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A COMPARISON BETWEEN US-SOViet MILITARY
DOCTRINE FROM AN EGYPTIAN POINT OF VIEW

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree
MASTEr OF MILITARY ART AND SCIENCE

by

LIC ABDEL HAMID SALEH HAFIZ
The Egyptian Army

Fort Leavenworth, Kansas
1981

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A COMPARISON BETWEEN US--SOVIET MILITARY
DOCTRINE FROM AN EGYPTIAN POINT OF VIEW

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Master of Military Art and Science (MMAS) thesis prepared at CGSC in partial
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See reverse
This study analyzes the ground force tactical doctrine of the armed forces of the United States and the Soviet Union. It focuses on division and lower level units and attempts to highlight the strengths and weaknesses of each country's doctrine.

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FROM
AN EGYPTIAN POINT OF VIEW

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)
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CHAPTER I

INTRODUCTION

In this paper I plan to investigate both United States (US) and Soviet military doctrine in order to discover strengths and weaknesses of each system. I am particularly interested in the way they intend to apply their doctrine on the modern battlefield especially at division level and below. Before that I will give a general background of the two super powers including their political and military interests.

My discussion will be conducted throughout three main chapters. These chapters will deal with defensive, offensive and march and engagement operations, the main tactical maneuver on the modern battlefield.

In my discussion, I will initially draw on my personal experience in the October war of 1973; the Soviet Chief of Reconnaissance Course at division level (G2) taken at Vestriel Academy from 1974 to 1976; and the US Army Command and General Staff College at Fort Leavenworth from 1980 to 1981.

The Soviet population:

The Soviet Union ranks third in the world population, after the People's Republic of China and India. Moscow and Leningrad are the most populous cities: Kiev, Tashkent, Baku, Kharkov, Gorky, Novosibirsk, Odessa, Omsk, Tbilisi and Chelyabinsk each have more than one million inhabitants.¹

More than 170 separate ethnic groups live in the Soviet Union. Almost seventy five percent of the total population are Eastern Slavs.
More than seven-tenths of the Slavs (slightly more than half the total population) are Russians; the rest are Ukrainians and Belorussians who live in the South-western and Western sectors of the European part of the Soviet Union. The remainder of the population includes peoples belonging to Turkic, Finno-Ugric, Caucasian, other Indo-European, and less numerous ethnic groups, such as Eskimos.

Although each group speaks its own dialect or language, Russian is the most widespread and is taught as a second language to non-Russians.

**Geography:**

The Soviet Union is the largest country in the world. Its territory stretches from the Baltic Sea to the Bering Strait, where an island belonging to the Soviet Union lies only three miles from an island that is part of Alaska. Most of the Soviet Union is above fifty degree north latitude. The latitude of Moscow is the same as that of southern Alaska.

In the west, from the Pripet Marshes near the Polish border is the Ural Mountains. Soviet territory stretches over broad plain broken only by occasional low hills. Crossing this plain to the south are a number of rivers, of which the most important are the Dnieper, which empties into the Black Sea, and the Volga, which empties into the Caspian Sea. Between the Black and Caspian Seas lie the scenic Caucasus Mountains.

The low Urals mark the traditional division between European and Asiatic Russia. To the east are the vast Siberian lowlands and the desert of central Asia. Beyond are the barren Siberian highlands and the mountain ranges of the Soviet Far East. Farther to the east lie higher mountain ranges, including the Damirs, Altai, and Tien Shan.
History:

Modern Russian history dates from March 1917 when Czar Nicholas II abdicated under pressure from representatives of the national legislature, who formed a provisional government. Like the Czarist regime, the new government continued its participation in World War I (WW I), which led to widespread economic and social dislocation and popular discontent. On November 7, 1917, her government was overthrown by a revolutionary group known as the Bolshevik (majority) wing of the Russian Social Democratic Labor Party.

Vladimir Ilyich Lenin, leader of the Bolshevis, was named head of the first Soviet government. The new regime concluded the treaty of Brest Litovsk with Germany and the other Central powers on March 3, 1918.

a. The Revolution:

The new Soviet government declared all land the property of the State, and a rapid succession of decrees nationalized factories, banks, railroads and other sectors of the economy. A bitter civil war ensued and lasted until 1921. The US, the United Kingdom, France, and Japan sent military forces to Russia for a variety of reasons, but withdrew them after it became apparent that the Bolshevik government would survive.

b. The Stalin era:

In 1924 Lenin died and this event intensified an intra-party struggle between a group led by Joseph Stalin and other Soviet leaders. Stalin defeated these rivals in the late 1920's and later had them executed or assassinated. Untold members of other Soviet political, military, economic, and cultural leaders were imprisoned, and many died in the later purges of the 1930's.
In the interwar years, the Soviet Government tried to gain acceptance by other European countries. It succeeded only partially, however, because of activities of the Soviet-led Third Community International (Commintern), founded in March 1919. The Commintern attempted, through local Communist organizations, to undermine West European governments. Although Soviet Russia was recognized by a number of European countries in 1924 and by US in 1933, relations with these countries were often strained.

c. World War II:

In the spring of 1939, Stalin made tentative overtures to Nazi Germany, and in August of that year the Molotov-Ribbentrap pact was signed in Moscow. This two year non-aggression treaty included secret provisions for the division of Poland, Romania, and the Baltic States.

Nazi Germany invaded Poland on September 1, 1939, and the Soviets followed on September 17. By the end of that month Poland had been divided once again.

On November 28, 1939, the Soviet Government abrogated its non-aggression pact with Finland, attacking it two days later. Bitter Finish resistance stemmed the Soviet advance. Peace negotiations were concluded on March 19, 1940, resulting in the cession of a large part of eastern Finland to the Soviet Union.

In June 1940, Soviet troops occupied Estonia, Latavia, and Lithuania. In July 1940 the territory of the Baltic states was incorporated into the Soviet Union. In July the Soviet Union also annexed two eastern provinces of Romania - Bessarabia and Northern Bukovina.

