THE ROLE OF WESTERN GERMANY IN WEST EUROPEAN DEFENSE

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SUMMARY

Over the course of history Germany has had many sharp alterations of fortune caused by an over industrious, hard-driving people who have never been satisfied with a mediocre position in world affairs. From almost complete devastation, caused by two World Wars in less than half a century, her unbelievable recuperative powers have brought her back to world recognition and a bulwark of Western defense.

The Federal Republic of Germany's geographic location in the heart of Europe and bordering the Communist Bloc has given her the most important forward position in the Free World. This position and the concentration of her industrial complexes and communication lines make her extremely vulnerable and unable to stand alone in any major conflict.

With timely and strong economic assistance from the United States, and under determined and intelligent political leadership the Federal Republic has risen to one of the richest and most dynamic countries in Europe. Her ability to absorb the millions of refugees and turn their energies and skills into the reconstruction of a devastated country has been remarkable. West Germany's trade with the United States and other countries is a key factor in her economic structure and absolutely necessary for a strong defense posture. With her highly skilled labor force and modern industrial experience she has the capability to expand rapidly in the scientific and technological fields. Because of the necessity to completely rebuild her industries along modern lines, she has the capability to convert to the production of modern military equipment in a short period.

The rising surge of the Federal Republic's political leadership in West European affairs and the growing trend of nationalism have caused some concern in the Atlantic Alliance Community. Though all political parties in the West German government are united in strong opposition to Soviet communism, the strength of this opposition has not yet undergone the test of possible concessions from the Eastern Bloc for German unification.

West Germany has developed an efficient and modern armed force within the restrictions designated by the Western European Union Treaty. All military forces are committed to the defense of NATO. However, there is a growing opinion among West German government officials that they should have a greater voice in nuclear planning and the utilization of nuclear weapons.

The continued close relationship established between the United States and West Germany during the last twenty years may be dependent
on a more liberal attitude by the United States in the control and use of nuclear weapons. After a brief rapprochement with France, West Germany again has turned to the United States and NATO as her main source of security and prosperity. The United States also realizes that she must continue to keep the Federal Republic strongly oriented toward her policies and be constantly assured of United States support in defense of German soil and Western Europe.
CHAPTER 1

INTRODUCTION

PURPOSE

The purpose of this research paper is to identify and analyze the various aspects of the national power of the German Federal Republic as it concerns the defense of Western Europe. This study, through an analysis of the historical background, geography and people, and the present role in the military, scientific and economic fields, presents an assessment of West Germany's defense potential. Finally, this research paper develops conclusions on what the United States should be doing to assure this support of the Free World's interest.

LOOKING BACK

To fully appreciate and understand the position that Germany finds herself in today, it is necessary to go back in history to see how the character of this controversial nation was formed. "Few people have experienced so many and sharp alterations of fortune as have been apparent in German history."\(^1\) The famous German poet, Egman Goethe, also aptly describes Germany with an epitaph, "Rejoicing to the Heaven, depressed to the depths."\(^2\)

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\(^1\)William Henry Chamberlin, ed., The German Phoenix, p. 3. 
\(^2\)Ibid.
During the era of Reformation, extending from Luther's appearance to the close of the Thirty Years War, Germany was to complete the transition from medieval to modern which was to determine the pattern of German life and history. But not until the year 1871, the era of William I and Bismarck, did Germany show real strength, true unification and the beginning of a new era.

Otto von Bismarck, the first chancellor of Germany, made his country the most powerful state on the continent. He also laid the foundation for a rapid growth of the nation's industry and commerce unparalleled in European history.

By annexing states, the population growth was further incentive toward the Industrial Revolution which began in full force in 1871. Because of their leadership in industrial production, scientific, technical and cultural fields, the Germans were held in high esteem throughout most of the world. This progress held in these fields until 1914, when Germany was involved in a great war.

After their defeat in 1918, Germany was in the depths of economic and political despair—a country totally defeated militarily and searching for any reasonable settlement. The old military dictatorship and semiautocratic rule had gone and she was free to set up a democratic form of government. But within fifteen years she handed herself over to a new, less responsible and far more tyrannous form of autocracy.3

3Ralph Flenley, Modern German History, p. 346.
Hitler, who in the early twenties was considered a nuisance and a crackpot, got his chance during the long economic crisis that began in 1929. His part grew steadily during the mass unemployment years. His rise to power was not a miracle and not an accident. He possessed qualities that were well-calculated to attract a mass following in time of despair when people were looking for some extraordinary deliverer.  

When Hitler established his dictatorship he immediately launched a skillful propaganda campaign which gave the German people a sense of belonging and a feeling of achievement in the construction of a new Germany. The German citizen throughout history has had respect for authority and power. By tradition and heritage Germans need strong leadership. The timing of Hitler's take-over was ideal when Germany was in "economic despair" and hungry.

A series of bloodless victories in foreign policy assisted in establishing his leadership among the German masses. One of his next steps was to move troops into the demilitarized zone of the Rhineland during March 1936. When Britain and France failed to take any action, a series of aggressive acts followed. Then on 1 September 1939, with the attack on Czechoslovakia, the world was plunged into World War II.

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4 Chamberlin, op. cit., pp. 22-23.
6 Chamberlin, op. cit., p. 28.
The terrible loss of life and property, the victories and defeats, and the horror of the Nazi regime are documented and well known. Never during modern times has a nation been so defeated. All large cities lay in ruin. All German territory was under foreign military occupation. Forty thousand square miles of German territory were annexed by Poland and Russia. The country was devastated physically, economically and politically. Communication and transportation were inactive. Agriculture production was dangerously low. A continuous flow of refugees and displaced persons worsened the situation.

In 1946 and 1947, the differences among the allies developed the cold war between Russia and the United States. This ever-increasing tension affected most policies concerning the occupation and ultimately brought about the divided Germany. 7

With aid pouring in from the allies, especially the United States, added to the persistent, aggressive and orderly German mind, West Germany within ten years recovered from their worst defeat in history to become a respected NATO ally. 8 By 1965, this Germany which was so utterly defeated was again pressing for world leadership in all fields.

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7 Rodes, op. cit., pp. 598-614.
8 Chamberlin, op. cit., p. 49.
The purpose of this brief history is to focus the reader's attention on the unbelievable recuperative powers and tenacity of purpose of the German citizen.

ANALYSIS

Over the course of history Germany has been either too weak or too powerful for her own good and the peace of Europe. These energetic, hard-driving egotistical people have never been nor will be satisfied with a mediocre position in European or in world affairs. When they discover a course, it is embraced with overwhelming enthusiasm, mixed with arrogant overconfidence, which has constantly caused the many sharp alterations of fortune in German history.
CHAPTER 2

GEOGRAPHIC BASE

STRATEGIC LOCATION

From the standpoint of land mass, the Federal Republic of Germany is relatively small, covering an area about the size of New York and Pennsylvania.

