeats, appears to have been as much of a surprise to the Soviet leaders as it was to the rest of the world. Their relatively greater demands and obstinancy discernable at conferences near the end

of the war reveal the growing self-confidence and increased horizons which the Soviet leaders could see within their grasp. The immediate post-war attitude of America characterized by a popular demand to get back to normal living and forget the war, leaving the pieces for diplomacy to pick up, played into the ambitions of the Soviet leaders. Foster Rhea Dulles describes this situation rather clearly.

> The very fact of predominant American power, as well as certain aspects of American postwar policy, may have accounted in part for what often seemed to be Soviet intransigence. For the United States not only had the atomic bomb, the world's greatest Navy, and a global ring of strategic air bases; in addition, its position in occupied Germany and occupied Japan carried its influence close to Russia's frontiers. Moreover such actions as the abrupt termination of lend-lease aid, and the casual ignoring of the Kremlin's request for a postwar reconstruction loan, were not in Soviet eyes convincing evidence of American good will. As a nation where fear and suspicion are endemic, it was not surprising that Russia should feel the need for loyal, friendly nations on her borders, and be determined to keep such nations under her influence, if not direct control. As time went on, however, what might originally have been a defensive position inspired by fear seemed to the Western World increasingly characterized by imperialist ambition. 3/

That the annexation of the buffer or communist bloc nations was not a long range objective is clearly evident by the mass dismanteling of factories and industries in these countries and removal to Russia as reparations; only to require replacement now that these countries have been integrated into the Soviet economy.

The Soviet leaders can be considered as opportunists in the conduct of their post-war imperialistic advances. Such was the case with Czechoslovakia and China. However Greece, Turkey and Korea were instances where external intervention caused disruption of the plans and helped unite the Free World effort against communist encroachment.

The fact that the Soviet leaders are notoriously insistant on molding the thinking, policies and personnel of other Communist controlled nations greatly increases the chances that there will be cleavages among Communist regimes especially there is a spacial separation as was the case with Yugoslavia. Where strong nationalistic

---

3/ Dulles, op. cit., p. 227.

groups are concerned, such as was present in the Baltic Nations, a complete program of transplanting the resident population to other Soviet areas and settling these Baltic areas with Russian Nationals is in progress in order to dilute any concerted racial opposition to the Kremlin and its leaders. 4/ Processes similar to these can be anticipated to take place among all of the nations in the present communist bloc in order to insure the security of the Soviet Union.

Twice in the twentieth century the Soviet Union has been invaded by Germany. An armed and aggressive Germany therefore presents a very real threat to the Soviet leaders. Of this Philip Mosely says:

> Soviet interests call for weakening and dividing the West, for splitting France from Germany, France from Britain, Britain from France and the United States. If all these objectives cannot be achieved, then the minimum Soviet aim remains to delay and, if possible, prevent the rearmament of Germany. 5/

Consequently it can be seen that the amount of diplomatic compromise necessary for the Free World to attain a united Germany may exceed that which the West is willing to pay.

In the readings preparatory to this discussion, a very revealing instance of Soviet compromise was illustrated by John Scott.

> Indeed, the very word compromise has a different meaning to Soviet leaders. Immediately after World War II, a mixed commission met in Trieste to determine the future status of that city. An argument developed as to the number of railroads going eastward from the city. The Russians said that there were three, the Americans claimed that was only one. This being a point of fact, the Americans sent up a plane. Photographs were taken, and when the film was developed and printed, there was one railroad as the Americans had asserted. The prints were shown to the Russians at the next meeting. They held a hasty huddle, then said: "All right. We will compromise with our Western Allies. Let us say that there are two railroads." 6/

By reviewing the published objectives of the USSR and analysing the actions which have transpired with the Bolshevik Government it is considered that the following are the primary foreign policy objectives of the Soviet Union.

4/ Scott, op. cit.

5/ P. E. Mosely, Russia After Stalin. p. 47.

6/ Scott, op. cit., p. 25.

Russian Foreign Policy Objectives.

1. To ensure the survival of the USSR as a Communist Nation.

   a. To build a Communist Nation capable of defending and supporting itself.

   b. To establish a Buffer state perimeter against external attack.

2. To foster the advancement of the Communist doctrine and ideologies throughout the world by political means.

3. To initiate, foster and encourage discord between countries of the free world.

4. To undermine the democratic and capitalistic forms of government by opportune means in order to provide a climate amenable to the advancement of the Communist ideologies.

5. To encourage and assist communist dominated governments and dictate their policies in accordance with the world Communist strategy.

6. To increase communist dominated territory by encouraging and sponsoring revolutionary actions at opportune times and places.

7. To thwart the reestablishment of Germany and Japan as militarily strong nations.

CHAPTER III

THE DYNAMICS OF RESOLUTION.

The prophecy of Alexis de Tocqueville, made in the mid-1830s, is being realised more than a century later.

> There are at present two great nations in the world, which started from different points, but seem to tend towards the same end. I allude to the Russians and the Americans . . .The principal interest of the (latter) is freedom; of the (former), servitude. Their starting point is different and their courses are not the same; yet each of them seems marked by the will of Heaven to sway the destinies of half the globe. 1/

This searching forecase is remarkable not only in the designation of the two countries but more so in the analysis of the basic fundamentals which were to guide each country in its rise to power. When these fundamentals are expanded and amplified to the extent of foreign policy objectives for each nation the chasm of divergent ideologies becomes more apparent. All Soviet objectives which have been deduced, except those strictly concerned with the security and defense of the USSR, are designed to oppose and subvert any form of government which is not communistic. They represent a philosophy which advances the theory of active concurrence or direct opposition. There is no middle ground, and if there is opposition it must be overcome by any means. The implementation of their policies is a one or two man decision. Of this John Scott says:

> In the Soviet Sphere, public opinion counts but little. The men in the Kremlin understand political warfare and are free to practice it unhampered by budget hearings, liberal publications, Congressional investigations and moral considerations. 2/

American objectives, except for the current short-range policies designed to combat Communism, are generally designed to insure a secure and prosperous America in a free, friendly and peaceful world. The current short-range objectives therefore are defensive in nature, however their complete exploitation is often hampered by National partisan

---

1/ Dulles, op. cit., p. 221

2/ Scott, op. cit., p. 11.

policies and cultural attributes. William Carleton has described these in the following manner.

> Americans possessed some cultural attributes which made American leadership difficult. For one thing Americans were in the habit of thinking of international relations in terms of law, contract, moral principles, ideal systems, cosmic creeds . . . their experience in world politics had been so restricted that usually they had thought of the latter in idealistic terms. European power politics was something peculiar to the blood feuds and perverted self-ishness of Europeans. 3/

Equally important in this existing contest for the minds of men of the world are the impressions created by governmental action and expressions of policy on such peoples. However, it must constantly be realised that the semantics of language are but a relatively minute exemplification of the much larger ramifications entailed in socio-logical and ideological background differences. Examples of this are daily apparent where one governments actions are interpreted in many divergent ways depending upon the local national background and interest. In discussing this phase, George Cressy makes a very pertinent point.

> It is clear that the Soviet Union desires to spread Marxist Communism. The United States also desires to spread democ-racy, but the methods are obviously different . . . look at comparative objectives through eyes of the more neutral countries of Asia. Many of these view American economic and cultural aid as thinly disguised imperialism, and point with alarm to our growing military bases abroad. Communism, on the other hand, makes a bid for ideological and spiritual leadership; it poses as the champion of nationalism and freedom. 4/

While on a divergent facet William Carleton says:

> The fact that foreigners did not fear the stationing of troops of the most potent nation in the world in their own or neighboring countries was a striking demonstration that for all its power and for all the criticism it had received the United States was still considered by most of its allies to be basically non-imperialist. 5/

To the Communist dominated countries of the world the stationing of American troops in free countries throughout the world is only of passing importance as their own countries are thoroughly saturated with Russian troops. However for the neutral countries of the world the

---

3/ Carleton, op. cit., p 22.

4/ G. Cressey, How Strong is Russia., p. 122.

5/ Carleton, op. cit., p. 93.

dominance that the United States exercises as a result of its tremendous economic and military power are not always conducive to complete confidence in America's ultimate aims and this uncertainty is incessantly accentuated by Soviet propaganda.

The possible courses of resolution which exist to solve this conflict of ideologies run from neighborly and cooperative existance to a general war of extermination. Though it is not likely that either of these extremes will be reached in the near future, they must be considered, as some mid-point exists between them which is likely to be the common ground for some years to come. Between these two extremes are two positions which might also be considered as they represent positions which we presently hold and have held. These might be considered as a state of co-existance with its moves, countermoves and stalemates; and another state or condition involving limited and local military actions to counter aggression and/or revolution. All of these conditions lead one to the other and can be considered as points on a scale. The expanse of the scale is not long and history has shown many times that nations can traverse its length from cooperative existance to war in the matter of a few years.

A consideration of the conditions necessary for each of these positions offers a means of better understanding their interrelation. To achieve a neighborly and cooperative existance the Soviets would have to renounce their effort to rule the world by force, intimidation, revolution and fraud. This in effect would take away the battle cry of the Soviet leaders and require leadership of the Soviet People rather than domination. It is not likely to happen. The United States in turn would forego those potentialities which are presently aimed at containing and retaliating against the Soviet threat. These also are not likely to be abandoned without absolute proof of intentions and fact.