Before dawn on June 22, 1941, Hitler attacked Russia. German troops advanced to the gates of Moscow before being driven back. The fol-
ollowing four years of fighting brought heavy casualties and left wide-
spread devastation in the European part of the Soviet Union. By the end
of the war the Soviets paid twenty million murders as a price of the vic-
tody.

The Communication Party: Form and Function:

In the Soviet system of government ultimate power is exercised by
the leaders of the Communist party. The party has a membership of approx-
imately sixteen million, or about six percent of the total population.
Party membership is the main avenue to positions of real authority in the
Soviet Union. Bound by rigid discipline, party members are expected to
carry out, faithfully, those policies set by the party leaders.

The party operates through a government apparatus which has little
independent authority. The legislative organ is the Supreme Soviet, which,
in theory, is the highest state authority in the Soviet Union. It has
two coequal houses - the Council of the Union, presently with 767 members
elected on the basis of population, and the Council of Nationalities with
750 members elected on the basis of territorial units. Elections are
called for every five years. Only one deputy, approved by the party runs
from each constituency.

The Council of Ministers, which at present has about one hundred
members is considered the Soviet highest executive organ and the most im-
portant part of the government structure.

Resources and agriculture:

Because of the great size of the country, some supplies of vir-
tually every natural resources are available in the country. Energy re-
sources, fuel, and waterpower are estimated to be at least twenty five
percent of the world's total, but difficulties in exploitation, as well
as inconvenient location of reserves, hamper development. Timber and manganese resources are the largest in the world. The Soviet Union also has more than adequate supplies of lead, zinc, nickel, mercury, potash, and phosphate.

Agriculture; despite increased investment and rises in real income the agricultural sector remains the Soviet Union's greatest economic problem. Sown crops occupy ten percent of the total land area.

The agricultural sector is organized into about 28,000 collective farms and 18,000 state farms. State farms function as "agricultural factories" on which farm workers and peasants are permitted to use private plots, most of them smaller than an acre. Although these plots account for only three percent of the total sown area, they produce thirty three percent of the country's meat, milk, eggs, and vegetables, and sixty percent of its potatoes.

Military:

The Soviet goal of possessing a large military force, places a heavy burden on the economy and limits potential growth of the standard of living and the economy as a whole. It is estimated that the Soviet military budget lies in the range of eleven to thirteen percent out of the Soviet total budget.

The armed forces of the Soviet Union number more than four and one-half million members drawn through universal conscription. In addition to large modern mechanized ground forces, the Soviet Union possesses an air force equipped with advanced interceptors, fighter-bombers, and long-range strategic bombers. The Soviet Union has the largest navy in the world, includes cruisers, destroyers, frigates, and submarines, many of which are nuclear powered. Missiles are the primary armament of
Soviet warships. The Soviet also possesses a full range of rockets, including nuclear intercontinental - and intermediate - range ballistic missiles.

The Warsaw Pact, established in 1955, is a Soviet dominated military alliance joining the Soviet Union and its East European Communist allies. Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and Romania. The pact has a joint command headed by a Soviet officer, which coordinates, plans, and carries out joint operations.

The Soviet foreign relationship and policy:

Soviet foreign policy is a complex mix of continuity and change. Policy makers must deal with a rapidly changing world and evolving domestic conditions. The increasing diversity of the international arena, the clear Western commitment to security and a stable East-West balance, and the increasing inter-dependence of the world's economics have affected Soviet policy options. While the Soviet leadership continues to aspire to exert and expand political and military influence in countries far from its borders, there are indications that the leadership increasingly perceives that the further modernization and security of the Soviet state is linked with the development of a more stable, prosperous international order.

Three broad interrelated areas of Soviet foreign policy concern are the West, the Third World, and the Communist world.

In relation with the West, including the US and Japan, the Soviet Union has modified its hostile attitude and has sought to normalize relations in order to reduce the risk of war, gain prestige by playing a large role in world affairs, and improve its access to the industrialized coun-
tries' technology through increased trade. 3

In the Third World, the Soviet Union has moderated its advocacy of communist-led revolutionary struggles and has attempted to establish and maintain good state to state relations with individual countries.

Within the Communist World, the monolithic character of international communism has dissipated as nationalism has become more important than ideology. Communist-ruled countries have become more resistant to, and in some cases defiant of, Soviet authority and control. Nonruling communist parties are also less subservient to Moscow's direction. At the same time Moscow has attempted, with varying degrees of success, to press for closer political, economic, and military ties with its Eastern European allies.

Because successful extension of its spheres of political, economic, and military influence requires continuous US prestige, the Soviet Union practices a policy of indirect harassment of the US through interference in countries of Middle East, Africa, Asia, Europe and South America: this interference is described as economic and military aid to combat "international imperialism". The Soviets also realize that unstable conditions in the Middle East, South Africa, and elsewhere in Africa, create a suitable atmosphere for expanding Soviet influence.

Another aid to Soviet foreign policy is the US human rights doctrine: US insistence on maintaining this doctrine is interpreted as weakness and, therefore, no hindrance to Soviet invasion of Afghanistan or Soviet threats against Poland, Somalia, Sudan and Egypt.

The United States of America: the people of the US:

The total population in April 1977 was estimated to be 215,892,000,
excluding US Forces stationed abroad. The composition of population refers to its distribution in respect to physical traits such as race, age, and sex and with respect to social and economic variables such as religion and occupation.

In 1970, of the 203.2 million persons residing in the US, 177.7 million (87.5 percent) were classified in the census as white, 22.6 million (11.1 percent) as black, and 2.9 million (1.4 percent) as members of other races, including 0.8 million American Indians. The population of Spanish origin, most of whom are white, numbered 2.9 million, or 4.5 percent of the US population.

Geography and location:

The US location: The US occupies nearly all that portion of the North American continent between the Atlantic and Pacific oceans, and at its northern boundary lays Canada and on the south Mexico.

The general coastline of the fifty states is 2,069 mile: on the Atlantic, 7,673 miles on the Pacific, 1,060 on the Artic and 1,631 miles on the Gulf of Mexico.

The principal river is the Mississippi - Missouri - Red Rock, traversing the whole country from north to south, and having a course of 3,710 miles to its mouth in the Gulf of Mexico.