In any military appraisal, her geographic location in the center of Europe, small size and her exposed borders make her particularly vulnerable to invasion. Also, it makes her alliance with the West essential in considering a successful defense of Western Europe.

RELATIONSHIP WITH FRONTIERS

The Federal Republic has common land frontiers with nine other countries with the major portion of her western borders facing the Communist Bloc countries. West Germany, unlike many other nations, is not endowed with readily defined political boundaries, determined by prominent geographical landmarks or long historical tradition. Her boundaries are the result of wars and power politics and are extremely vulnerable to attack from land armies.

COMMUNICATION SYSTEM

The Federal Republic has a highly developed system of transportation, railroads, inland waterways, road and air. Approximately
15 million dollars were invested in the fields of transportation and communication between 1949-1960. Under a ten-year road building plan, 7,000 miles of federal roads are to be repaired, enlarged, and rebuilt by 1967 and 620 miles will be constructed. The railways are being modernized and the shipping fleet redeveloped after the rundown during the war and the immediate postwar years. The Federal Republic communication system is one of the finest and most compact in Europe. Almost all European lines of communication going either from north to south or east to west must cross her borders. Though vulnerable, the development and maintenance of good transportation and communication systems are much less difficult and expensive than in the broad expanses of Eastern Europe.

The predominately east-west orientation of the major land forms of Germany is in sharp contrast with its rivers. The river systems which flow mainly northward to the North Sea provide a basically important key to German political unification and economic development. The Rhine River carries more commerce than the entire Mississippi River system. The inland waterway system of Germany will continue to play a very significant role in the transportation and the economy of the country.

In spite of her limited coastline, the Federal Republic has two outstanding ports in Hamburg and Bremen which have excellent access to the oceans of the world and are capable of handling her ever-growing foreign trade and immense industrial complexes.

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Germany has only a moderate amount of mineral resources and with the exception of coal and potash depends heavily on imports to meet their growing needs.

At the present time approximately 57 per cent of the area of the Federal Republic is used for agriculture and only 34 per cent is actually under crops; as against this 29 per cent is under forest and 14 per cent is not used agriculturally.²

ANALYSIS

West Germany's geographical position alone—without her great military and economic power—makes her an extremely important ally in considering the defense of Western Europe. She has the most important forward position in the Free World today. The border between East and West, running for almost four hundred miles through the two Germanys, is a fragile dividing line between war and peace. With no real natural barriers to halt either the penetration from its periphery or the advance of forces from its core, the central position of Germany has for centuries been Europe's favorite battleground. The concentration of her industrial complexes and the vulnerability of her lines of communication place her in a serious situation in any type of war. The thought of a conventional type of conflict in which she would undoubtedly be in the middle is extremely disturbing to German planners. It is easy to see why the Federal Republic has supported the nuclear concept.

Germans may live in freedom or oppression depending upon which side of the line that runs through the heart of Germany they live.

The population of West Germany, according to the 1964 census, was 57,865,000. Their people are crowded in an area which is 52.8 per cent of the Reich's former area with 576 people per square mile. Over two-thirds of the population is concentrated in the large cities of Hamburg, Munich, Cologne and Frankfurt, and the contiguous urban centers of the industrial Ruhr area.

Approximately one-fifth of the West German population was either expelled or fled from Eastern Europe and Eastern Germany. This gigantic migration of people, which came to an end in 1946-47, settled in the lands most easily reached from the eastern territories, such as Schleswig Holstein, Lower Saxony and Bavaria.

It was indeed a feat to get these ten million people resettled and working. They accepted poorly paid jobs which were in no great demand by the domestic population. Through the years they have profited and now many of them own their own small business establishments which has resulted in a substantial increase in the national product.

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In Germany there is a labor force of 26,880,000 of which 12,969,000 are engaged in industry. Approximately two million work in the Ruhr area in mining. The Ruhr economy has outgrown its essential German function and has taken an important part in the overall economic integration of Europe.

Young skills play an important role in the human reservoir of specialized and skilled workers for commerce and industry. There has been the tradition to train apprentices in industry with time divided between plant and school until the age of eighteen is reached. This system is still strong in Germany even with modern industrial development. Of the 1,500,000 young people employed, one-third are girls.

Many women work outside the home not only in the professions, but also at jobs requiring mechanical skill. There are several reasons for this:

1. There are four and one-half million more women than men, three million of these are widows.
2. Some 700,000 are not living with their husbands.
3. About three million are single women over twenty-five, of these 400,000 are divorced who have not remarried.

There is a definite trend away from agriculture. In 1882, agricultural workers constituted 42.2 per cent of all the gainfully employed.

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3 The First Ten Years of Germany, prepared by Roy Bernard Co., Inc., p. 69.
4 Ibid., p. 74.
employed forces of labor; in 1950, this number had dropped to 23.2 per cent; and in 1962, only 13.2 per cent were engaged in agriculture.  

German farmers do not live on the land they own, but in nearby communities. The farms are small because the land has been divided among the family at the owner's death.

West Germany still has much the same standard of education that the nation had before 1933, and the rural areas have tried to keep alive one school with thirty or forty people under one teacher. Today in Germany the compulsory education age is from 6 to 15 years. After the first four years of school, the course of instruction is divided into a four-year vocational and an eight-year pre-university course (Gymnasium) for those who are able to afford it. In 1958, there were 4,618,000 pupils in the elementary schools, 2,407,000 in the vocational schools and 765,000 in the Gymnasium or 8-year high schools. In 1962, 217,547 students were enrolled in the eighteen universities and eight technical colleges.

ANALYSIS

The German labor force is highly skilled and has considerable modern industrial experience. German workers are noted for the high quality of their products and for their disciplined dedication to

work. High standards of general education and vocational training have continued to contribute to the effective use of capabilities. Labor mobility has played an important part in maintaining production. When necessary, industry has moved to the source of labor. The inherent German penchant for discipline and submission to rules and regulations is reflected in the manner in which employer's organizations, trade unions and work councils operate. Most employers belong to associations which exercise a relatively strict discipline over their members. For the time being the Federal Republic will continue to find it necessary to import common labor from outside of Germany to meet the ever-increasing needs of its industrial expansion.
CHAPTER 4

POLITICAL LEADERSHIP

WEST GERMAN GOVERNMENT

The system of government in the Federal Republic reflects a mixture of traditional German institutions, reaction to Nazi dictatorship and political excesses, World War II Allied agreements, and the bipolar international politics of the cold war. At the national level the Federal Republic has a bicameral parliament legislature.