The co-existance which is being experienced today is better measured by the relative degree of action and counteraction which is

transpiring at any particular time. The Free World is attempting to establish a stalemate in this dynamic situation while the Soviet Union appears to be directing its efforts in many directions. John Scott has said of the situation:

> The Kremlin knew what it wanted - - A Communist world - - and proposed to get it by whatever means seemed most expedient . . . While (they), with a chessman's skill, planned and executed the complex combined operations of the cold war, the West argued wordily whether or not the cold war was indeed necessary; . . . Or, as one wit put it, the Russians were playing chess while the West played bingo. 6/

Though this appears to be a harsh indictment of Western methods for reaching a compromise it contains enough of the elements of truth for sober reflection. However while continuing in this condition where diplomatic relations and conferences exist, the following by Leonard Shapiro offers excellent background and correlates with experience.

> The author's analysis, based on historical facts and documentary evidence, reveals with the utmost clarity the Bolshevik tactics and strategy were adopted at random in the beginning, but which subsequently turned out to be exceedingly successful. This policy consisted of coming to temporary agreements with opponents and showing exceptional flexibility in concluding all kinds of alliances, while never for a moment forgetting the final aims. As soon as the need for alliances had passed the Bolsheviks showed little regard for their former allies. They were quite cynical about this aspect of their policy. 7/

The stalemate with the world divided into two integrated spheres of influence appears to be the logical end result if this condition continues to run its entire course. However this seems highly improbable, as history has never been static. It will probably vacillate between the extremes of this condition with occasional entrance into the next condition to be discussed.

Such a condition entails limited and local military action to contain Communist aggression or revolution. Such was the case in Korea and such might be the case in the Near East. Though action was taken in the name of the United Nations in Korea, such would not be the case in any future conflict due to the veto power possessed by the

---

6/ Scott., op. cit., p. 19.

7/ L. Schapiro. The Origin of the Communist Autocracy. Bulletin of the Institute for the Study of the History and Culture of the USSR., Sept. 1955.

Soviet Union. However it is not inconceivable for the NATO nations to consider such aggression contrary to their interest and thereby take concerted action. Similar alliances throughout the world provide the United States with opportunities for taking concerted action. Situations such as this are potentially very dangerous and without extreme caution can expand into full intercontinental war. Secretary of State Dulles on 12 January 1954, in an effort to forestall any future conflicts such as Korea, announced that the National Security Council had decided to rely not upon local defenses in meeting aggression, but upon "a great capacity to retaliate instantly by means and at places of our own choosing". He amplified this later in a magazine article.

> The essential thing is that a potential aggressor should know in advance that he can and will be made to suffer for his aggression more than he can possibly gain by it. This calls for a system in which local defensive strength is reinforced by more mobile deterrent power. The method of doing so will vary according to the character of the various regions . . . Local defense is important. But in such areas the main reliance must be on the power of the free community to retaliate with great force by mobile means at places of its own choice. 8/

This announcement completely shocked the European Allies of the United States as it brought home the realization that unilateral action might be possible, the realisation of the small gap between local and general war and implied the use of nuclear weapons, possibly within their own territories.

General or intercontinental war to exterminate the conflicting ideology is well within the realm of reality. Without doubt any such confliet would entail the use of nuclear weapons at least in the tactical situations. However in any such war where busy factories and original scientists are so essential, the differential between strategic and tactical employment is purely a matter of definition. Hanson Baldwin quoting Paul Scott Mowrer in the New York Post of September 17, 1947., said of balance of power:

> . . . is the instinctive tendency of free nations to combine against that one or group among them that seems

---

8/ Foreign Affairs, XXXII (April 1954) 353-364, as quoted by Dulles, op. cit.

to be expanding so aggressively and exerting such domination as to endanger the liberties of all.

The balance of power has eventually defeated every would be world conqueror since Roman times. 9/

The Free World has in being such a balance of power prepared to defend itself against aggression if necessary.

It is apparent that local or general war is most conceivable within the next ten or fifteen years, unless extreme caution is exercised by both powers in the pursuit or adjudication of their objectives. With the existance of this strong possibility of war, the war potentials of each country should be examined. The spectrum of such a possible war runs from immediate all-out war to local conflicts which may persist for several years before expanding to a general conflagration. Therefore, the potential in being as well as that which can be developed must be examined. Broadly these potential catagories include: geography, population, natural resources, industrial capacity and military forces. There are many other catagories which could and should be included, however space and time limitations for this discussion preclude their inclusion.

9/ H. W. Baldwin. The Price of Power. p 308.

CHAPTER IV

GEOGRAPHY

SIZE

The Union of Soviet Socialist Republics is the largest country in the world, occupying nearly half the total area of Europe and the whole northern portion of Asia. It covers a total area of 8,708,900 square miles or approximately fifteen percent of the land area of the world. Approximately 2,500,000 square miles of this area are in Europe and 6,208,900 square miles are in Asia. This area includes the territorial aquisitions made in 1939 and 1940 and those territorial gains made as a result of World War II. 1/ It stretches 6000 miles from east to west and 1800 to 2800 miles from north to south. Except on the west the borders of the Soviet Union, for the most part, follow natural water or mountain barriers. 2/

The United States, on the other hand, comprises only a continental land area of 2,977,128 square miles. 3/ To this can be added the area of the dependencies of the United States which have become integrated into the continental economy. These would include Alaska, Hawaii, Puerto Rico and the Canal Zone which comprise an area of 596,912 square miles. 4/ The longest east-west distance across the United States is 2807 miles while the shortest is 2152 miles. The longest north-south distance is 1598 miles. 5/

POSITION

Figure 1. clearly indicates not only the comparative sizes of Russia and the United States, but also the relative latitudinal positions of these two countries with respect to the North Pole. The longitudinal

---

1/ The Lincoln Library of Essential Information. 1955. p. 785.

2/ The Encyclopedia Americana. 1948. Vol. 27. p 291.

3/ The Lincoln Library, op. cit. p.667.

4/ The Encyclopedia Americana, op. cit., p 305.

5/ The Lincoln Library, op. cit., p. 667.

Figure 1. Polar Projections of the Geographical Areas of the USSR and the United States superimposed to display relative Positions and Size.

placement of the two countries has been such that the largest proportion of land areas overlap and thereby afford the largest degree of comparison.

It is to be noted that a large portion of the Soviet area which lies south of the northern border of the United States is predominantly desert and arid land. The greatest portion of the USSR, and the most productive agriculturally and industrially, lies within a latitude comparable to that of Canada and Alaska.

The position which a country occupies relative to neighboring countries also is extremely important in determining its geographical advantage. The United States is bordered by only Canada and Mexico, both friendly to the United States. The Soviet Union is bordered by twelve nations; seven of which are dominated and controlled by the Soviets, three of which profess neutrality and two of which are members of NATO in an alliance against Communist aggression. It is apparent that the United States enjoys a decided advantage relative to the security from attack along its frontiers. On the other hand, the sheer size of

the Soviet Union makes complete conquest and control of this immense territory a tremendous undertaking which staggers most military planners.

TOPOGRAPHY

The surface of European Russia is a vast rolling plain which rises at the Ural Mountains on the east to an altitude of about 8,000 feet and, at Mount Elbrus in the Caucasus Range, to a mixiumm height of 18,465 feet. Almost the whole surface, however, is less than 600 feet above sea level. 6/ The Asiatic portion of Russia is composed of the large, low central area, generally less than 1,000 feet above sea level, surrounded by high mountains to the south and east and the sea to the north. Figure 2. shows the extent and relative placement of the areas discussed.

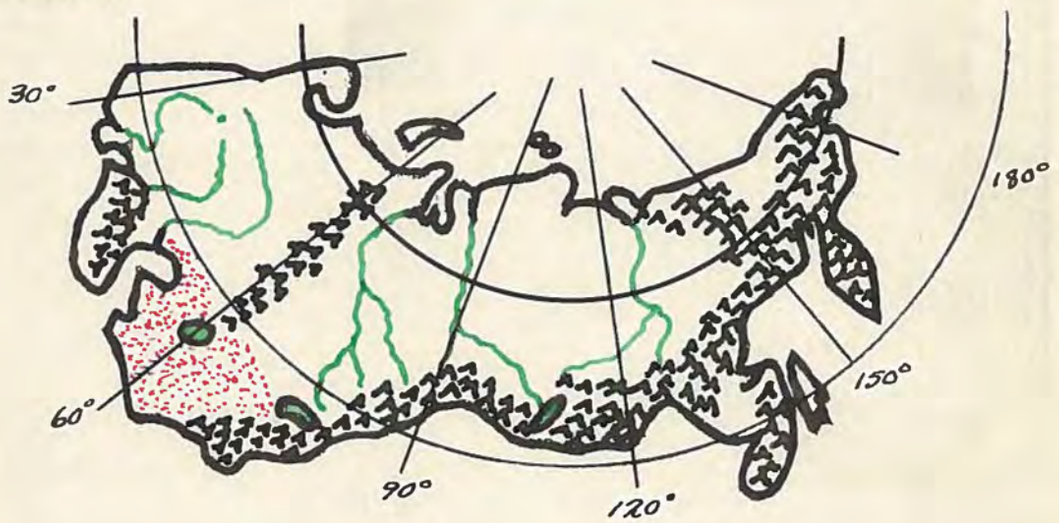

Figure 2. Primary Geographical Features of the USSR.

It is assumed that the topographic features of the United States are known in detail to the reader and therefore do not require recitation at this time to afford a comparison.