The Rocky Mountain chain separates the Western portion of the country from the remainder. Travel is through certain elevated passes several of which are traversed by railroads and major highways. West of the Rockies, bordering the Pacific Coast, the Cascade Mountains and Sierra Nevada form the outer edge of a high tableland, consisting in part of stony and sandy desert and partly of grazing land and forested mountains, including the Great Salt Lake, which extends to the Rocky Moun-
tains. Eastward the country is a vast, gently undulating plain, with a
general slope southernwards towards the partly marshy flats of the Gulf
of Mexico, extending to the Atlantic, interrupted only by the Appalachian
Mountains in the Eastern States. Nearly the whole of this plain, from
the Rocky Mountains to some distance beyond the Mississippi consists of
immense prairies. In the Eastern States, which form the more settled
and more thickly inhabited portion of the country, large forests of
valuable timber, such as beech, birch, maple, oak, pine, spruce, elm,
as, walnut; and the south, live oak, magnolia, palmetto, tulip still
exist in the remnants of the forests which formerly extended over all
the Atlantic slope, but into which great inroads have been made by the
advance of civilization. The mineral deposits consist of iron, copper,
lead, and zinc. Non-metallic minerals include large quantities of coal,
petroleum, stone, salt, and phosphate rock. The highest point is in
Mount McKinley in Alaska, 20,320 feet above sea level, and the lowest
point is in Death Valley, California, 282 feet below sea level.

History:
The nineteenth Century - expansion and conflict:

The US entered the nineteenth century as a struggling new nation
on the frontiers of civilization; it left as a world power. Many factors
contributed to this transformation, including the development of an army
that was small, in keeping with the nation's resources, but uniquely
suited to its need. In over nineteen major wars, expeditions, campaigns,
occupations, and other disturbances, this small army provided the security
that made national expansion and progress possible. 6

The Civil War:

The expanding country was not yet one hundred years old, when the
Civil War between North and South broke out (April, 1861). One main cause of that war was the slavery problem. The war was ended in 1865 and the thirteenth amendment to the US Constitution, made slavery illegal throughout the United States.

The American-Spanish War, 1898:

This war was a result of sinking of an American battleship in the harbor of Havana, Cuba in February 1898. The war ended in December with the signing of a peace treaty in Paris and under its provisions, the terms of cease-fire were formalized, ceding Puerto Rico and the Philippine Islands to the US.

World War I (WW I)

In 1918 the US Forces were fully committed to the war in Europe. Early in the year Germany had virtually eliminated the Russians and Italians from the war, and thus had troops available to move to the Western front for a massive onslaught to break the allies lines. In March, the German forces breached the British and French lines at the Somme and in the following month staged a massive attack in Flanders. Under extraordinary pressure, the Allies succeeded in stabilizing their lines. US troops fought with the British in Belgian and with the French during the Meuse-Argonne offensive. At the end of the year, the Allies accepted President Wilson as their spokesman in the armistice negotiations, then the armistice was signed in November 1918, to put an end to WW I.

World War II and after:

In 1939 Germany moved into Czechoslovakia, claiming disorder in that country threatened the safety of German nationals. Later, Hitler announced the annexation of Memel, Lithuania, a Baltic port near Danzig.
At the same time Italy crossed the Adriatic to occupy Albania. Hitler demanded access to Danzig across the Polish Corridor, but Britain and France agreed to protect Poland if attacked. Germany and the Soviet Union signed a pact, which was revealed as a scheme to divide up Poland between Germany and the Soviet Union, and in September the Germany blitzkrieg overwhelmed Poland. Therefore, England and France declared war on Germany, and President Roosevelt asked for legislation to bolster the nation's defenses.

On December 7, 1941 the Japanese attacked the US fleet in the Hawaiian Islands. Then in 1942 the US committed herself to the war, men and a few women were mobilized into the Armed forces and the entire population was mobilized. The US regained the initiative by involving Guadalcanal, while the infantry entered the European theater by way of North Africa and US bombers raided targets in France and Italy.

In 1943, with increasing US participation the Allies won North Africa and Sicily in Europe, while advancing in the Pacific. In 1945 Germany surrendered and signed documents at Reims, followed by the surrender in Tokoyo Bay, by the Japanese. The victors conferred at Yalta and Potsdam. In all this the US played a leading role, but its spokesmen changed, for President Roosevelt, who had seen the country through depression and war, died shortly before the war ended. President Truman was in charge of the opening of the first meeting in San Francisco of the United Nations. He had ordered the atomic bombing of Hiroshima and Nagazaki in Japan. For most Americans, demobilization and an end of bloodshed and rationing were evidence that their way of life was vindicated and assured.
The Korean War:

In 1951, US forces in Korea slowly recovered from the communist Chinese onslaught and by the end of March most of Korea south of the thirty eighth parallel was recaptured. But when the American General Douglas MacArthur announced that the solution to the Korean conflict was to attack Communist China, President Truman, who believed that such a course would lead to war with both China and Russia, relieved MacArthur of his command.

Later, in November 1952, General Dwight D. Eisenhower was elected as President of the US, and just six months after he took his office, he carried out his promise to the US people during his election campaign, to bring the Korean War to an end.

Vietnam War:

In 1965 the Americans became increasingly concerned as the US extended its military commitments overseas in the Dominican Republic and Vietnam - in keeping with its policy of containing the spread of communism. In February 1965 President Johnson ordered air strikes against North Vietnamese targets and after April the number of US ground troops grew rapidly and reached 500,000.

In the US two diverse groups protested the war. Some called for an all-out attack against the North, including the bombing of Hanoi and the use of nuclear weapons if needed. Others felt that the US should end the bombing and leave the Vietnamese to solve their own problems.

The expansion of the war increased dissent. Conservatives, labor leaders, and others continued to support the Administration's Vietnam policy or call for a still larger US effort. But liberals, blacks, students, and many intellectuals - groups that overwhelmingly supported
Johnson in 1974 turned from him. Therefore Johnson in 1968 announced that he would not run for another turn. President Johnson was followed by Richard Nixon, (1968), whose political career was thought to be ended after his defeat in 1960 by the late President Kennedy.