The constitution of the Federal Republic is the "Basic Law" of 23 May 1949. It provides for a limited power president with a real executive authority in the hands of a chancellor who is the principal decision maker and determiner of major governmental policies. It further provides for two legislatures, the Bundestag and the Bundesrat. The Bundestag is the most important federal organ which is elected by the people as a whole--by equal, direct, secret and free ballot for a four-year term. It is the lawmaking branch of the legislature, it elects and dismisses the chancellor, and has both the government and federal administration under its control.

1Helmuth Arntz, Facts About Germany, pp. 56-62.

The Basic Law of the Federal Republic of Germany, Article 65. (The Constitution of the Federal Republic is the "Basic Law" of 23 May 1949. It is meant to be only a provisional settlement since it is intended that when Germany is reunified, the entire German nation will vote freely on a new constitution for all of Germany.)
The Bundesrat members are appointed by the state governments and authority is limited almost exclusively to laws affecting the administrative organizations of the states and Bundestag.

**BASIC LAW**

The Basic Law contains various innovations that reflect German feeling in the postwar period. The determination to prevent a revival of Nazism prompted Article 21 which states that "parties which according to their aims and behavior of their members seek to impair or abolish the free and democratic basic order or to jeopardize the existence of the Federal Republic of Germany, shall be unconstitutional." This law has been used to outlaw extremist groups. In general, the Basic Law permits the growth of democratic institutions and political stability concentrating on human and fundamental rights. Unless radical changes are made there appears no danger to the future of Germany as a democracy under its constitution.

All the main parties in West Germany stand for the ideological and practical grounds of parliamentary democracy. The different political parties check each other and, therefore, preserve the freedom of the citizen against the misuse of power by the party in power.

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THE CHANCELLOR'S PART

One of the greatest difficulties of a political system which has evolved from an autocratic structure is to find an adequate public substitute for the figure of the monarch. Europeans have experienced this need for a powerful symbol of identity with the state. The German penchant for order, and desire to be given at least a sense of direction, causes the people to place a premium on an individual who can maintain firm control on the political apparatus. Today the Federal Chancellor has replaced the Kaiser, the President, and the Fuehrer as the symbol of strength in West Germany. As an example, Chancellor Adenauer for almost fifteen years led the German people from the depths to the high position they enjoy in the eyes of the world today. Adenauer's strong dominate personality and with his tenacity and determination, systematically and even ruthlessly, imposed his influence and leadership over the German people. He had given the German people a period of extraordinary stability and prosperity, and in spite of harsh tactics, the German people consider him as the "grand old man" of Germany.

The present Chancellor, Ludwig Erhard, has yet to show the same mastery of leadership that is necessary to hold the respect and support of the German people. Germany also suffers from a

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deficit of capable young democratic leaders who could provide leadership to a people traditionally disposed to leave political decisions to the professionals. Many of the old professional leaders are not yet free from the tenets of Nazism.

Another factor to take into consideration of Germany's part in Western European defense is the new growing nationalism which has been encouraged by de Gaulle. Today the ultra-rightists are making an effort to group into a common front. In recent elections the ultra-nationalists vote in Germany has run well over ten percent--though too divided to be effective. A survey of German youths conducted by the United States Embassy in Bonn during 1964 revealed that the number one political concern of German youth was the reunification of Germany. There is a possibility that the Germans may decide to work out some compromise with the Eastern Bloc and also make concessions to effect this reunification at the expense of Western unity.

The German Federal Republic became one of the most prosperous political entities of the 1950's and the early 1960's; in contrast, the German Democratic Republic, the Communist creation in the Soviet occupied zone, has passed through a permanent and ever-growing economic crisis.5

ANALYSIS

To all outward appearances the political situation in the Federal Republic appears to be very stable and the state well on its way to assume the leadership of our continental European allies. All parties are united in strong opposition to Soviet communism. However, this appearance of stability must be treated with caution. The many changes that have taken place over the past twenty years have been too sudden to have firmly established themselves. There are certain potentially serious problems that continue to exist beneath the apparent calm and prosperous life in the Republic. The religious, sectional, socio-economic, and ideological conflicts which characterized German politics in the past still exist. Chancellor Adenauer with his strong authoritative personality was ideally suited to hold together the many factions joined in his coalition.

The demand for the reunification of Germany and the recovery of lands now under Polish and Russian rule is growing ever stronger, especially among the younger generation. These demands might some day be successfully exploited by power hungry leaders. The defensive orientation of NATO is meant to prevent any German attempt to seek the re-establishment of the prewar Reich by armed force, but these very restrictions on their sovereignty are resented by many Germans.

It is up to the United States to keep a political and diplomatic balance between the new nationalism and Germany's key position in the defense of Western Europe.
CHAPTER 5

ECONOMIC STRENGTH

RETURN TO POWER

Of all the problems that West Germany has faced the one it mastered most successfully has been that of economic recovery. From a completely devastated country in 1945, Germany has risen to one of the richest and most dynamic countries in Europe.

A very important factor in this recovery was American aid, mainly through the Marshall Plan, from which West Germany benefited to the amount of 3.2 billion dollars.\(^1\) The timing of the aid was precisely when the Germans needed it most, from 1949 to 1955. Further, the up-draft in the German economy in the mid-fifties was aided by the coincidence of six sets of conditions:

2. Good supply of cheap skilled labor from East Germany and Italy.
3. Cooperation of trade unions to accept technical changes for higher productivity.
4. Confidence in the full recovery of German economy by businessmen and strong investments for the future.
5. Steady flow of dollars from American defense spending.

6. The absence of excessive taxes.²

Concurrent with the rise in economy the political leadership has been strong, intelligent and honest. Excellent business and industrial management worked hand in hand with a skilled labor force. West Germany loses fewer working hours through disputes than most other Western countries, and yet, enjoys a fair wage level and standard of living.³ Important human resources for commerce and industry are Germany's reservoir of specialized and skilled labor attained through the long-standing tradition of young men trained as apprentices in the skills of industry.

INDUSTRY AND TRADE

As a member of the European Common Market, Germany has continued to prosper to an unprecedented degree. In the first three years of the Market's operation, the Federal Republic's gross national product increased at an average annual rate of 4.7 per cent; its industrial production by 8.9 per cent. On a per capita basis West Germany had the highest growth rate of any member.⁴

Among the nations of the world, Germany ranks third in the output of crude steel (31,578,000 metric tons), fifth in coal production and ninth in iron ore. In the production of ships

²Karl Deutsch, and Lewis Edinger, Germany Rejoins the Powers, p. 150.
³Fritz Erler, Democracy in Germany, p. 43.
Germany ranks third, close behind Japan and Great Britain. From a complete standstill in 1945, this advancement is outstanding.\textsuperscript{5}

German industry, which had more than doubled its production between 1950 and 1960,\textsuperscript{6} continued to improve its competitive position between 1960 and 1964. The Federal Republic labor shortage was greatly alleviated by increase in the number of foreign workers and the commendable advance of productivity per worker. The real wages have doubled in West Germany since 1953, the biggest increase in any country in the world. The real national product in West Germany rose by five per cent in the second half of 1963 and by over six per cent in the first half of 1964. Throughout 1964, the Federal Republic's economy was sound and strong.\textsuperscript{7}