CLIMATE

The Soviet Union because of its size has all types of climate except tropical. About sixteen percent of the area experiences an Artic climate, 80 percent a temporate climate and only four percent a sub-tropical climate. For most of the country, winter with freezing temperatures, is

---

6/ The Lincoln Library, op. cit., p. 785.

the longest season. Most of the country is remote from a circulating sea or ocean and therefore does not experience a moderating climatic influence from this source. The Atlantic Ocean plays a slight part in European Russia's weather, however this is very localized by specific sections. The Pacific Ocean moderates the immediate East Coast weather but due to the mountainous terrain does not extend inland. The Artic Ocean is not cut off from inland areas by mountains and exerts a large and cold influence on the weather, especially the temperature, of the northern portion of the country. 7/

The United States is entirely within the temperate zone and the climatic conditions, in general, are those to be expected within the zone. However the topography of the eastern and western mountain ranges modifies specific area climates such that extremes well beyond the limits of the temperate zone are experienced as to hot and cold and rain and dryness. 8/

The relatively short growing period in the Soviet Union, i.e., 60 days in the Artic Siberia to 120-180 days in Central Europe and the Ukraine, coupled with a shortage of rainfall limit the area suitable for crop growing to only eight to ten percent of the entire country. 9/ The United States with its longer growing season and greater precipitation can grow a greater yield and variety from approximately the same cultivated acreage. 10/

The comparison of the geographic features of the USSR and the United States leads to the conclusion that though the USSR is appreciably larger than the United States; the United States possesses relative advantage in position, topography and climate.

7/ The Encyclopedia Americana, op. cit. p. 291c.

8/ Ibid. p. 308.

9/ G. B. Cressey, The Basis of Soviet Strength. p. 97

10/ John A Morrison, Geography of Russia, A lecture to Naval War College on 16 Oct. 1951. Reported in NWC, Information Service For Officers of March 1952.

CHAPTER V

POPULATION

The inhabitants of a nation are the basis for its strength or weakness, its progress or its backwardness. As a very basic premise, a nation is its population; the land mass and its resources are only important to the extent that they are developed and utilized by these people. The interactions of these peoples among themselves and their concerted actions toward other national groups of people determine the character of a nation and its objectives. To establish the relative strength of a nation, the characteristics of its people must be studied in detail as they are the means and the potential by which a nation develops and exploits its physical resources for defense against or domination over other peoples.

Size

The size of a population is not always proportional to national strength. In fact the two most populous nations of the world, China and India, have displayed little national strength primarily due to internal friction and lack of national direction. The next two nations in size of populous, Russia and the United States, on the other hand, have overcome the internal divergence and are now directing their efforts toward exerting their national influence over lesser nations.

In the year 1955 the population of the Soviet Union is estimated to be 214,500,000, 1/ while that of the United States is estimated to be 164,367,000. 2/ Figure 3. illustrates that the rates of growth for both populations are approximately equal. Famine, epedimics, wars and revolution have retarded the rate for Russia, however annexations of territory and their peoples have partially offset these losses to where the rate established since 1930 is considered to be close to the actual growth potential. The phenominal growth rate of the United States

---

1/ Information Please Almanac, 1956., New York Herald Tribune Edition. p. 656

2/ Ibid. p. 90

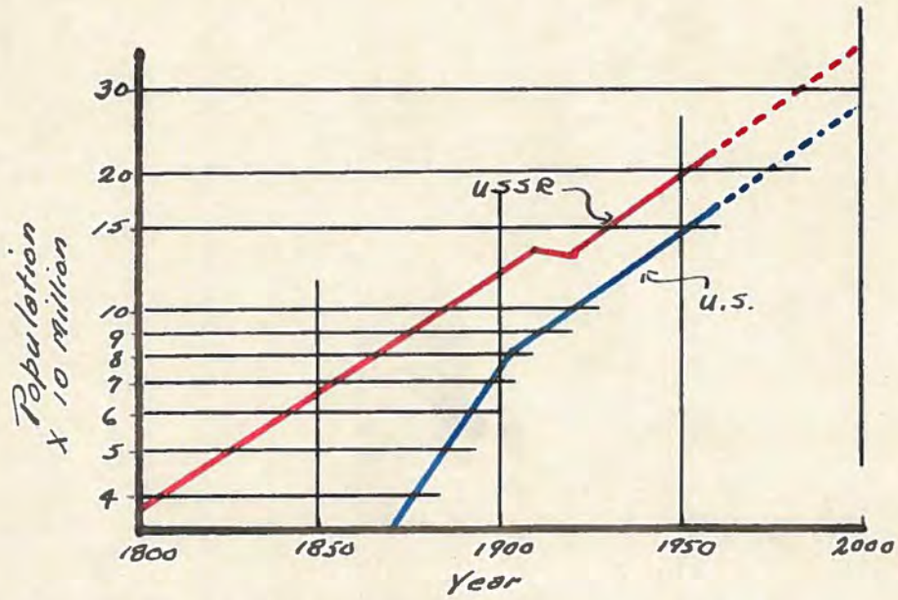

Figure 3. Population Growth for the US and USSR plotted on a logarithm ordinate to compare rate of growth. 3/

prior to 1910 is largely the result of migration, however since that time the rate has fluctuated within normal deviations of the rate shown and represents a true growth rate. These rates of growth add 3,600,000 persons to Russia each year and 2,720,000 persons to the United States.

GROUPS

The Soviet Union in its vast expanse contains over eleven ethnic groups which include more than 100 seperate peoples. A great deal of effort is needed to force the will of the Kremlin upon these many divergent groups. 4/ The attempts to disburse these geographical groups has been previously referred to with respect to the Baltic groups. Though facts are not available, it is apparent that these divergent groups will weaken any concerted and cooperative action which is attempted on a nation wide basis.

The United States similarly contains many ethnic elements, however these were recorded as gains by migration rather than conquest. Their assimilationdand integration into the general population has been gradual and group identity has been lost in favor of becoming Americans. This has been something which Americans brag about and state with pride that America is the "melting pot".

3/ W.S. Woytinsky and E.S. Woytinsky, World Population and Production, Trends and Outlook. p.44

4/ Trends in Economic Growth, by Reference Service of the Library of Congress, 83d Congress, 2d Session. p.75

POPULATION STRUCTURE

The age and sex distribution of a national population are important aspects in the economic and military potential of that country. It defines the percentages of a population which contribute to an effort, and that which must be supported. The mores of the national society will limit the percentage of those contributing during a peace time economy. In the United States most young men don't join the labor force until they are approximately eighteen, while most authorities place the figure at fifteen for the Soviet Union. The greater employment of female labor in the labor force, i.e., 54 percent in the Soviet Union against 33 percent in the United States is pertinent to the economy during time of peace. 5/ However, in a war of the magnitude which might be expected, the national mores will require complete revision to the extent that all persons who are physically capable must contribute to the effort. With this in mind total populations have been considered without regard for sex.

Approximately 73 percent of the total United States population was 15 years of age or older in 1950 6/, while about 66 percent of the Soviet population was 15 years of age or older in the same year. 7/ However, of the United States percentage, eight percent were over 65 years of age, and therefore can be partially discounted from this productive group. 8/ Similar figures are not available for the Soviet Union, but the impression gained from numerous readings indicates an estimate of from four to six percent. It can be surmised that a larger percentage of the United States total population was considered as productive in that year, however in specific numbers utilized the Soviet Union possessed the advantage due to its larger total population and its higher utilization of female labor. Projecting these figures ten years into the future, further places the United States at a disadvantage due to its higher age structure. The

5/ Ibid. p. 80

6/ Statistical Abstracts of the United States, 1953. U.S. Dept. of Commerce. p. 31

7/ Trends in Economic Growth. op. Cit. p.79.

8/ Statistical Abstracts of the United States. op. cit. p. 31

problem of senescence, which by percentage of population has doubled in the United States since 1900, appears to be more critical in the United States. Figure 4., by using slightly different age groupings, shows the significance of this problem when compared with the previous population structure figures which were given.

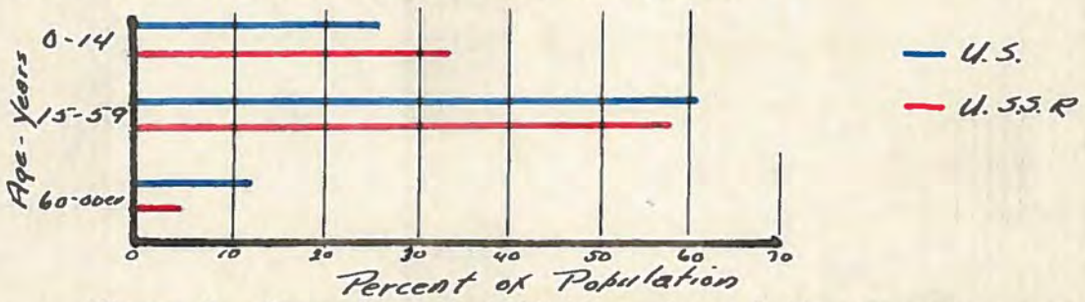

Figure 4. Percentage distribution of population by age groups for the United States and the USSR for 1950.
US Statistics 9/ USSR Statistics 10/

EDUCATION

The level to which a population has received formal education is indicative of its sociological advancement. For only by building upon an accumulation of knowledge and techniques previously gained and recorded has man been able to exploit and develop the world resources which surround him. The nation with the highest degree of education therefore has the probability of developing its existing potential to the greatest degree.