In that era the Americans learned that they had already lost 30,000 young men on Asian battlefields, therefore Nixon started to withdraw the American troops from Vietnam in conjunction with conducting negotiations with the North Vietnamese.

**Government of the US:**

In the US Government, the executive power is vested in a president, who is elected every four years, and is eligible for re-election for one more additional term. The president must be at least thirty five years of age and a native citizen of the US.

**The Congress:**

The legislative power is vested by the Constitution in a Congress, consisting of a Senate and House of Representatives. The Senate consists of two members from each state, chosen by popular vote for six years, one-third retiring or seeking re-election every two years. Senators must be not less than thirty years of age and must have been a citizen of the US for nine years, as well as be residents in the states for which they are chosen.

The House of Representatives consists of 435 members elected every second year. The number of each state's representatives is determined by the decennial census, in the absence of specific Congressional legislation affecting the basis.

**The US resources:**

Throughout most of its history the US has owed much of its pros-
perity to the abundance of its natural resources. These included metals and minerals, energy sources, water, rich soils and timberlands. Particularly important among the metals and minerals were iron ore, copper, lead and zinc, phosphates for fertilizers, and industrial minerals such as limestone for cement. Energy material - coal, petroleum, and natural gas were so plentiful that they were used with little thought of conservation.

Immediately after WW II, the US began to change from a nation that exported metals and minerals to one that imported these commodities.

Agriculture:
The farmlands in the US make up about twelve percent of the arable lands in the world. They are among the richest and most productive in the world. Of 930 million hectares of land in the fifty states an estimated 120 million hectares are planted annually. The trend in the US continues to be toward larger farms, which, with the application of good management, abundant fertilizers, and advanced mechanization, are far more efficient than smaller units.

Until 1974 a US government "soil bank" program paid farmers to keep part of their lands out of cultivation in order to prevent overproduction and decreases in prices. Then, because of world food shortages and consequent price increases, this restraint was removed and farmers were encouraged to produce as much as possible.

The US Army:
The US military is based upon possession of a small number of volunteer troops equipped with sophisticated weapons and supported by an air force and navy in a high state of readiness.

The largest commands in the US are the theater army and the corps.
The typical theater army may consist of a variable number of corps; combat forces of armour and infantry; air defense artillery; field artillery; combat support forces of aviation, engineer and signal elements; and combat service support forces of logistic and maintenance units. A typical corps consists of a variable number and mixture of infantry, mechanized infantry, armored, airmobile, and airborne divisions; one or more separate infantry brigades; one or more armored cavalry regiments; corps artillery and air defense elements and target acquisition unit, as well as combat support and combat service support units.

US Army Divisions have a common base (containing command, aviation, divisional artillery, combat, combat support units and combat service support units) and a varying mixture of combat maneuver battalions (usually ten or eleven in number in three brigades) to make up airborne, infantry, armored, mechanized infantry and air mobile divisions. US divisions can in this way be tailored to fit a variety of strategic or tactical situations.

The Foreign relations:

Despite former Secretary of State Kissinger's suggestion for a new Atlantic Charter stressing reforms in economic, monetary, and defense policies, Europe was suspicious of the new superpower relationships. Nixon who had established close personal relations with many world leaders, came under the cloud of Watergate scandal and finally resigned in 1974.

American prestige in the Middle East soared briefly when Kissinger achieved a separation of Arab-Israeli forces (1974). But Kissinger, who had been named Secretary of State in 1973 and who continued in that office under President Ford, was unable in 1975 to achieve permanent settlement.
in the Middle East. Another war between Arabs and Israelis was only one of the new potential dangers. The oil producing states of the Middle East had already imposed a brief oil embargo on the US, and had also sharply increased the prices charged for petroleum products as a means of regaining their rights.

The Carter administration (1976-1980), carried forward the policy of detente with the Soviet Union. But further attempts to broaden and extend the terms of the SALT agreements were frustrated by delay. Carter's insistence that the Soviet Union observe its human rights obligations met with Soviet protests that Carter was interfering in its internal affairs. US-Soviet relations also were clouded by Soviet support of Cuban armed intervention in Angola and Horn of Africa. The Carter administration scored a foreign policy success, however, when the Senate ratified the Panama Canal treaties early in 1978. Carter gained widespread praise by successfully acting as mediator between Egypt and Israel at Camp David, in September 1978.

As mentioned before, Carter's human rights policy and his pragmatic foreign policy were rejected by the Americans who viewed him as a weak president.

In November 1980 Ronald Reagan was elected as President of the US. Many Americans believe that he is the man who will return the country to her former position as undisputed leader of the free World. Therefore world attention is focused on the Reagan administration; wondering if it will be able to negotiate an equitable solution to the Arab-Israeli problem, despite the Israeli government's position and the lack of a United Arab position. Will he be able to aid the people of Afghanistan in the same way the Soviets supported North Vietnam? Will he be able
to support the African countries who are facing the threat by surrogate Soviet forces?

**Summation:**

I have in this introduction presented the background of the US and the Soviet Union, in order to give the reader a clear picture of the countries I intend to discuss.

I will first focus on US-Soviet military doctrine, paying attention to how each applies defensive, offensive, march, and engagement operations, at division level and below.
CHAPTER I

FOOTNOTES


3Egyptian Ministry of Information. The Year Book, Cairo; State Information Service, 1977.


CHAPTER II

DEFENSE OPERATIONS

There is no doubt that the political interests and circumstances of the country, including the nature of the threat and the terrain usually have strong impacts on military doctrine as well as the shape, size and organization of an army.

One of the purposes of this researcher's thesis is to investigate the strengths and weaknesses of the US and Soviet doctrine. In doing so I will use the division which is considered an internationally recognized tactical unit. Discussing the organizational differences, strengths and weaknesses, which are considered a necessary background for the emphasis on tactics at the division level, is appropriate before undertaking an analysis of defense operations.
The US Division Organization

The capabilities of the American divisions:

1. The Armored division;
   a. Conduct sustained combat operations.
   b. Accomplish rapid movement, deep penetration and pursuit.
   c. Disperse over great distances and concentrates rapidly from widely separated areas.
d. Exploit success, to include the effects of nuclear, biological, chemical and conventional fires.

e. Conduct covering forces operations.

f. Conduct active defense operations.

g. Operate as a mobile counterattack forces.

h. Provides organic air defense against low-altitude hostile aircraft.

i. Can command and control up to fifteen maneuver battalions through the command and staff elements of the divisional headquarters company.