Since 1951, Germany has joined the Western powers in promoting expansion of international trade. As a world trader, she stands second only to the United States. Exports account for twenty per cent of her gross national product which is almost four times as much as the corresponding figure for the United States (5.3%). It can readily be seen that the Federal Republic has a great effect on the world economy and is also heavily dependent on it. Because of this interdependency, Germany must continue to pursue liberal foreign trade policies in the future.\textsuperscript{8}

\textsuperscript{5}"West Germany," \textit{The Americana Annual - 1965}, p. 296 (referred to hereafter as "Americana Annual").
\textsuperscript{7}\textit{Americana Annual}, \textit{op. cit.}, p. 296.
Because of the dynamic expansion of industry and the requirements of the Common Market, German agriculture has been floundering. German agriculture has a long history of protection and as a consequence, it was only recently that inducement to modernize methods of production and marketing was made. Apart from the natural handicaps of relief, soil and climate, West German agriculture suffers from disadvantages which arise from social organization. Farms are excessively small and fragmental in size. These small farms produce only half the grain needed by the swollen population, and not nearly enough of most other foods and feed.

Before World War II (1939), the proportion of people engaged in agriculture compared to the population as a whole was 17.9 per cent; by 1960, the number had dropped to 10.5 per cent. In regard to both quality and quantity, Germany is dependent on the import of food for the nourishment of her population.9

SCIENCE AND TECHNOLOGY

As in the economic field, the postwar revival of science and technology in West Germany has been phenomenal. Postwar scientists were scattered throughout the world and very few research establishments were operating due to the severe damage which they had

9Helmut Arntz, "Agriculture, Forestry, and Fisheries," Germany Reports, p. 5.
sustained. The recovery of German science and technology is about complete except perhaps for some fields significant in defense. 10 There are more than five hundred scientific and technological societies, associations and unions in the Federal Republic today. 11

It has been estimated that approximately one and a quarter billion dollars were made available from all sources in Germany for research and development in 1962, and that amount has increased annually. 12 Forty per cent of that amount was contributed by industry and individual states, the remaining sixty per cent was provided by the federal government.

Although there is no central federal authority for science and research, the federal government acts through the appropriate ministry channels. It is responsible for research institutes, classified as federal establishments, which come under the authority of the various ministries.

Science and engineering are receiving added emphasis in education and practical application to industry. Germany has eighteen universities, nine technical colleges, and forty-six other institutes and colleges devoted to specialization. During 1962, 237,547 students were attending scientific colleges in the Federal Republic. 13

10 K. H. Lauder, A Brief Review of Science and Technology in Western Germany, p. 1.
11 Ludwig F. Aridrieth, and Herman I. Chinn, "The Organization of Science in Germany," International Science Reports, p. 70.
12 Ibid., p. 12.
Because of the postwar restrictions on applied nuclear research, nuclear physicists had directed their interests to cosmic radiation, isotopes, and study of the ionosphere. However, research in the pure nuclear field is increasing rapidly. Also, Germany is a member of the European Space Research Organization whose purpose is to promote collaboration among European states in space research and technology for peaceful purposes. The Federal Republic is the second largest contributor, next to Great Britain in this endeavor (21.5%).

The fact that West Germany was forced by the most destructive war in history to begin almost anew has given it a unique opportunity of rebuilding the organization and structure of its science and technology in the most modern way. The skill and ability of the average German in scientific matters is a well known fact. West Germany also realizes that the economic strength and political effectiveness of a country depends on its progress in technology. The Federal Republic fully understands the cost for scientific achievement and is prepared to pay whatever is necessary.

In recent talks between Chancellor Erhard and President Johnson it was agreed that Germany should join the United States in several space research projects, including probes to the sun and Jupiter. Though Germany has indicated that her main interest is in the

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14Lauder, op. cit., p. 19.
15European Year Book - 1963, Vol. II.
16Lauder, op. cit., p. 86.
satellite as a communication system, she may join Britain in the development of launcher and guidance systems. This agreement is potentially of more importance to Germany than a greater role for the Federal Republic in nuclear defense planning.  

ANALYSIS

The Federal Republic today is the largest continental European state in terms of population, industrial production, and foreign trade; and it is on its way to becoming the wealthiest of the large powers in terms of per capita income. The effect of the division of Germany has been to turn the western half, which contains most of the country's limited natural resources, industries, and skilled industrial manpower, into one huge factory. Her export trade has increased phenomenally in recent years and she is exceedingly well equipped to produce modern machinery.

The greatest weakness in the economic field appears to be in producing enough food for her own consumption. The loss of agricultural lands in East Germany has greatly increased her dependency upon foreign sources for food and raw materials. A definite danger will exist if a drop occurs in the demand for West German exports. But for the immediate future, it appears that the Federal Republic will continue as an expanding industrial and prosperous society. A country sought after as a partner of many countries of the world because of its dynamic economy.

CHAPTER 6

ARMED FORCES CONSIDERATION

MILITARY STRENGTH

On 5 May 1955, the North Atlantic Council welcomed the Federal Republic of Germany as the fifteenth member of NATO. Germany had obligated itself to contribute to Europe's defense by means of a national army integrated into the forces of the alliance. Under the Western European Union (Treaty) the Federal Republic voluntarily undertook not to increase her armed forces above certain levels and in particular not to produce atomic, bacteriological or chemical weapons.¹

The present United States Ambassador to Germany, George C. McGhee, emphasized this in a speech on the 30th of May 1965:

Germany since rearming has given the world no cause to fear its strength. All its forces are committed to NATO. The Federal Republic has renounced their use for national ends. It has faithfully kept its obligation. The United States are glad these forces are in existence and are available for common defense of freedom.²

The Paris Treaties called for a German army of 500,000 men with a limited air force and navy.³ In April 1964, the strength of the

¹M. E. Bathurst, and J. L. Simpson, Germany and the North Atlantic Community, pp. 170, 172.
²George C. McGhee, News from the German Embassy, Vol. 9, 13 Jun. 1965. (Speech made on 30 May 1965 for graduating class, University of Maryland Extension Division, Heidelberg, Germany.)
³John E. Rodes, Germany: A History, p. 656.
armed forces of the Federal Republic was 424,000 of which 274,000 were army; 94,000, air force; 28,000, navy; and 28,000 in the territorial army. 4

Under Kai-Uwe von Hassel, West German defense minister, the Bundeswehr has steadily continued the buildup toward the maximum strength of 500,000. Because of competition with the booming economy for trained and skilled manpower, von Hassel does not expect to meet this figure until 1968-70. 5