The Bolshevik government evidently realized this fact very early and has made tremendous strides in educating an almost illiterate population which they inherited. At present the educational system of Russia comprises the following types of schools: elementary schools, secondary schools, colleges, technical schools, workers schools and apprentice schools. Education is a state monopoly. Compulsory education extends from the age of seven to fifteen, but is enforced only for ages seven or eight to twelve. 11/ However in 1953 Russia was estimated to have 887 colleges and institutions of higher learning with an enrollment of

---

9/ Loc. Cit.

10/ Trends in Economic Growth. op. cit. p.328.

11/ Lincoln Library. op. cit., p. 1662.

1,400,000 students. Literacy was estimated at over 90 percent in 1950. 12/

The United States as a government supports education financially, however the actual control is exercised by the individual states. Compulsory education is enforced by all states from the ages of seven to sixteen, with some states requiring education to eighteen years of age. Education beyond these ages is voluntary. The United States has 1851 institutions of higher learning, public and private, with an enrollment in 1954 of 2,715,000 students. 13/ It has been estimated that in 1950 there were 9,600,000 illiterate persons in the United States, or about six percent of the population. 14/ The criterion used was less than five years of elementary school, while the Russian criterion has been inferred to be merely the ability to read or write.

The granting of Engineering and Advanced Science degrees has assumed special significance in this present age of technology. Figure 5.

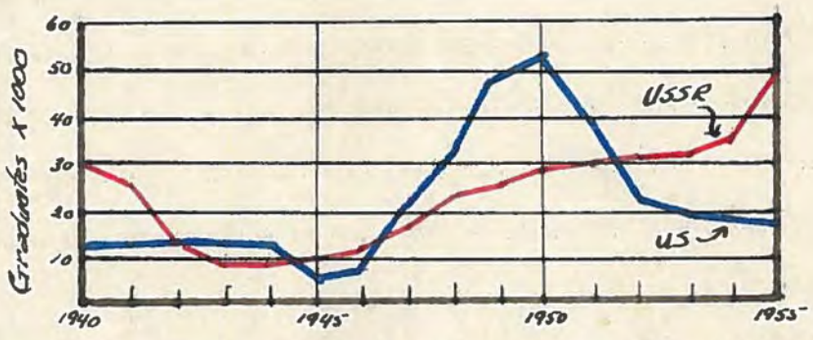

Figure 5. Number of Engineering Degrees US and USSR 1940-1955. 15/

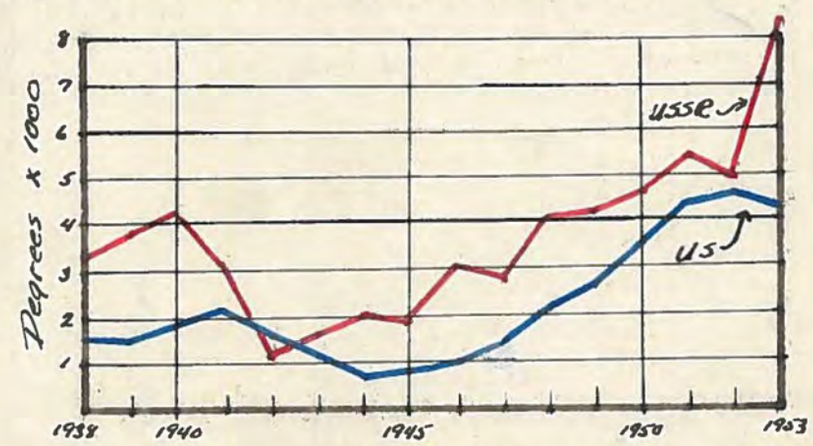

Figure 6. Number of Advanced Science Degrees, 1938-1953. 16/

12/ Information Please Almanac. op. cit. p. 659
13/ Ibid. p. 132.
14/ J. Fredric Dewhurst, America's Needs and Resources - - A New Survey, 1955. p. 397.
15/ New York Journal American, Jan. 1, 1956, Sec C. p. 25.
16/ Loc. cit.

and Figure 6. present the comparative quantitative figures for the United States and the USSR. Qualitatively there are no measures available for comparison and therefore these numbers may be misleading, as the Soviet State dictates who will undertake and complete such curricula. As selection of higher education and curricula is voluntary in the United States, and related with the ability to finance such education, the control of these graduating numbers is purely a supply and demand resultant of current economic conditions. It behooves the United States to encourage such curricula and provide financial aid for qualified students in order to maintain its present technological advantage.

DISTRIBUTION BY OCCUPATION

TABLE 1. Comparison of the size and distribution, by percentage of the labor force of the United States and the USSR for the year 1952.

Type Employment	U.S. 17/	USSR. 18/
Size of Force (Number)	66,426,000	108,500,000
Agriculture	11.6	55.0
Mining and Manufacture	35.1	24.8
Government, commerce, education, services and trade.	49.0	10.7
Forced Labor	---	3.6
Armed Forces and Misc.	4.3	5.9
	100	100

Table 1. clearly indicates the preponderance of effort which the Soviet Government must spend in the field of agriculture. Much of this however may be the choice of the people themselves resisting the advancements that are being forced upon them. The United States has the largest single segment of its population engaged in commerce, education, services and trade. The comprable Soviet figures are mainly employment in the government.

In discussing labor force groups within each economy the place and

17/ Statistical Abstract of the U.S. op cit. pp. 179-215.

18/ Trends in Economic Growth, op. cit. p. 82.

and objectives of labor unions should be considered. The place and objectives of such unions in the United States is a matter of much controversy today, however there are few who will deny the valuable contribution which they have made to the status and welfare of the laboring man in the past fifty years in accordance with their stated goals. Soviet labor unions, on the other hand, have different objectives and in effect are agencies of the state. Their purpose is to organize competition amongst workers in order to:

a. Achieve maximum increase in productivity to fulfill state plans,

b. Insure constant progress,

c. Achieve higher quality and lower costs,

d. Insure complete utilization of all resources. 19/

In this again is shown the superior needs of the state over those of the individual and the machine which helps to attain them.

STANDARD OF LIVING

Comparisons of relative standards of living are exceedingly difficult. There are so many intangibles which are a part of the tradition and the history of each ethenic group and which pattern the way of life and material desires of a people. Many of the luxuries considered necessary in the United States would offer no attraction for the native of Siberia. Therefore, for any comparison the basic essentials of life, i.e., food, clothing, and shelter and their relative per capita consumption, must be considered.

Table 2. substantiates the concept that the average Russian subsists mainly on a diet of bread and other grain foods and has but one suit of clothes. Each of the last three Five-year Plans has stressed an increase in consumer goods, however current newspaper and magazine articles concerning the subject infer that the general Soviet population is little better off than it was in pre-war days although considerable emphasis is placed on the "Window Dressing" displayed in localities such as Moscow and other large cities for local and foreign consumption.

19/ G. C. Guins., Bulletin of the Institute for the Study of the History and Culture of the USSR. Oct. 1955. p 3.

TABLE 2. Average per Capita Consumption of Various Items in Metric Pounds during Years 1934-1938. 20/

Item.	North America	U.S.	USSR
Bread grains	369.3		716.0
Potatoes	192.9		787.9
Coarse grains	1238.1		391.3
Meat	140.6		41.0
Milk	912.5		333.8
Tabacco		6.3	2.5
Cotton		20.0	8.2
Wool		5555	1.0
Rubber		7.7	0.4
Coal		6150.0	1205.0
Oil, gas		5125.0	465.0

Though the figures on this representative table are over twenty years old, where comparisons have been made or inferred in current publications they tend to confirm the approximate ratios which are presented.

The inadequacy of housing in the Soviet Union has been publicly admitted by the Kremlin. Czarnowski /21 in his analysis presents a rather prejudiced picture, however his allocation of about 34 square feet of housing to each urban dweller is very sobering. In correcting this situation the Soviets report they have built 2,152,780,000 square feet of new urban residences and 4,500,000 country houses since the end of the war. 22/ Though these numbers seem large, in the same period the United States has constructed 10,488,000 houses. 23/,24/. If this figure is multiplied by 1000 square feet, as an average for an American house, the United States has added ten billion square feet for a smaller gross population and still has what this society considers a housing shortage.

The health and safe of the people of a nation is vital to its existance and continuing prosperity. The Soviet desire for technical knowledge achieved a ratio of 7.6 doctors per 10,000 population in 1940. The United States at that time possessed a ratio of 12.9 per 10,000 population. 25/ The increase in scientific degrees fostered by Russia

---

20/ Woytinsky, op. cit. pp. 288,294,299.
21/ F. B. Czarnowski, Can Russia Survive. p. 62.
22/ New York Times, January 4, 1958., Sec. C., p. 49.
23/ Statistical Abstract of U.S., op. cit. p775.
24/ Information Please Almanac, 1956. op. cit. p. 715.
25/ Woytinsky, op. cit. p. 229.

has no doubt raised this ratio close to that of the United States.

GOVERNMENT IDEOLOGY

The Soviet Government is not a government of the people or for the people. It has raised an abstraction, The State, to a position of dominance, however in actuality this dominance is for the benefit of the few possessing power. The people are rigidly controlled and directed by a state police. They have without doubt become conditioned to such treatment and posses a quasi-loyalty to such a state. This loyalty will be strong in defense of the homeland and immediately adjacent areas as the conditioning and strong supervision will persist. However, if Soviet military power is projected long distances from Russia or over water barriers which will provide psychological barriers and cleavages, it is believed this loyalty and conditioning will diminish to such an extent that control will be seriously impaired.