This division has the following limitations:

(1) Heavy equipment cannot be lifted by army aircraft.

(2) Mobility is restricted by jungle defense, forest, steep, rugged terrain and water obstacles.

2. The Mechanized Division:

a. Conducts sustained combat operations.

b. Accomplishes rapid movement, deep penetration and pursuit.

c. Operates as mobile counterattack force.

d. Disperses over great distances and concentrates rapidly from widely separated areas.

e. Conducts limited airmobile operations.

f. Exploit success, to include the effects of nuclear, biological, chemical and conventional fires.

g. Conducts covering force operations.

h. Conducts active defense operations.

i. Provides organic air defense against low-altitude hostile aircraft.

j. Can command and control up to fifteen maneuver battalions through
the command and staff elements of the divisional headquarters and head-
quartes company.

This division has also the following limitations:

(1) Heavy equipment can not be lifted by the army aircraft.

(2) Mobility is restricted by jungle, dense forest, steep, rugged
terrain and water obstacles.

(3) Requires heavy logistic support to include rail or highway
transport of tracked vehicles for long administrative moves.
THE ORGANIZATION OF THE SOVIET DIVISIONS

THE MOTORIZED RIFLE DIVISION:

```
                    MRD
                   /|
                  / |
DIVISION HEADQUARTER /  A.R. REGIMENT BMB /  A.R. REGIMENT BTR /  TANK REGIMENT /  INDEPENDENT TK BN
                   |   |                   |   |
                  ARTILLERY REGIMENT ANTI-AIRCRAFT REGIMENT ROCKET LAUNCHER BN MAINTENANCE BN MEDICAL BN
                   |   |                   |   |
                  ANTI-TANK BN FROG BN COMMAND BATTERY MOTOR TRANSPORT BN CHEMICAL DEFENSE BN
                   |   |                   |   |
                  RECON BN SIGNAL BN ENGINEER BN ANTI-TANK GUIDED MISSILES BN TRAFFIC CONTROL CO FIELD BAKERY
```

THE MAIN WEAPONS AND EQUIPMENT:

- MEDIUM TANK 214/1265
- ARMORED INFANTRY COMBAT VEHICLE "BM8" 117
- ARMORED PERSONNEL CARRIER 334
- 120 MM MORTAR - M 1943 54
- 132 HOWIZER D-30 72
- 132 HOWIZER, SP-M - 1974 18
- MULTIPLE ROCKET LAUNCHER - BM-21 18
- FROG - 7 - TEL 4
- 100 MM ANTI-TANK GUN T-12/T12A 18
- ANTI-TANK GUIDED MISSILES MANBACK 24
- ANTI-TANK GUIDED MISSILES VEHICLE 27
- 23 MM ANTI-AIRCRAFT GUN ZSU-32X4 16
- SA-6 GAINFUL MISSILE SYSTEM 20
- SA-9 CASKIN MISSILE SYSTEM 16

24
The Soviet Tank Division:

The main weapons and equipment:

Medium tank: T-55 162/64/73 322

Armored personnel carrier: BTR 96

Armored infantry combat vehicle: 147

Artillery:
- 120mm mortar M1974 18
- 122mm howitzer D-30 36
- 132mm howitzer, SP-M-1973 18
- 155mm gun-howitzer SP-M-1973 18

Multiple rocket launcher BN 31 4

Anti-tank:
- Anti-tank guided missiles vehicle 'Brom' 32
- 23mm, 5p anti-aircraft gun 'ZSU-23-4' 16
- SA-6 gainful missile system 70
- SA-7 Grail missile system 75
- SA-9 Gaskin missile system 16
The Soviet organization at division level, includes an antitank guided missile battalion, which consists of twelve antitank guided missile vehicles "BRDM" plus antitank guided missile companies at the motorized rifle regiments and the tank regiment as shown below:

a. The motorized rifle division:

<table>
<thead>
<tr>
<th>2 MR regiments &quot;BTR&quot;</th>
<th>MR regiment &quot;BM5&quot;</th>
<th>Tk regiment</th>
<th>Division troops</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antitank guided missile company (five vehicles) plus one vehicle &quot;BRDM&quot; for command and control</td>
<td>None because most of the regimental vehicle &quot;BM5&quot; equipped with antitank guided missile</td>
<td>Antitank guided missile company (five vehicles) plus one vehicle for command and control</td>
<td>Antitank guided missile battalion (twelve vehicles)</td>
<td>Twenty seven antitank guided missile vehicles</td>
</tr>
</tbody>
</table>

b. Tank division:

The Soviet tank division has the same antitank guided missile battalion as in the motorized rifle division organization in another distribution as shown below:
<table>
<thead>
<tr>
<th>Three tank regiments</th>
<th>Division troops</th>
<th>Total</th>
</tr>
</thead>
</table>
| Antitank guided missile company "five vehicles"
plus one vehicle "BRDM"
for command and control. | Antitank guided missile battalion,
twelve vehicles | Twenty seven antitank guided missile vehicles |

Three regiments X five vehicles = fifteen antitank guided missile vehicles

The main functions of these antitank guided missile subordinate units are:

It can be utilized as an antitank reserve of the regiment/division commanders to direct it independently or in conjunction with a tank reserve and movement obstacles detachment in counterattack or blocking actions. It can be utilized also in conjunction with movement obstacles detachments during offense operations to secure flanks and gaps, as well as part of an anti-airmobile reserve to destroy the enemy's helicopters.

The antitank guided missile takes part in a counterattack.
The antitank guided missile units secure flanks during offense operations.