From 1956 and until 1964, the German army had grown both in size and efficiency. At the present time it has seven armored infantry divisions, three armored divisions, one mountain division, one airborne division; all well qualified and trained. In addition, there is the Armed Frontier Protection Force of 60,000 men. 6 During 1964, the emphasis was placed on expansion of the Territorial Reserve. The main characteristics of these reserves follow closely to the US Army Reserve. This reserve is not a militia, but is composed of well-trained, well-equipped and effective units. From the strength of 10,000 men in 1964, they expect to reach 50,000 in 1966. 7

In 1961, for 213,000 private soldiers there were 110,000 non-commissioned officers and 25,000 officers--an indication of expansion into a larger force by the use of trained cadres. Their air force

6Helmut Arntz, "Defense," Germany Reports.
consists of six fighter bomber squadrons, four fighter squadrons, four reconnaissance squadrons, three transport squadrons, and six antiaircraft regiments. All combat ready units of the air forces have been assigned to NATO, and have the capability of carrying nuclear weapons. The Bundeswehr administration has kept pace with the buildup of the military formations. 8

The Federal Republic of Germany's defense budget has increased steadily since 1955. Approximately thirty per cent of their national budget has been concerned with defense (Annex B). Although the defense budget for 1965 was set at 4.8 billion (same as in 1964), the West German Parliament approved only 4.6 billion—a decrease of some 200 million dollars. 9 The reduction in military spending represents a new phase in Bonn's defense effort. After years of rapidly mounting allocations for the military, the government intends to level off the expansion of the armed forces. There are indications that another 225 million dollars will be cut in defense spending in 1966. The cabinet in Bonn has decided these measures are necessary to make sure that next year's budget can be balanced. According to the Federal Minister of Finance, this cut will in no way effect the commitments toward the United States and

Britain, designed to ease their financial burden of stationing NATO troops on German soil.11

COMMAND STRUCTURE

The command structure of the West German armed forces is unlike that of any previous German military organization. Civilians within the government control policy and command. It is so organized to assure that the military will never again have supreme power. Control of the armed forces by parliament is channeled through a powerful defense committee that is specifically named in the constitution and cannot be created or disbanded at will by a parliamentary majority. The parliament controls the budget, and the defense committee of the Bundestag has constitutional authority to investigate the armed forces.12 (Annex D)

The position of Defense Commissioner has been established under the Bundestag to insure that legislative policies are not being violated by the armed forces.

The German armed forces school training system is comprehensive and patterned somewhat after the United States. The main problem is the great gap between newly trained company grade officers and senior colonels and general officers. This is true in all branches

12Fritz Erler, Democracy in Germany, p. 77.
of the service. In the near future, most of the World II senior officers with combat experience will be considered over age.

NUCLEAR QUESTION

In accord with the Paris Agreement, Chancellor Adenauer gave assurance that West Germany would not engage in the production of atomic, biological or chemical weapons. Further, the Federal Republic understood that she was to refrain from any action inconsistent with the strictly defensive character of the treaty. 13 Since France and Great Britain have joined the nuclear club, Germany feels the necessity for a stronger position.

In an address before a meeting of the Western European Union in June 1963, Kai-Uwe von Hassel, West German defense minister, indicated that although the Federal Republic would never seek nuclear weapons, his government believed that the size of Germany's NATO commitment entitled it to participate in nuclear planning and decisions on the employment of nuclear weapons. 14

On the 30th of November 1965, Franz-Josef Strauss, West German defense minister until 1963, publicly warned Chancellor Erhard not to "sell a birthright of German sovereignty" 15 by renouncing the

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13 Rodes, op. cit., p. 644.
right to acquire nuclear weapons in his talks with Johnson. Strauss further indicated that only when a federal union was created, with its own nuclear defense potential, should West Germany give up the right to acquire national nuclear power. Until then, he said, Germany had a right to demand "equality with the other members of the North Atlantic Alliance."16

The acceptance of the MLF concept by the Western Bloc may have been a solution to Germany's demand for a voice in the nuclear coalition. The MLF which emerged in February 1963, as a United States principal effort to restore the cohesion of NATO has been shelved by the administration.

This force was to be composed of twenty-five surface ships, each carrying eight A-3 Polaris missiles with a range of 2,500 miles. These ships were to be manned by crews drawn from at least three nations. No nation would contribute more than forty per cent. Command of the ships was to be in proportion to the financial contribution. The Federal Republic was to be by far the largest contributor paying close to seventy per cent of the European share. In practice this would have meant that the Federal Republic and the United States would each contribute forty per cent, leaving twenty per cent to be divided.17

16Ibid.
ANALYSIS

Germany rearmed and became a member of NATO on the request of her Western allies to fill a dangerously potential gap in the West European defense. Through her contributions she also gained her sovereignty and a place in the Free World. This rearming of a once powerful and dangerous nation initially caused concern not only by a great many people in the Western countries but also by the Republic's own population. But over the period of years, Germany has proved her sincerity and has kept within the limitations of the Paris Treaties.

The quality of the German armed forces is very high and its prestige has risen since its establishment in 1955. Because of their officer and noncommissioned officer cadre system, their frontier protection force, and the rapid expansion of their territorial reserve forces, they are capable of obtaining a wartime posture in a relatively short time. They are equipped with a modern weapon system lacking only perhaps, in the rocket field, which can be supplied by the United States. She can be rated as a first class fighting force, the main weakness being in her logistical system and shortage of competent junior officers.

Germany will continue to cooperate with the United States in improving the effectiveness of the Bundeswehr to fight conventionally but will strive to obtain nuclear weapons at the strategic, tactical and battlefield levels.
Strong support can be expected from their Defense Minister von Hassel for more effective contribution to the defense of the West, proportionate to German economic expansion and recovery from military shortage attributed to the war. Also, they will exert pressure on the United States to persuade other NATO allies to fulfill their conventional force goals.
When the Korean War started in 1949, and there existed a possibility that the war would initiate Soviet action, allied policy was drastically reversed. The West organized forces which were called the European Defense Community (EDC). Occupied Germany provided a vital gap in the defense planning of Western Europe. On the condition that West Germany would participate in this defense, they would be granted sovereignty. However, the French were very concerned about an armed Germany, and failed to ratify the EDC recommendation. A substitute arrangement Western European Union initiated by the United States and Great Britain which would provide sovereignty on the basis of NATO membership was submitted and approved. American statesmen and leaders have repetitively affirmed that the security of Europe and the security of the United States are inseparable. Also, they have agreed that the strength and location of Germany make her indispensable to the defense of Western Europe, and that the defense of the border of West Germany is tantamount to the defense of the United States.¹ Considering this

¹Department of State Bulletin, 24 Apr. 1961, p. 582. (Vice President Lyndon Johnson's address before the North Atlantic Council, Paris, 6 April 1961.)
policy it is not surprising that the United States government has assumed the leading role to insure the security of the Federal Republic and also its full cooperation in the Western Alliance.²

To further strengthen the ties between the United States and Germany there is the close parallel which has developed between their respective national and foreign policies. For the past twenty years and several changes of administration, the United States has strongly supported the foremost goal of the Federal Republic, the reunification of the Germanys on both sides of the Iron Curtain in peace and freedom.³

**RELATIONSHIP WITH THE REPUBLIC OF FRANCE**

The Federal Republic was extremely susceptible to approach by France, because of the strained relations between Bonn and Washington in 1962. At that time, the Germans felt that the United States would make concessions to the Soviets concerning Berlin and accept the division of Germany for a permanent promise of stability.