The United States, on the other hand, has adequately displayed that under its form of government it can station and maintain troops for combat or security throughout the world.

In the most important field of propaganda and information however, the Soviet Union outspends the United States by roughly ten to one and comparatively the U.S. ranks seventh among nations engaged in international radio propaganda broadcasting. 26/ The American is unfortunately addicted to the belief that right will always conquer might and consequently sublimates the thoughts of advertising his good points and accomplishments on an international scale. The emphasis on national internal education can also be increased with the distinct possibility of avoiding ignorance as was displayed by Senator George W. Malone of Nevada while recently in Moscow. After nine days in Russia he decided the Soviet people were not going to rise up against their rulers, and therefore "the propaganda disseminated by the Voice of America and other United States agencies designed to increase dissatisfaction and promote resistance to the Soviet rulers is pointless and wasteful." 27/ The industries of the United

---

26/ Scott, op. cit. p. 21.
27/ New York Times, September 8, 1955. Sec. A., p. 28.

States spend approximately eight billion dollars annually advertising various products for consumption by the American public. Consequently this art of selling by advertising has become highly refined in America. Application of this art to the vital national problem at hand of selling democracy and its advantages is definitely indicated.

> For a nation that prides itself on being able to sell refrigerators to Eskimos and cigarettes to people with sore throats, Americans are not selling the basic principles of democracy to the world. 28/

28/ Scott, op. cit. p. 126.

CHAPTER VI

NATURAL RESOURCES

The natural resources of a primitive community were its environment; the land, forest, the river and the ocean, all of which supplied the necessities such as food, shelter, clothing, firewood, weapons and tools. Most natural and economic resources as we know them today are either man-made or have acquired value because man has developed devices that permit him to use them. Coal and oil have been in the ground for ages, but only recently have they become economically useful. Waterfalls and rapids were only obstacles to navigation until man built machines that can use their energy. Many ores were valueless rocks until man learned how to convert them into metals. Molybdenum and uranium ores would have been of little value except for recent progress in metallurgy and physics. Other forms of resources and energy will be discovered to replace those which stand a chance of depletion today.

In this discussion of the potentials of two nations comparison of the primary material resources with which a modern war is pursued will be made. These appear to be agricultural, mineral and energy resources. The primary interest is directed toward two phases of these resources; the possession and the extent to which these resources have been developed. For agricultural resources, energy resources, and iron of the mineral resources, it is important to know the potential for expansion or reserves which each nation possesses, as these will require immediate expansion and increased consumption with the advent of war. Reserves of other minerals will generally be stockpiled if there is a deficient supply within the nation, or that nation will insure that the lines of supply have a reasonable chance of not being disrupted during such a war.

AGRICULTURAL RESOURCES

The primary agricultural resource of a nation is its arable land. The USSR is credited by most authorities with having about 556 million

acres and the United States with approximately 455 million acres. 1/ Climatic conditions, such as length of the growing season and rainfall constitute a vital consideration in the efficient utilisation of such acreage. The Soviet Union, as previously discussed, does not enjoy a favorable position with respect to agricultural climate. Its arable area in recent years has proved to be insufficient for the adequate support of the Soviet population and efforts in recent five-year plans have been exerted toward irrigating and conditioning additional land for cultivation. Figure 7., illustrates the major area of the Soviet

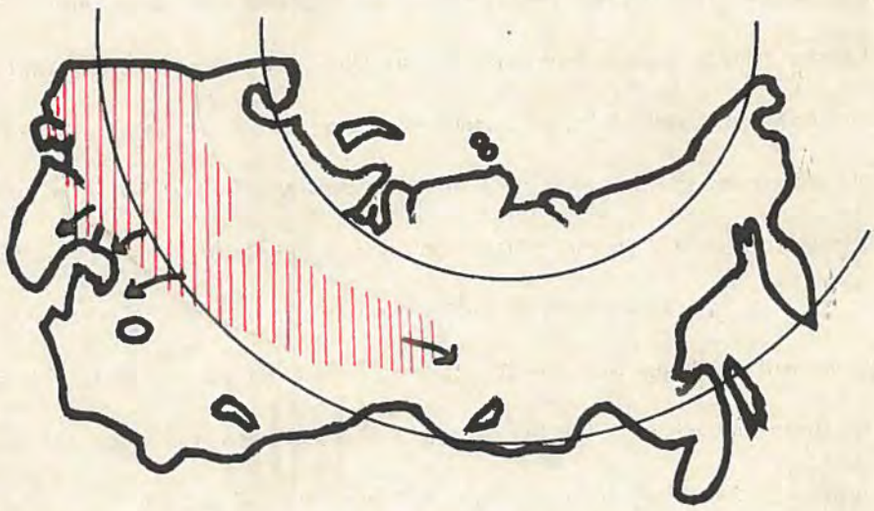

Figure 7. Primary Agricultural Area of the Soviet Union and General Areas Where Agricultural Expansion is Being Attempted.

Union which is devoted to agriculture and the areas in which expansion is being attempted. New extensive multiple purpose projects were announced in 1950 to irrigate the acid and semiacid land in the south and southeast and use such water to generate power and improve the climate. Cotton and wheat will be the crops to be planted in the Crimea and southern Ukraine when the irrigation projects are completed.

The yield per acre of land under cultivation can be used as an index of the agricultural productivity of the area and the efficiency of the workers. Table 5., offers such a comparison and emphasizes the advantage which the United States possesses in this area. Flax and hemp

---

1/ Trends in Economic Growth, op. cit. p 27

Table 8. Comparison of Yield per Acre of Selected Commodities for the US and USSR in metric quintals, 1950, 2/

Commodity	U.S.	USSR
Grain in general	4.6	2.8
Corn	9.5	4.2
Sugar Beets	13.2	5.4

play a large part in the Soviet economy and many authorities have reported that a considerable increase in the allocation of acreage has been made to these industrial commodities. The Soviets have lagged behind other European countries in the use of fertilizers, 3/ which may in part account for their relative production. Pictures of Soviet agriculture in action which are released for foreign consumption, generally show large combines and tractors at work. However, in 1951 the United States had one tractor for every 119 acres while the USSR had only one tractor for every 998 acres. 4/ This situation is further clarified in the following quotation.

> Use of combines is largely dictated by the advantage of controlling the harvest and preventing concealment or theft of grain, rather than for economic reasons. The concentration of mechanical farm equipment in its hands provides the government with a powerful control of all farm operations. 5/

The collective and state farm systems of the Soviet Union are considered to be the weakest point in their economy. Many writers on this subject have reported the peasant resistance to this organization and of the low collective effort and inefficient operation which results in at least a twenty percent loss of harvest. 6/ This is further agrivated by the harsh jail sentences which are being imposed for non-fulfillment of delivery quotas and the low morale caused thereby. 7/

The Soviet Union possesses a tremendous advantage over the United States in the amount of forest areas within its boundries. The United

2/ Woytinsky, op. cit. pp. 546, 558, 570.

3/ Trends in Economic Growth. op cit. p. 118.

4/ Woytinsky, op. cit. p. 998.

5/ Ibid, p. 552.

6/ Bulletin of the Institute for the Study of the History and Culture of the USSR. October 1955. p. 23.

7/ News from Behind the Iron Curtain, December 1955., p. 1.

States is estimated to posses 624 million acres of forests, while the Soviet Union possesses approximately 2,275 million acres. 8/ The pulp and paper industries of the United States are at present feeling this relative shortage and have just recently found that forests must be treated as crops and not mines.

MINERAL RESOURCES

TABLE 4. Comparison of the self-sufficiency of the US and the USSR in Major Minerals. 9/

Mineral	US	USSR	Code
Antimony	C	C	
Asbestos	D	A	
Bauxite	C	C	A Minerals available for export.
Chromite	C	B	
Coal	B	A	
Copper	A	C	
Industrial Diamonds	D	D	B Minerals adequate to meet domestic demands.
Graphite	C	B	
Iron Ore	A	B	
Lead	B	C	
Magnesite	B	A	C Inadequate to meet domestic demand, or so located or of grade and cost as to require import.
Manganese	D	A	
Mercury	C	C	
Mica	D	D	
Nickel	D	D	
Nitrate	D	D	
Petroleum	A	A	D Depends almost entirely on import.
Phosphates	A	B	
Platinum	D	A	
Potash	B	B	
Quartz Crystal	D	D	
Sulfur	A	D	
Tin	D	D	
Tungsten	C	D	
Vanadium	B	D	
Zinc	B	B	

Table 4., if studied, in a very short space gives a very complete analysis of the relative possession and self-sufficiency of each nation with respect to the minerals which are used in appreciable quantities by industrial nations. It also dispels the myth relative to the Soviet self-sufficiency with respect to minerals.

The extent to which the mineral resources of each country are exploited are related to the industrial capacity and the products which that nation can produce. Inefficient or uneconomical recovery methods

8/ Information Please Almanac, 1956., p. 707.

9/ Weytinsky, op. cit., p. 333.

will retard industrial growth and production. Known Soviet methods have been derived from the West, however the efficiency of their utilization is unknown.