The Soviet organization has the following strengths:

The motorized rifle division is in fact a combat arms formation. It includes 214-265 medium tank (T62) and 117 armored infantry combat vehicles (BMB) as well as 196 artillery guns in various caliber, which give the division the capability to operate independently. The characteristics of BMB make the motorized rifle division also extremely effective as it doubles as a personnel carrier and a combat vehicle. It also possesses strong antitank assets and tremendous fire power as well as a good antiaircraft system, particularly the 23mm gun (7SU) which is considered an effective weapon against the attack helicopter.

The following are considered weaknesses of the Soviet divisional organization:

The Soviet division does not have aviation assets in its own
organization. Close air support is usually considered by Soviet commanders as a waste of time, because the request should go through the command channels up to the army or the front and the response often is too late. The Soviet division also does not have attack helicopters initially in the organization and reinforcing it by the attack helicopters is usually considered beyond the capacity of the commander's control. The Soviet battalion has weak combat weight, particularly the tank battalion in comparison to the American tank battalion, for instance the Soviet tank battalion consists of thirty-one tanks, while the American consists of fifty-four tanks. Also the Soviet division does not have the ability for airborne operations.

The noticeable strengths of the US division organization are:
The US division has elements of close air support which facilitate immediate air support for the division's units. It also has attack helicopter units which are highly combat effective. The US armor battalion, within the division organization has double combat weight as compared to the Soviet armor battalion excluding the Soviet independent battalion. The US division also has technological devices, which facilitate easy fire control and accurate shooting. In addition, its organizational structure facilitates flexibility in task organizing, and forming brigades according to the combat situation.

The following are weaknesses of the US division organization:
The US division organization has a noticeable lack of artillery assets and inadequate air defense weapons. The M 113 is considered only a personnel carrier not comparable to the Soviet BMB, which doubles as a fighting vehicle. Having also too much organizational flexibility may cause command and control problems as well as difficulties in coordinating the efforts of brigades.
SECTION I

The United States Army's objective is to win the land battle, to fight and win in battles, large or small, against whatever foe, and wherever it may be sent to war. The US leaders consider the next battle they have to fight can not be known, where or when, but they do assume the potential enemy will possess weapons generally as effective as their own. The US leaders also calculate that the enemy will have them in greater numbers than they will be able to deploy, at least in the opening stages of conflict, because the lethality of modern weapons continues to increase sharply. US planners also expect very high losses to occur in short periods of time, and entire units could be destroyed quickly if they are improperly employed. Therefore the United States Army today must, above all else, prepare to win the first battle of the next war. The US leaders also consider success will depend on their ability to assess correctly the dynamics of modern battle; to reassess them continually in peace with the ever changing nature of the modern battlefield, and to communicate an effective battle doctrine throughout their forces.

Changes in intensity and lethality of modern battle and the need to fight outnumbered present to the United States Army challenges greater than those faced on previous battlefields. The objective however, remains unchanged: To win the land battle. Therefore, the US leaders view that the army must obtain the maximum combat effectiveness of all forces in the combined arms team. To achieve this effectiveness the United States Army depends on sound doctrine. This doctrine must be derived from an accurate assessment of dynamics of modern battle, and an understanding of all its implications. Then to be effective, this doctrine must be disseminated throughout their forces.

To win the battle, there are four prerequisites that must be met:
Adequate forces and weapons must be concentrated at the critical times and places. The battle must be controlled and directed so that the maximum effectiveness of fire and maneuver is applied at the decisive time and location. The battle also must be fought using cover, concealment, suppression of enemy fire and combined arms teamwork to maximize the effectiveness of the United States weapons and to minimize the effectiveness of enemy weapons. The United States leaders also view that the teams and crews must be trained to take advantage of maximum capabilities of their weapons.

These are the American general's principles to win the land battle, which are spelled out in defense, offense and movement to combat doctrine.

The defense fundamentals (doctrine) includes: Knowing the enemy. The US leaders visualize that in Europe their army, together with the NATO allies, will engage the combined armies of Warsaw Pact, if war breaks out. Elsewhere in the world they also might face forces organized, trained and equipped by the Warsaw Pact countries. Therefore, it is necessary to study their weapons, and the tactics and techniques for them.

In order to offset the numerical superiority of the attackers the United States leaders consider seeing the battlefield continuously as an important factor to defeat the enemy, prior to the start of the attack and until the end of the battle.

The US commander must also decide exactly when and where he will concentrate his forces based upon the results of his intelligence operations (seeing the battlefield) and his analysis of that information. He should also decide how much force will be required to cope with the enemy attack within the terrain and the space limitations of the defensive
area. As a result he seeks not to be outweighed more than three to one in terms of combat power.

The US commanders emphasize fighting as a combined arms team. They organize their forces for combat according to the size and density of the enemy attack, the characteristics of the terrain to be defended, and the mix of the defending units. Generally, tanks and long range antitank guided missile (ATGM) are employed on open terrain, mechanized infantry in urban, wooded or less traffic areas. However, the decision on how to cross-reinforce, or even whether to do so, depends upon how the commander decides to fight the battle.

The US leaders consider also the exploiting of the defender's advantages are necessary to win the battle and depend upon how well the junior commanders (companies, platoons, crews, commanders) exploit all the built-in advantages of the defender. These commanders should see that each weapon is sited to take advantage of its range and purpose and to minimize its vulnerability to counterfire or suppressive fire. Their fighting vehicles must be covered, or at least hull down. They must fire first. The terrain must be exploited and reinforced when necessary with mines and obstacles to slow down the enemy and improve the effectiveness of the weapons of the defense. Each battle position must combine the characteristics of a defense and an ambush. Several battle positions in mutual support should multiply the strength and value of each. The combination of all these advantages repeated in each set of position, in depth, supported by field artillery, close air support and attack helicopters, should easily inflict very high losses on an attacking enemy.

The US leaders believe the defender enjoys many advantages such as the opportunity to know the terrain and carefully emplace weapons and units to maximize the capabilities and minimize the vulnerabilities, so the following are some reasons to go on a defense:
To cause an enemy attack to fail, to gain time, to preserve forces, facilities, installations, activities or to retain tactical, strategic or political objectives, and to control essential terrain. To wear down enemy forces as a prelude to offensive operations, to force the enemy also to mass so that he is more vulnerable to our firepower.