On 22 January 1963, France and Germany reached the peak of their current relations by signing a treaty providing for closer cooperation in foreign affairs, defense, education, and scientific research. In view of French differences with Washington, and in

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view of past German support for American policy, the Franco-German Treaty of Reconciliation caused some concern in the West's political circle and also came as something of a surprise to Washington.4 This treaty seemed to be very popular with the average German citizen. De Gaulle, during his visit to Germany in September 1963, was received with open arms by the Federal Republic.5 During this state visit, de Gaulle reiterated that the union of the two peoples was necessary because of the Soviet threat, Europe needed a base of strength and prosperity similar to that of the United States in the New World, and the relaxation of tension in Europe would permit free development "from the Atlantic to the Urals." De Gaulle stated that such a union could make a unique contribution to the progress of the whole world.6 The United States was shocked, and a deliberate policy of "wooing the Federal Republic away from France was begun in the military, diplomatic and economic fields."7

The Franco-German treaty aimed at harmonization of foreign policy, and increased economic and military cooperation and educational and cultural contracts. By 1964, political views diverged almost completely, military collaboration was stepped up slightly, and the educational programs were progressing.

5Ibid.
6Frank Roy Willis, France, Germany, and the New Europe, p. 307.
The new Chancellor, Ludwig Erhard, on 18 October 1963, in his first speech before the Bundestag, although briefly acknowledging the contribution of the Franco-German treaty to the "mutual understanding and trust of the two people," made it clear that his government would pursue policies at variance with de Gaulle's. "The security of the Federal German Republic," he said, "can be guaranteed only through NATO, with the cooperation of European and North American partners in both political and military fields." 8

To many Frenchmen and to most Germans, the conception of a "European Europe" independent of the United States, defended by French force, and embracing East European countries was unreal. The possibility de Gaulle might jettison the Franco-German treaty was unlikely to disturb politicians, who had written into the preamble, proof of their unwillingness to make Franco-German union a substitute for the Atlantic Community. 9

ANALYSIS

The Federal Republic of Germany had accepted her role as a partner in the alliance very seriously. Not only has she met all of her defense commitments, but also has strongly supported the concept of "Atlantic Partnership" and the compelling need for indissoluble links between Germany and the United States.

9*Willis, op. cit.*, p. 327.
The new Chancellor, Ludwig Erhard, left no doubt that he prized understanding with the United States more than reproachment with France, and that he was unwilling to make economic concessions at the expense of Germany to please France.

With or without a treaty, Franco-German close relationship was a reality because it had brought about by myriad contacts of students, teachers, businessmen, tourists, soldiers, and politicians. Further, it had been institutionalized by ties, not of governments, but of mayors and their cities, historians and their students, and business and their administration.

The major goal of US policy is to establish a stable moderate philosophy in German thinking—a country strong enough to defend itself and meet her commitments in the Western Alliance, but not to attack. Germany should be united so that its frustrations do not cause a conflict, and should demonstrate a moderation toward nationalism which would not arouse the suspicions of her neighbors.
CHAPTER 8

CONCLUSIONS

The pattern of German history clearly indicates that she will never be satisfied with a mediocre position in European or world affairs. The total defeat of her armed might in the last two World Wars has all but been forgotten. With her extraordinary recuperative powers and tenacity of purpose the Federal Republic will again strive for world recognition and leadership.

Germany's geographical position alone makes her a mandatory ally in considering the defense of Western Europe. Because of her extreme vulnerability from all directions, she cannot defend herself on her own, but without her, Europe cannot be defended either. Europe cannot safeguard its freedom without full support of the United States, while America's freedom is ultimately dependent on the defense of Europe.

The United States must retain an alert and positive foreign policy toward the Federal Republic, always keeping in mind, the many sharp alterations of fortune that have been experienced by this controversial nation. A constant analysis of her "reformation" to assure that it is permanent, is necessary. Further, this "reformation" must be tested under stress, both foreign and domestic.

The Germans are becoming increasingly aware of their tremendous economic strength and the power position they hold in the Western European community. As time goes by, they will become increasingly
independent and more demanding in economic and political transactions with her NATO allies and the United States in particular. There will be an effort made to expand her trade and improve her relations with the Eastern Bloc countries.

The political leadership has remained questionable since Adenauer relinquished the chancellory to Erhard. Although all parties are united in strong opposition to Soviet communism and in strong support of the West, there is a growing unrest among the various factions within the government. The demand for reunification, the recovery of lands now under Polish and Russian rule and the new-found nationalism deserve close scrutiny by the United States policy makers.

Strong and active support can be expected from West Germany in fulfilling her NATO commitments. In a period of ten years West Germany has provided NATO with a well-trained hard-hitting military force of nearly one-half million men. Furthermore, this force has the capability to expand rapidly. This army, combined with West Germany's tremendous industrial and scientific potential, is considered one of the most dynamic powers in the world today and well qualified to maintain her key position in Western European defense.

In return a more generous attitude must be displayed by the United States in nuclear planning and utilization to satisfy German national pride and prevent unilateral action in this sensitive area. Also the United States must continue to maintain a strong military
force on German soil as a pledge to defend Germany. Any indication that the United States would retreat from its commitments to defend German territory will increase the chances of Germany moving out on an independent course.

The United States must not hesitate to take the necessary action to maintain West Germany on the right course in the fight for world freedom.

PAUL R. LUTJENS
Col
AIS

   (A German writer goes deeply into the background of Germany's recovery, and provides documented information on which to base a judgment.)


   (A broad background material on educational exchange and cultural relations with Western Europe.)


   (An excellent analysis of Adenauer's reign as Chancellor of the Federal Republic. The entire issue of April 1963 *Current History* provides a good source of material concerning the many problems faced by West Germany.)


   (An excellent report from the Scientific Attache, American Embassy, Bonn, on organizations, schools, and progress of West German science from 1945-1963.)


(The progress of German science and technology.)


(A lecture given at the University of Minnesota, by James B. Conant, former Ambassador to the Federal Republic of Germany. Delivered on 24 February 1957 at Williams Arena.)