TABLE 5. Comparison of the annual post-war ø or year, as indicated, production of various minerals for the US and USSR. 10/*11/

Mineral	Unit	US	USSR	Year
Aluminum *	Thousand metric tons	1,596	575	1954
Bauxite *	" " "	1,608	1,000	1953
Asbestos	" " "	47	158	
Chromite *	" " "	53.4	600	1953
Coal *	Millions " "	378.6	320	1954
Copper *	Thousand " "	876.6	338.4	1954
Iron Ore *	Million " "	79.2	55	1954
Lead *	Thousand " "	500.4	270	1954
Manganese	" " "	95	2,000	
Phosphates	" " "	11,273	2,500	
Zinc *	" " "	909.4	200	1954
Tungsten	Metric Tons	5,693	7,500	

ø, average

In the preparation of Table 5., it was noted that comparison of recent figures with those of pre-war vintage showed considerable divergence, indicating that both the production of the United States and the Soviet Union had materially increased, however, those figures for the Soviet Union increased at a rate of approximately four percent greater than those of the United States. Comparisons of the gross product as presented in the table, show that a percentage rise for the United States greatly exceeds in actual volume a larger percentage rise in the Soviet Union.

Due to its vital position in the production of steel and its relation to all other industries, it is essential that the estimated reserves of iron ore within each country be considered. As of 1950 it was estimated that the United States had 70,880 million metric tons with a probable 36 percent iron content while the Soviet Union only had 10,862 million metric tons with a probable iron content of 40 percent. 12/

ENERGY RESOURCES

While coal no longer holds the almost exclusive position it had in

---

10/ Trends in Economic Growth, op. cit., p 132.

11/ Information Please Almanac, 1956., pp. 706,707.

12/ Woytinsky, op. cit., p. 783.

the nineteenth century as a source of heat and power, and now must meet four competitors; oil, gas, electricity and atomic, it remains the most important source of energy in the world. Today it provides about 40 percent of the energy used in the United States, but in 1920 it provided approximately 75 percent of the energy used.

TABLE 6. Comparison of the production and estimated reserves of Energy Resources of the US and USSR as indicated by year. 12/, *13/, @14/.

Resource	Production	Unit	Year	Reserve	Unit
Coal, Anthracite and Bituminous					
US	416.1*	MST	1954	2,880	BMT
USSR	346.0*	MST	1954	1,200	BMT
Coal, Bituminous					
US			1950	1,281	BMT
USSR			1950	1,352	BMT
Oil, Crude					
US	5,681	MB/D	1950	26,218	MB
USSR	721	MB/D	1950	5,570	MB
Natural Gas					
US	94,664*	MT	1954	194	TCF
USSR	insig.		1954	34.8	TCF
Electric Power					
US	513@	BKW	1953	(18% potential being used)	
USSR	133@	BKW	1953	(using considerably less)	

MST Million Short Tons
MB/D Million Bbls per day
MT Million Therms
BKW Billion Kilowatts
BMT Billion Metric Tons
MB Million Bbls
TCF Trillion Cubic Feet.

There is much conflicting information concerning the coal reserves possessed by the Soviet Union. However, of the bituminous coal reserves it is fairly definitely established that less than ten percent of the total reported lies in European Russia and the remainder is at best a guess as little exploration has been conducted in Asian Russia.

The extent of uranium deposits within either country is not known. The United States is known to import uranium from the Belgian Congo and Canada to supplement its domestic supply. Of Russian deposits Scott has the following to say.

12/ Woytinsky, op. cit., pp. 855-953.

13/ Information Please Almanac, 1956., p. 706-715.

14/ Trends in Economic Growth, op. cit., p. 43.

One of the biggest deposits is in the Kirghiz Soviet Republic, not far from the frontiers of Western China, at a place called Tyuya Muyum. Cleaned ores from this deposit reported 65 to 80 percent U-308 by weight, while poorer ores run approximately 50 percent. (in 1951 the U.S. Atomic Energy Commission required only 20 percent U-308 by weight for candidates for a $10,000 Uranium Award on domestic ores.) 15/

In general it is apparent that the United States by its geographical location possesses a greater abundance of known natural resources and has in being the technique and facilities to utilize these resources at a considerably more efficient and higher rate than the Soviet Union.

Table 7., was noted in the readings and is presented at this time to forcefully indicate the extremely high rate of consumption of resources by the United States.

TABLE 7. Minerals: Probable length of life, in years, of known reserves, under specified rates of Consumption. 16/

Minerals	In all countries as in 1947-48.	In all countries as in the United States in 1948.	At present European rate for all countries, US at present rate, USSR excluded.
Petroleum			
Proved	22	2.5	20
Ultimate	160	18.0	150
Coal	2,200	340.0	985
Iron Ore			
Actual	200	25.0	66
Potential	625	74.0	200
Manganese	250	50.0	140
Chromite	47	8.0	40
Tungsten	125	34.0	-
Copper	45	5.0	20
Lead	33	4.0	11
Zinc	39	6.0	18
Tin	38	6.0	17
Bauxite	200	31.0	165

15/ Scott., op. cit., p. 164.

16/ Woytinsky, op. cit., p. 329.

CHAPTER VII

INDUSTRIAL CAPACITY

The industrial capacity, in a broad sense, includes the capacity of all the activities involved in transforming raw materials into commodities for direct consumption or further processing. In a limited sense, it includes the mills which convert and refine the raw materials to an intermediate product, the manufacturing industries which process raw or intermediate material to a finished product, the transportation which carries these materials and others, and those trades and services which are essential to the accomplishment of the above.

NATIONAL PRODUCT

Attempts are continually being made by the economists and the statisticians to equate the industrial functions of various countries having from parallel to dichotomous economies in the hope that they can provide comparisons on a common basis. The Soviet Union has not cooperated with these comparative ventures and generally releases figures which are misleading or designed for internal consumption and therefore adhere to the current five-year plan. From these Soviet figures some interesting myths and half-truths have become firmly established in the popular mind. Mr. George F Kennan, former United States Ambassador to the Soviet Union, said he had little confidence in any Soviet statistics of economic growth based on the alleged value of output in terms of a system of artificial prices. He would prefer a comparison based on direct output, but only if these figures took into account the human cost. 1/

Though Table 8., of itself does not disclose any startling information, a close scrutiny does reveal that though the Soviet National Product has increased at a relatively greater rate than that of the United States, the product has not gone to the private individual for consumption, but rather to the government and capital investment. Of the Soviet private individual's consumption, Scott says:

1/ New York Times, September 14, 1955., Sec A, p. 5.

They don't consume. They manufacture almost no passenger automobiles, skyscrapers, television sets, deep-freeze units, reinforced concrete highways, juke boxes and electric irons -- items which absorb nearly one-third of America's steel. The Russian worker walks to work, has one suit of clothes, eats bread, cabbage and kasha, and saves kopeks for that shining bicycle he hopes to get next year. But he produces nearly as much as his well fed American cousin. Indeed, having neither effective trade unions nor benevolent employers to look out for his interests, he frequently works longer hours, under speed-up pressures, and turns out more. Millions of Soviet slave laborers work themselves to death every year in huge construction projects while consuming almost nothing. 2/

TABLE 8. Comparison of the National Accounts of the US and USSR, 1952-1953 or as indicated. 3/

Item	Unit	US	USSR
Gross National Product	Billion US $	385	110
Growth National Product (1948-1953)	Percent	27	43
Change in per capita consumption (1938-1953)	Percent	+ 45	+ 8
Origin of National Income			
Agriculture	Percent	7	23
Industry	Percent	41	46
Services	Percent	52	31
End Use of National Product			
Private consumption	Percent	63	47
Government consumption	Percent	20	27
Gross investment	Percent	17	26
Food as percent of total private expenditure		27	+ 50

INDUSTRY

In the comparison of any industry or group of industries of the United States and the USSR the underlying demand for such industries must be borne in mind. In a free economy, such as the United States, the growth of any industry is regulated by consumer demand for that product at a reasonable price. If in 1920, the demand for steel had been what it is today, it is almost certain that the industry would have reached its present size by 1930. Conversely, American railroads have decreased trackage since 1920 because the existing lines have been sufficient to handle the demand. In a controlled economy, such as the Soviet Union, the growth of individual industries is regulated by the state with little

2/ Scott, op. cit., p. 21.

3/ Trends in Economic Growth., op. cit. p. 16.

regard for individual consumer demands. In this way, its economy can be directed to give emphasis to such industries as the state considers necessary. In 1954 the Soviet Union devoted 74 percent of its effort to basic "heavy" industry. 4/ These include pig iron, steel, petroleum, coal and electricity and such capital good for expanding these industries. As these in turn are the basic means and requirement for building and supporting a war machine, their comparative extent and development in each country is indicative of war potential.

In this modern world steel has become the touchstone of industry. Nothing is produced without steel and it is therefore indicative of the industrialization of an economy.

TABLE 9. Comparison of Pig Iron and Steel Production of the US and USSR for the year 1950, in Million of Metric Tons. 5/

Commodity	US	USSR
Pig Iron	60	19.4
Steel	87.6	27.3
Finished Steel Products	67.9	20.8

In accumulating figures for this section it was noted that the United States produced 117 million tons of steel in 1955 with furnaces operating at 93 percent of capacity. 6/ In a similar article it was noted that the Soviet Union produced 45 million tons of steel,7/ however, this figure and others quoted in the article coincided exactly with the heavy industry production figures which were previously published as the goal of the Fifth Five-year Plan. The United States possesses a substantial advantage in the production of iron and steel and this advantage is not in danger of being surpassed in the near future. Soviet increases, though great and planned at an accelerated rate, are encountering difficulties due to the locations of high grade iron ore and bituminous coal. Figure 8., illustrates this geographic difficulty. "The most recently developed center of iron and steel, the Kusnetsk Basin, consists of two

4/ Encyclopedia Americana, 1955 Supplement, p. 752.