The Americans believe in active defense and they view it as a decisive way to defeat an outnumbered enemy. They also consider it as the way to have the initiative on the enemy. The division is considered the basic organization to carry out this kind of defense.

To achieve the defensive mission, the division commander divides the defensive area into: Covering force area, main battle area and rear area as shown below:

The covering force area (CFA) begins along the line of contact and extends rearward to the forward edge of the main battle area (MBA). The mission of the covering force is to go locate the enemy and fight him
with sufficient force to cause him to deploy, plan an attack, concentrate forces to attack, and thus reveal the location and the direction of his main effort. This must be done sufficiently far forward to permit forces in the main battle area to concentrate to destroy the enemy main effort. In order to do this, the covering force must strip away enemy reconnaissance units, defeat the advance guard, force the enemy to deploy his main body, and cause the enemy to bring up artillery and second echelon forces to organize a deliberate attack. As the enemy shifts forces, brings up artillery and masses for a main attack, he will reveal his strength and where he intends to attack. A covering force also seeks to hide the actual location of the main battle area from the enemy. To do this the covering force may have to fight forward of the main battle area, until a specified time so that the main battle area preparations can commence.

The covering force takes up the fighting as far forward of the main battle position as possible. Its battalions and squadrons fight from a series of coordinated, mutually supporting battle positions. These positions are sited to make maximum use of protection offered by terrain and are designated to minimize the vulnerability of the defender's weapons systems while maximizing their effectiveness. Therefore, to units in the covering force itself, the battle is very much like the action of any battalion in the main battle area. When directed to do so, the covering force hands off the enemy to main battle area forces, then moves to a designated area in the main battle area and prepares for operations there. Normally, this will be a battle position deeper in the main battle area, where there will be some time to rearm, refuel, reorganize and prepare to fight again. Thus, we find the cover-
ing force has a difficult mission. It must first find the enemy, then
draw him into the fight in such a way that his main body must deploy.
To do this, it is necessary to disrupt the basic elements of the offensive
doctrine of the enemy forces, which is mass and momentum. Both can be
denied the enemy, but it is quite clear that the task will not be easy.
Indeed, it may well be necessary for the covering force to attack
vigorously, either to destroy reconnaissance or advance guard elements,
or to divert enemy pressure from one area to another, thus dissipating
mass and moderating momentum.

The size and composition of the covering force usually depends
on the mission, enemy, terrain, and forces available. These factors
take on added significance and complexity depending the attack mode
chosen by the enemy, depth of the area available for covering force op-
erations, and the time required by the main battle area forces to get
set for action. The covering force is normally tank heavy. A covering
force operating in front of a division could well consist of up to four
or five tank heavy battalion task forces or cavalry squadrons, attack
helicopter, field artillery, air defense, and engineer units. The cover-
ing force may be controlled by either the division or corps. Provision
must be made to change command arrangements in the course of battle as
enemy strength and intentions are deployed. (see figure 1)

A division covering force may be controlled in several ways:
The division commander may control it, using a tactical command post, or
he may designate an assistant division commander to command the force and
provide a small staff to assist him, or brigade commanders may control
that portion of the covering operating forward of their main battle area
positions.
The main battle area is considered the place in which the decisive battle is fought, where forces are concentrated to destroy the enemy main attack. As a result of concentration, forces will usually be unequally distributed laterally. There will be differences in the way combat forces fight the defensive battle, depending upon whether they are in the area where forces are concentrated or in the area where forces are economized. In the main battle area, tank heavy task forces are concentrated in depth along the major avenues of approach into the area to be defended. However, some main battle area brigades can expect to be organized initially with mechanized infantry heavy task forces in situations where a strong covering force is established. Task forces from the covering force join the fight in the main battle area when they become available. (see figure 2)

The division controls the area behind brigades, which is called the rear area. The division command post and supporting units are not located in the main battle area. They are normally located in the division rear area. Since units in reserve will usually be committed to fight in the main battle area by placing them under the operational control of brigades, they will normally be located in the main battle area from outset.

Sometimes it may be necessary to establish boundaries to facilitate command control. However, brigades often fight in battle areas, which are, in turn, composed of battalion battle areas or battle positions. Therefore, brigade boundaries may not have to be established at all. Position areas designated to be the rear brigade battle areas may be established. These position areas will serve to designate the location of units, activities, agencies, and facilities located there.
How the US commanders organize the defense: When the division takes up an active defense, forces must be fitted to the terrain. To do this, it is necessary to thoroughly study the terrain over which the battle is expected to be fought. Personal reconnaissance is essential. All avenues of approach into the division area should be clearly identified. Terrain which can slow or block lateral and forward movement of enemy forces is also identified. Also the threat attack doctrine must be carefully studied. Once avenues of approach and the likely action of the enemy have been identified, it is necessary to determine the number of weapon systems required to defeat enemy forces that can be deployed along each avenue of approach. This determination is based on two factors:

Maximum number of weapon systems the enemy can deploy at one time on a given avenue of approach, and the length of time this target array will be exposed (this evaluation is based upon thorough knowledge of enemy organization and tactics, careful study of the terrain along each avenue of approach, and a reasonable estimate of the effect of obstacles in the area). This determination is also based on the rates of fire and the capabilities of defending weapon systems to kill enemy vehicles at ranges within which they will be exposed.

Based on the general number of weapon systems necessary to defeat the enemy, battalions and squadrons are allocated in task organized defending forces.

Not only so, but also the United States commanders use the following matrix to make sure that the available forces are enough:
Assuming that the enemy forces available are 3 battalions, so the commander has enough forces to fight the battle.

This estimation based upon a ratio of 1:3

The active defense from the US point of view might be fought in
three phases: Covering force actions, main battle within the main battle area and counterattack actions.

The covering force action usually takes place forward of the main battle area. Even before the covering force establishes contact, the enemy should be harassed and weakened by air attacks. As soon as the enemy comes within range, artillery fire will be brought to bear. To achieve this capability at the earliest possible time, some artillery may have to be deployed forward in the covering force area.