(This book was written by the present Chancellor of West Germany, Ludwig Erhard, when he was minister for economics. An excellent insight to the policies which guide German leadership today.)


36. Germany. Economic surveys by the OECD. *Paris:* 1964. (HC286 071)


(A comprehensive book on Germany's revival of its economic, political and social development, 10 years after WW II, from a French writer's viewpoint.)


(One of the most current and informative books on the future of NATO and the difficulties which face the alliance. A positive assessment on the strategy for defending Western Europe, control of nuclear weapons and the German problem.)


(A thorough analysis of the problems found in West German defense policy; concise, hard-hitting and well documented.)

(Speech made before the graduating class, University of Maryland Extension Service, on 30 May 1965.)


(Presents an excellent analysis on economic recovery and rearmament, which contributes to West Germany's increasing ability to become an independent voice and to shape her national destiny.)


(A frank appraisal of problems faced in reunifying Germany and the bargaining position of the US.)


(Study on defense of West Germany, written by a German senator, emphasizing the importance of political victory versus military.)


(A full length study of the relationships between France and Germany from 1945 till 1964. An excellent insight on de Gaulle's attitude and policy toward the Federal Republic.)
# Annex B

**Indicators of Economic Strength of European OECD Countries, the US and Canada, 1964**

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (Millions)</th>
<th>a/ Gross Total (Million dollars)</th>
<th>Gross National Product Per capita (Dollars)</th>
<th>b/ Defense Expenditures Total (Million dollars)</th>
<th>c/ As percent of GNP</th>
<th>d/ Energy Consumptions Total (Million MT IHE)</th>
<th>d/ Per capita (MT IHE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>9.4</td>
<td>15,260</td>
<td>1,627</td>
<td>497</td>
<td>3.3</td>
<td>(45.0)</td>
<td>(4.7)</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>3.3</td>
<td>582</td>
<td>1,769</td>
<td>9.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>48.4</td>
<td>86,000</td>
<td>1,776</td>
<td>4,918</td>
<td>5.7</td>
<td>145.7</td>
<td>3.0</td>
</tr>
<tr>
<td>West Germany (including Saar)</td>
<td>56.1</td>
<td>99,270</td>
<td>1,770</td>
<td>4,882</td>
<td>4.9</td>
<td>237.2</td>
<td>4.3</td>
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<tr>
<td>Italy</td>
<td>51.0</td>
<td>42,950</td>
<td>971</td>
<td>1,789</td>
<td>3.6</td>
<td>93.0</td>
<td>1.8</td>
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<td>Netherlands</td>
<td>12.2</td>
<td>16,500</td>
<td>1,369</td>
<td>735</td>
<td>4.4</td>
<td>34.7</td>
<td>2.9</td>
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<td><strong>Total EEC</strong></td>
<td>177.3</td>
<td>267,212</td>
<td>1,597</td>
<td>12,836</td>
<td>4.8</td>
<td>555.6</td>
<td>3.2</td>
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<td><em>UK</em></td>
<td>54.2</td>
<td>91,370</td>
<td>1,685</td>
<td>5,562</td>
<td>6.1</td>
<td>277.5</td>
<td>5.2</td>
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<tr>
<td><strong>Total EEC plus UK</strong></td>
<td>231.5</td>
<td>358,582</td>
<td>1,549</td>
<td>18,398</td>
<td>5.1</td>
<td>833.1</td>
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<td>6,200</td>
<td>1,678</td>
<td>220</td>
<td>3.5</td>
<td>22.4</td>
<td>6.1</td>
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<td>*Denmark</td>
<td>4.8</td>
<td>8,940</td>
<td>1,864</td>
<td>255</td>
<td>2.9</td>
<td>17.5</td>
<td>3.7</td>
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<td>*Portugal</td>
<td>9.1</td>
<td>3,120</td>
<td>343</td>
<td>229</td>
<td>7.3</td>
<td>5.2</td>
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<td>Iceland</td>
<td>0.2</td>
<td>315b/</td>
<td>1,676b/</td>
<td>none</td>
<td>0.0</td>
<td>0.9</td>
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<td>Greece</td>
<td>8.5</td>
<td>4,970</td>
<td>585</td>
<td>185</td>
<td>3.7</td>
<td>5.0</td>
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<td>7,250</td>
<td>235</td>
<td>385</td>
<td>5.3</td>
<td>9.6</td>
<td>0.3</td>
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<td><strong>Total European NATO</strong></td>
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<td>389,377</td>
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<td>19,672</td>
<td>5.1</td>
<td>893.7</td>
<td>3.1</td>
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<tr>
<td>*Austria</td>
<td>7.2</td>
<td>8,460</td>
<td>1,176</td>
<td>135</td>
<td>1.6</td>
<td>21.1</td>
<td>2.9</td>
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<td>*Sweden</td>
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<td>17,000</td>
<td>2,245</td>
<td>823</td>
<td>4.8</td>
<td>40.5</td>
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<td>*Switzerland</td>
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<td>12,880</td>
<td>2,147</td>
<td>347</td>
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<td>2,590</td>
<td>909</td>
<td>36</td>
<td>1.4</td>
<td>6.5</td>
<td>2.3</td>
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<td>Spain</td>
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<td>17,700</td>
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<td>516</td>
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<td>36.5</td>
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<td><strong>Total European OECD</strong></td>
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<td>1,304</td>
<td>21,529</td>
<td>4.8</td>
<td>1,018.7</td>
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<td><strong>Total EFTA</strong> (countries marked with *)</td>
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<td>154,720</td>
<td>1,591</td>
<td>7,698</td>
<td>5.0</td>
<td>416.4</td>
<td>4.3</td>
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<td><strong>US</strong></td>
<td>192.1</td>
<td>628,700</td>
<td>3,272</td>
<td>51,323</td>
<td>8.2</td>
<td>1,653.7</td>
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<td><strong>Canada</strong></td>
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<td>1,678</td>
<td>3.9</td>
<td>152.4</td>
<td>8.1</td>
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<td>72,673</td>
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<td>Country</td>
<td>General Index (1953 = 100)</td>
<td>Crude Oil (MT)</td>
<td>Crude Steel (MT)</td>
<td>Electric Power (Billion KWH)</td>
<td>Crude Petroleum (MT)</td>
<td>Primary Aluminum (Thousand MT)</td>
<td>Motor Vehicles (Thousands)</td>
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<td>------------------</td>
<td>-----------------------------</td>
<td>---------------------</td>
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<td>115.6</td>
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<td>374.2</td>
<td>15.4</td>
<td>650.8</td>
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<td>#UK</td>
<td>128</td>
<td>196.8</td>
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<td>180.2</td>
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<td>32.2</td>
<td>1,832.0</td>
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<td>Total EEC plus UK</td>
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<td>7.0</td>
<td>none</td>
<td>none</td>
<td>none</td>
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<td>Norway</td>
<td>142</td>
<td>0.4</td>
<td>0.6</td>
<td>44.0</td>
<td>none</td>
<td>none</td>
<td>none</td>
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<tr>
<td>Portugal</td>
<td>153</td>
<td>0.5</td>
<td>0.3</td>
<td>4.7</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Iceland</td>
<td>na</td>
<td>none</td>
<td>none</td>
<td>none</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Greece</td>
<td>154</td>
<td>1.3</td>
<td>0.2</td>
<td>3.7</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Turkey</td>
<td>152</td>
<td>5.2</td>
<td>0.4</td>
<td>4.4</td>
<td>0.9</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Total European NATO</td>
<td>142</td>
<td>467.9</td>
<td>110.8</td>
<td>618.9</td>
<td>16.3</td>
<td>944.6</td>
<td>6,862.9</td>
</tr>
<tr>
<td>Austria</td>
<td>141</td>
<td>3.6</td>
<td>3.2</td>
<td>20.4</td>
<td>2.7</td>
<td>77.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>138</td>
<td>0.1</td>
<td>4.4</td>
<td>45.2</td>
<td>none</td>
<td>30.4</td>
<td>160.1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>na</td>
<td>none</td>
<td>0.3</td>
<td>22.9</td>
<td>none</td>
<td>64.8</td>
<td>none</td>
</tr>
<tr>
<td>Ireland</td>
<td>160</td>
<td>0.2</td>
<td>insign</td>
<td>3.1</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Spain</td>
<td>171</td>
<td>13.4</td>
<td>2.6</td>
<td>27.0</td>
<td>none</td>
<td>61.8</td>
<td>117.8</td>
</tr>
<tr>
<td>Total Western Europe</td>
<td>145</td>
<td>497.6</td>
<td>123.4</td>
<td>768.8</td>
<td>20.8</td>
<td>1,214.2</td>
<td>7,171.8</td>
</tr>
<tr>
<td>(countries marked with *)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>141</td>
<td>455.6</td>
<td>115.3</td>
<td>1,082.4</td>
<td>379.1</td>
<td>2,315.5</td>
<td>7,745.5</td>
</tr>
<tr>
<td>Canada</td>
<td>138</td>
<td>9.1</td>
<td>8.3</td>
<td>134.3</td>
<td>40.5</td>
<td>764.4</td>
<td>560.4</td>
</tr>
<tr>
<td>Total NATO</td>
<td>141</td>
<td>932.6</td>
<td>234.4</td>
<td>1,835.6</td>
<td>435.9</td>
<td>4,024.5-15,168.8-2,712.5</td>
<td></td>
</tr>
</tbody>
</table>
NOTE: Data shown are the latest available at time of publication, but are subject to revision. All figures are rounded, but computations for percentages and for per capita figures are based on unrounded data.