5/ Woytinsky, op. cit. pps. 1117,1118, 1127.

6/ New York Times, January 11, 1956, Sec. C., p. 44.

7/ Ibid, January 4, 1956. Sec. C., p. 49.

great combines -- Magnitogorsk in the Urals and Kuznetsk in Siberia, 1400 miles apart. Iron ore is shipped from the Urals to Siberia and the returning trains carry coal to the Magnitogorsk mills." 8/

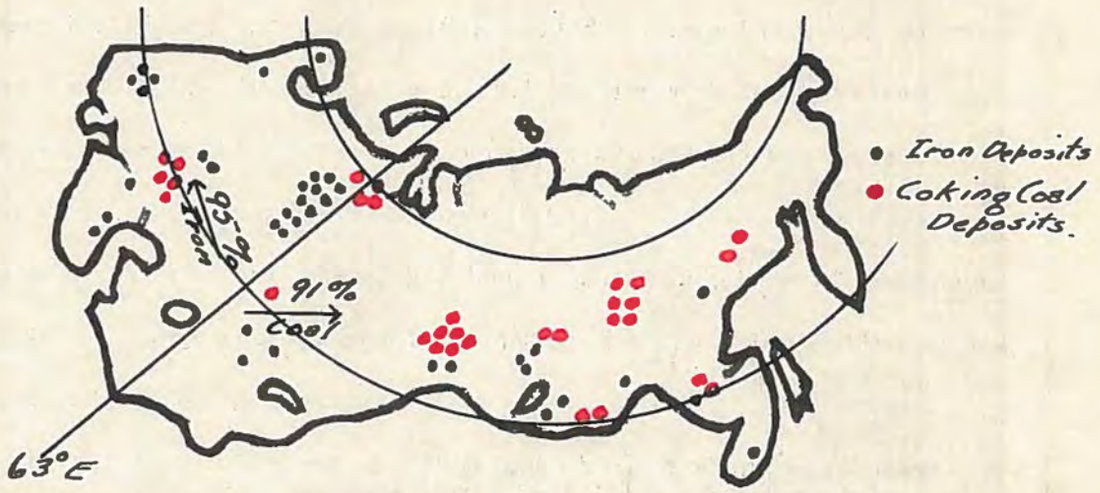

FIGURE 8. Geographical distribution of Coal and Iron Reserves of the USSR. 9/

The relative outputs of petroleum, coal and electricity have been covered in conjunction with other natural resources. Both nations have large current and future needs for petroleum and electricity and will therefore continue to develop these industries as rapidly as possible where it is economically feasible. The advantage which the United States possesses will not be overcome in the near future. The demand for coal in the United States is not diminishing but has in general become stabilized. The Soviet Union, on the other hand, has great need for coal and if developed according to the Sixth Five-year Plan, will surpass the United States production in 1957.

In most manufactured items where comparisons of production have been possible by cross reference, it has been possible to determine that the United States outproduces the Soviet Union by a ratio of anywhere a little more than one to one, to five to one, and this does not correct for quality of production. However, Scott reports that the Soviet Union is producing between 50,000 and 60,000 planes per year with a potential for 80,000 per year. 10/ In 1944 the United States produced 96,318, but

8/ Woytinsky, op. cit. p. 1111.

9/ Morrison, op. cit. p. 39.

10/ Scott, op. cit. p. 21.

in 1952 this had dropped to 3,500 planes per year. 11/ Present production is not known, but as plant facilities are still available the potential is very great.

In the Second World War the United States had four years in which to expand its industrial capacity to the size needed to win the war. Within these four years it had doubled its output in dollar value and in physical volume had increased its output by 50 percent. 12/ Though a figure is not available in the literature, it has been deduced from the various readings that the civilian economy was only displaced by approximately twenty percent in order to achieve this volume of war production. In any war of the future it is not considered that a nation will have this period to mobilize its industrial capacity. Therefore a nation must concentrate on economic readiness rather than economic mobilization. Those products which are in being and for which there is a production line in operation will be the implements with which such a war will be fought. With this in mind, it is considered that the productive advantage which the United States possesses is partially offset by the rumored high military production currently being carried on by the Soviet Government.

TRANSPORTATION

TABLE 10. Comparison of percentage division of freight ton-miles by carrier for the US and USSR, 1953-54. 13/, 14/

Carrier	US	USSR
Railroads	51.46	84.5
Rivers and waterways	13.7	6.4
Sea	?	5.1
Truck	19.25	3.1
Pipeline	15.55	.9
Air Carrier	.04	-.1

The Soviet Union with its vast expanse of area and its wide distribution of resources is critically dependent upon transportation to support its economy. Table 10. indicates the Soviet dependence upon

11/ Statistical Abstracts of the U.S. 1953., p. 566

12/ Dewhurst, op. cit. p. 5.

13/ Information Please Almanac, 1956. p. 723

14/ Soviet Transportation Problems, Holland Hunter, A Lecture to the Naval War College, October 14, 1955.

railroad transportation against the multiple means used by the United States. Soviet railway mileage was estimated in 1955 as 72,000 miles, of which about a third was double tracked. 15/ Most of this rail system is concentrated in the European part of Russia. The United States, on the other hand, had 223,779 miles of railroad in operation in 1950. The length of railroad mileage in the United States has been decreasing since 1916. 16/ The high volume carried by Soviet railroads is reported to be a critical part of the Soviet economy and plans for expansion have been included in each of the last two five-year plans. One authority estimates that the Soviet practice of overloading trains has failed to meet transportation goals and that a 60 percent increase will be required by 1960 in order to keep pace with the other facets of the Soviet economy. 17/

Highway transportation has not been developed in the Soviet Union as illustrated by the percent of tonnage shown in Table 10. In 1949 there were only 7,146 miles of all weather roads. 18/ While the United States in 1951 had 1,723,175 miles of surfaced roads. 19/

In summary, it can be said that the industrial potential of the United States at the present time is many times greater than that of the Soviet Union. It is diversified and concentrating primarily on civilian consumption. This latter condition may be a disadvantage in a short, intense war as economic readiness rather than economic mobilization will be required. It is considered that the United States is economically ready at the present time, however the cost of maintaining this condition is high and in all probability will go higher. The Soviet economy is also considered economically ready and will continue increasing this potential as time passes if the presently directed industrial policies continue.

15/ Information Please Almanac, 1956. p. 723.

16/ Lincoln Library, op. cit. p. 1218.

17/ Bulletin for the Study of the History and Culture of the USSR, October, 1955., p. 11.

18/ Information Please Almanac, 1956. p. 660.

19/ Statistical Abstracts of the U.S., 1953. p. 527/

CHAPTER VIII

ARMED FORCES

Though the day of push-button war is supposed to be just around the corner, the massing of armed forces to manuever and control the present day machines of war and to individually carry the battle to the enemy are still very much a necessity. Table 11. has been prepared to facilitate a comparison of the numbers of personnel employed in the past, the present strength and the potential from which the future armed forces will be drawn.

TABLE 11. Comparison of the Numbers and Potential Numbers of the Armed Forces of the US and USSR under varying conditions. 1/, 2/, 3/

Condition	US	USSR
Peak Number in WWII (1945)	12,018,974	15,000,000
Number in-being. (1954)		
Army	1,404,598	2,600,000
Air Force	947,918	800,000
Navy	725,720	600,000
Marines	214,797	
MVD and Border Guards		700,000
Total	3,293,033	4,800,000
Potential, Age 17-34, 1955	17,000,000	26,000,000
" " , 1960	17,000,000	31,000,000
" " , 1970	22,000,000	30,000,000

ARMY

There is considerable controversy as to the actual size of the Soviet Army, however, if the MVD and Border Guards are included as part of the Army strength, most authorities come close to agreement. These forces are divided into 175 divisions of which 65 are mechanized. Munitions are in reserve to provide for 300 divisions. 4/ The size of the reserve forces is unknown, however as a million men are released each year after their two year draft enlistment, it is considered that this potential is large. The United States Army, on the otherhhand, is reducing its numbers to 1,027,000 in 1956 and concentrating its organ-

1/ Information Please Almanac, 1956., pps. 348, 659.

2/ Trends in Economic Growth. op. cit. p. 89.

3/ Bulletin of the Institute for the Study of the History and Culture of the USSR. September 1955., p. 39.

4/ Encyclopedia Americana, 1955 Supplement. p. 752.

ization on smaller units, mechanization, speed and mobility. 5/

NAVY

TABLE 12. Comparison of the Numbers and Types of Ships possessed by the Navies of the US and USSR, 1955. 6/, 7/

Type of Ship	US	USSR
Carriers	14	
Battleships	4	3
Light Carriers	13	
Cruisers	18	26
Destroyers and destroyer escorts	247	315
Submarines	110	400
Amphibious, mine, patrol, and auxiliaries.	707	
Reserve Fleet	1,395	
Operating Aircraft	9,941	3,500

From the composition of the Soviet Naval Forces it is apparent that their present plans call for a defensive strategy around European waters, as the preponderance of their force consists of submarines, destroyers and cruisers.