b. At current market prices.

c. Converted into dollars at official exchange rates. Not adjusted for differences in the purchasing power of the dollar, which is generally higher outside the US.

d. Data are for 1963.

e. Because new statistical series from different sources were used, production data are not strictly comparable to the data published in last year's "Indicators." This is especially true for the general index, which is based on 1958 rather than on 1953, and for the series on electric power production, which this year includes (for most countries) power generated by industrial establishments primarily for their own use.

f. Totals based on 1958 UN weights.

g. Hard coal and lignite in terms of hard coal equivalents.

h. Estimated effective exchange rates used:

   Iceland: 54 kronur per US dollar

i. Including alloys.

j. European NATO plus the US and Canada.

### ANNEX C
**NATO VS. WARSAW PACT NATIONS**

<table>
<thead>
<tr>
<th></th>
<th>West (North Atlantic Treaty Organization)</th>
<th>Germany's Contribution</th>
<th>Warsaw Pact Nations (Members: Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Romania, Soviet Russia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>500 Million</td>
<td>57 Million</td>
<td>330 Million</td>
</tr>
<tr>
<td>Output of goods and Services</td>
<td>$1,100 Billion a Year</td>
<td>$99,270 Million a Year</td>
<td>$350 Billion a Year</td>
</tr>
<tr>
<td>Armed Forces</td>
<td>6 Million</td>
<td>430,000</td>
<td>4.3 Million</td>
</tr>
<tr>
<td>Nuclear Weapons</td>
<td>10,000 Stockpiled in Europe by US, plus more held by Britain and France</td>
<td>Stockpiled US</td>
<td>Thousands all held by Russia</td>
</tr>
<tr>
<td>Warplanes</td>
<td>25,000—all types</td>
<td>see-note*</td>
<td>15,000—all types</td>
</tr>
<tr>
<td>Combat Ships</td>
<td>908</td>
<td>254</td>
<td>744</td>
</tr>
<tr>
<td>(excludes US ships not assigned to NATO forces)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-range Missiles</td>
<td>1,400</td>
<td>None</td>
<td>300</td>
</tr>
<tr>
<td>Arms Spending</td>
<td>$73 Billion a Year</td>
<td>$5 Billion (approx.)</td>
<td>$43 Billion a Year</td>
</tr>
<tr>
<td>Steel output</td>
<td>276 Million Tons a Year</td>
<td>37.3 Million Metric Tons</td>
<td>130 Million Tons a Year</td>
</tr>
<tr>
<td>Oil Production</td>
<td>3.3 Billion Barrels a Year</td>
<td>7.7 Million Metric Tons</td>
<td>1.9 Billion Barrels a Year</td>
</tr>
<tr>
<td>Electric Power Generated</td>
<td>1,931 Billion Kilowatt-Hours a Year</td>
<td>160.9 Billion Kilowatt-Hours</td>
<td>664 Billion Kilowatt-Hours a Year</td>
</tr>
</tbody>
</table>

6 F-104G interceptor squadrons
4 F-104G fighter-bomber squadrons
6 F-84F fighter-bomber squadrons
6 F-104G and Fiat G-91 reconnaissance squadrons

ANNEX D
ORGANIZATION OF THE FEDERAL MINISTRY OF DEFENSE

- Press Section
- MINISTER
  - Personal Assistant Minister's Office
  - Personal Assistant Head Office
  - State-Secretary
  - Inspector-General of the Bundeswehr
    - Army, Air Force and Navy Adjutants
    - Dept. Quartering Accommodation and Building
    - Dept. Defence Economy
    - Dept. Military Technology
    - Dept. Administration and Legal Matters
    - Operations Staff Armed Forces
    - Dept. Budget and Finance
    - Operations Staff Army
    - Dept. Staff
    - Operations Staff Air Force
    - Medical Services Inspectorate
    - Operations Staff Navy

ANNEX B - MILITARY BUILD-UP

Personnel strength
Personnel strength planned

500,000

Army 274,000

Air Force 94,000

Navy 24,000

Territorial Army 28,000