AIR FORCE

Estimates for 1954 place the Soviet Air Force strength at from 20,000 to 23,000 first line aircraft of which most of the fighters and two-thirds of the bombers are jet aircraft. 8/ The capabilities of these aircraft are estimated to be approximately the equivalent of those possessed by the United States.

PERSONNEL

The problems which the United States is experiencing today in recruiting and retaining qualified men within the Armed Forces is well known. That similar problems are being experienced by the USSR however, is not generally known. This is believed to be the reason behind the Soviet announcement of a reduction of forces by 650,000 upon the termination of the occupation of Austria. One group of authorities explain it this way. 9/ The Soviet require from conscription approximately 1,500,000 men annually in order to keep their forces at strength.

5/ U.S. News and World Report, November 18, 1955. p. 52.

6/ Information Please Almanac, 1956., p. 347, 659.

7/ Encyclopedia Americana, 1955 Supplement. p. 752, 509.

8/ Ibid, p. 16.

However, they have only been able to conscript approximately 1,200,000 men annually, and have therefore been forced to reduce their forces. The bookkeeping is broken down as follows, and the various numbers of replacements are due to the different lengths of conscription service required by each individual service.

Draft requirement annually:		
Land Forces	1,050,000	(1/2 non-regulars annually)
Air Force	200,000	(1/3 non-regulars annually)
Navy	90,000	(1/5 non-regulars annually)
MVD and Border Guards	160,000	(1/3-1/4 non-regulars annually)
Total	1,500,000	
	-300,000	for reduction of 650,000
New Total	1,200,000	the number able to be conscripted.

NEW WEAPONS

The subject of new weapons is one of a highly classified nature. However, the progress which the Soviet scientists have made in the development of nuclear capabilities gives every indication that their scientific progress in the development of combat weapons will be the equivalent of that of the United States and should be planned for on that basis. The ability to utilize these weapons with the greatest effect and economy will in general be the deciding factor. The advantage possessed by the United States as the result of technological experience and experimentation with nuclear weapons will be of decided advantage in the range of weapons from which to choose, and the tactics and dispositions for atomic defense. It is considered that the Soviet Union has had sufficient time to manufacture the quantity of nuclear weapons necessary to seriously impair the industrial capacity of the United States if properly delivered.

9/ Bulletin of the Institute for the Study of the History and Culture of the USSR. September 1955., p. 41.

CHAPTER IX

SUMMARY AND CONCLUSIONS

The foreign policy objectives of the USSR are dedicated to advancing Communism throughout the world, and thereby gathering control of all the people and territory under the domination of the Soviet Union and its leaders. Conversely, the foreign policy objectives of the United States are dedicated toward the establishment of a free and peaceful world community, with each nation enjoying a freedom of action and thought, and with differences arbitrated within the framework of the United Nations. These dichotomous aspects of the objectives are in conflict throughout the entire spectrum of dealings with free and neutral nations. The United States has assumed a defensive role in this conflict while the Soviet Union has to all appearances carried on the offensive role where conditions permit. As in the Korean conflict however, the United States emphasized the principle that force would not be tolerated as a means of aggression and would be met with force in resisting such aggression. With these two ideological forces endeavoring to exert their influence upon the peoples of the world, there will be instances where local armed conflict is precipitated by faulty planning and analysis. Such local conflicts have a great potential for spreading into unrestricted warfare.

The most significant conclusion which can be drawn from the comparison of war potentials, is that the United States has encountered the most formidable foe in its history. Should a conflict develop between these two world giants, it will require the full capabilities of each economy to successfully pursue such a conflict.

The Soviet Union possesses an area many times larger than that of the United States, however climatically and topographically the United States possesses the advantage in land utilization and productivity. Agriculture within the Soviet Union presents the weakest link of the entire economy. The collective farm system appears to be inefficient and meeting with considerable resistance from the peasants. Production has been barely sufficient to meet the minimum demand, and climatic

and geographical conditions do not appear to favor a rapid improvement for this situation.

The Soviet Union has an advantage as to its population size and age distribution. However, the peculiarities of a police state coupled with the heterogeneous ethnic groups provide a foundation for this society which appears to be vulnerable. In general educational level of the population, it is considered that the United States possesses a large advantage, however in the training of scientists and the issuance of advanced educational degrees the advantages of subsidized and directed higher education appear to be accruing to the Soviet Union. The occupational distribution of the United States population appears to be more favorable with respect to industrial mobilization. Larger American numbers can be diverted from trade, finance and services for industry than can be diverted in the Soviet Union from its similarly large segment of population which however is devoted to agriculture.

The industrial capacity coupled with the natural resources of the United States are substantially larger and more developed than those of the Soviet Union. Both nations have mineral deficiencies but these do not appear to be critical if stockpiling has been instituted. The further development of industry and resources in the United States is largely dependent upon the economy and the laws of supply and demand. Such further development in the Soviet Union will be as directed by the State.

Militarily, it is considered that the Soviet Union has a larger ground force in-being and possesses the armaments for this force and its reserves when mobilized. Its Air Force is comparable to that of the United States in plane numbers and plane performance. Its Navy is generally inferiorrelative to total numbers of ships, however it possesses a strong submarine threat. The United States, in balancing its forces consistent with the economy, threat and weapons on hand, possesses a force in-being capable of carrying out the national policy and supporting international committments.

In the overall analysis, it is considered that the war potential

of the United States is superior to that which is possessed by the USSR. The expansion of time during which the divergent ideologies are in world conflict is to the advantage of the Soviet Union. In a war in which the use of nuclear weapons is prohibited, the gross size of the armed forces of the Soviet Union and their immediate proximity to all of Europe and its large productive population, places a tremendous advantage with the Soviet Union. A future war under these circumstances would be a contest between two continents. Similarly, a very short war, employing only the existing forces, is to the advantage of the Soviets. However a war of longer duration or one employing nuclear weapons is to the advantage of the United States, because its unsurpassed industrial capacity can be diverted to the war effort.

Another facet of the comparison, which has not been more than lightly touched in the foregoing text because of its intangibility, should be mentioned again. The psychology of a people can prove to be the factor which can overwhelm statistics and ideologies. This is the immeasurable force which can upset the most meticulous plans and doctrines. Therefore, it must be considered, though no attempt at analysis has been made.

Never before in the history of the United States has the conduct of foreign relations been so closely integrated with the concepts of military strategy for the preservation of a free world. Events in any part of the world, such as Cyprus, Israel, Korea or Malaya affect the United States just as directly as happenings in the Western Hemisphere. The foreign policy objectives, war potential, and military stature of the United States must be kept in consonance with the world situation, so that a failure of diplomacy, collective security, or the United Nations will not leave the United States and the free world vulnerable to the onslaught of Communist Imperialism.

BIBLIOGRAPHY

BOOKS

Baldwin, H. W., The Price of Power, New York: Harper, 1947. 361 p.

Balzak, S.S., V. F. Vasyutin, and Ya. G. Feigin, Economic Geography of of the U.S.S.R., New York: The Macmillan Company, 1949. 620 p.

Bergson, Abram, ed. Soviet Economic Growth. Evanston: Row, Peterson and Co., 1953. 388 p.

Brookings Institution, Major Problems of U.S. Foreign Policy. Washington: Brookings Institution, 1954.

Cressey, G. B., The Basis of Soviet Strength. New York: McGraw-Hill, 1945, 287 p.

_____., How Strong Is Russia. Syracuse: Syracuse University Press, 1954.

Czarnomski, F. B., Can Russia Survive. New York: Philosophical Library Inc., 1953.

Dewhurst, J. Fredric and Associates, America's Needs and Resources -- A New Survey, 1955. New York: The Twentieth Century Fund, 1955.

Dulles, Foster Rhea, America's Rise To World Power 1898-1954. New York: Harper, 1955.

Dulles, John Foster, War or Peace. New York: MacMillan, 1950.

Mosely, Philip E., Russia After Stalin. New York: Foreign Policy Association, Inc. 1955.

Scott, J., Political Warfare. A Guide to Competitive Coexistence. New York: John Day Co., 1955.

Woytinsky, W. S. and E.S. Woytinsky, World Population and Production Trends and Outlook. New York; The Twentieth Century Fund, 1953.

PERIODICALS

Bulletin of the Institute for the Study of the History and Culture of of the USSR. September, October, 1955.

News from Behind the Iron Curtain. December 1955.

Time Magazine. August-January, 1955, 1956.

U.S. News and World Report. Auguest 1955-January 1956.

GOVERNMENT PUBLICATIONS

Morrison, John A. "Geography of Russia." Information Service for Officers, U.S. Naval War College, March 1952.

Statistical Abstracts of the United States, 1955. U. S. Department of Commerce, Government Printing Office.

U.S. Library of Congress. Legislative Reference Service. Trends in Economic Growth. 83rd Congress, 2nd Session. Government Printing Office, 1955.

ENCYCLOPEDIAS

Encyclopedia Americana, 1948 edition. New York: Americana Corp. 30 vols., and Annual Supplements thereafter.

Information Please Almanac, 1956. New York: New York Herald Tribune.

The Lincoln Library of Essential Information. Buffalo: Frontier Press Co. 1955. 1 vol.

NEWSPAPERS

The New York Times, August 1955-January 1956.

The New York Journal American, August 1955-January 1956.

MISCELLANEOUS

Hunter, Holland, "Soviet Transportation Problems". A Lecture to the U.S. Naval War College, Newport, R.I., October 14, 1955.