As soon as the enemy advances into the covering force area, the covering force should make contact and should fight an action of such intensity that the enemy will have to launch his breakthrough attack prior to reaching the main defense area. The covering force must strip away enemy reconnaissance, advance guards and forward air defense elements and make contact with the main thrust early. Accordingly, the covering force must have the strength to fight a battle of such magnitude that the corps and divisions will be able to see the battle as early as possible. The covering force should destroy as much of the enemy as possible without losing freedom to maneuver. They should be predominantly armored cavalry, or the national equivalent, reinforced by tanks, anti-tank weapons, artillery, air defense artillery, engineers, and anti-tank helicopter forces to inflict the maximum distraction of the enemy from the outset.

In the main battle area the conduct of the defenses must be elastic, active and flexible, with combat power well forward. Units must be prepared to shift forces to concentrate combat power at the enemy's point of main effort to stop the enemy well forward. The enemy's intentions
must be anticipated in order to force him to fight the defender on the
ground of the defender's choosing. The extended frontages which have to
be defended and the concentration of combat power at the point of main
effort will inevitably lead to gaps in the defense or high risk area on
the flanks. Combat power which can be concentrated most rapidly, such
as artillery fire, remotely delivered mine, tactical air and anti-tank
helicopters, should be brought to bear quickly while armor, mechanized
and infantry forces move.

The active defense orientates on destroying the enemy forces, and
positions are established in depth in order to allow continuous concen-
tration of combat power to wear down, weaken and destroy the enemy. Ter-
rain should not be yielded without a compelling reason such as maintain-
ing the effectiveness of a fighting force by avoiding being overrun.
Strong points can be established; however, they are the exception rather
than the rule because of the likelihood that a strong point may be by-
passed and cut off. Judgement will be the key as to when to establish
strong points.

At all times in the main defense area, the offensive spirit of de-
fense must be maintained, and local counterattacks should be executed by
fire and maneuver whenever a high degree of success can be anticipated.
Barriers and minefields are used to increase the advantages of the de-
fender.

The counterattack should be conducted only when the gains to be
achieved are worth the risks involved in surrendering the innate advan-
tages of the defender. Because counterattacking forces give up most
advantages of the defense, they must protect themselves from enemy ob-
servation and fire by judicious use of terrain, smoke, night and bad wea-
ther and they must be supported by direct and indirect suppressive fires on every weapons system that can bring fire on them. Reserve slopes and limited objective attacks should be the rule rather than the exception. Often, counterattacks will consist of moving tanks and anti-tank guided missile (ATGM) to the flanks or even to the rear of exposed enemy elements. From these positions, enemy armored vehicles can be destroyed by long range fires alone. If it is necessary to close with the enemy positions, the counterattack force should move by routes, which protect it from the enemy's overwatching elements. Sometimes it will be necessary to counterattack to recapture critical terrain. In these cases all the principles of the attack should be brought into play.

Reviewing this explanation of the US principles and fundamentals and the way the US leaders apply them, the following appear to be strengths and weaknesses in their doctrine of the defensive operations:

1. The strengths:
   a. This kind of defense offers the defender all the defensive advantages such as terrain, cover and concealment. Not only so, but also offers the defender the initiative because of the contact operation of the covering force and by attacking the enemy all the way up to the battle area, the enemy might lose the initiative, because he might be forced to divert from his plans.
   b. Active defense doctrinally concentrates on causing the enemy casualties, which eventually make it easy to regain terrain or even win a new terrain.
   c. It is not easy to bypass or cut off the US defenses because they have mobility, and are not restricted to fixed areas.
   d. Attacking the enemy with a reasonable strength in the covering
force area facilitates discovering the main effort of the enemy and his main directions of advances. It will be easy then for the forces in the main battle area to react correctly in order to stop and destroy him.

e. This kind of defense doctrine indeed gathers most of the defense area and the mobile defense doctrine. Some of these similarities are:

   The selection of the defensive position in both active defense and area defense is based upon the suitability of the terrain by offering the defender good observation and fields of fire to get the maximum effect of all available weapons. Both of the military doctrines allow the defender to set up excellent obstacle systems in front of the main battle area or the FEBA. The extending of constructing alternative positions gives the defender the advantage of fighting from positions to canalize the penetration.

   f. Active defense doctrine depends upon building up the effort in the threatened areas, according to the battle's dynamics (progress).

   g. Active defense principles avoid wasting forces by distributing them on the ground, and emphasize setting up suitable size forces in the proper place, according to an analyzing process for both the enemy and the terrain.

   h. Active defense doctrine gives also junior commanders of battalions and below the complete freedom to act and react according to the development of the battle in their directions.

   i. Brigade level controls its capability to accept additional support such as attack helicopter, close air support and others particularly during the fighting periods.

2. The weaknesses:

   a. The potential dangers of the US defensive doctrine are apparent in
the lack of the defensive depth. For example, if the enemy succeeds in penetrating the main battle area, he will not face a real reserve at the brigade level or even a strong divisional reserve.

b. The US doctrine of well forward defense causes the division commanders to keep up a small reserve which is not able to react effectively.

c. The active defense emphasizes doing a great maneuver all over the frontage in critical times, which might cause the defender problems (see figure 3).

d. Lack of troops and extended frontage might cause the commanders problems, particularly in the enemy's main directions.

e. The cavalry tasks act as a covering force to deny them achieving their main mission of gathering information, especially under the enemy pressure.

f. Defending of a large frontage creates great gaps, which give the enemy the opportunity for easy penetration, and spreading out into the defensive zones.

Section II

The Soviets view the military doctrine on the nature of the modern combined arms as the use of armed forces and the requirements for war preparedness. The two essential components of military doctrine are political and military technology.

Specifically Soviet military doctrine determines the structure of the Soviet Armed forces, allocates the resources and output and orients research and development efforts to support the armed forces. Military forces also is the blueprint drawn up by the highest Soviet leaders, which describes the shape and the way to use their armed forces
in detail.

The Soviet military doctrine includes the component of military science (military arts), which is the theory and practice of engaging in combat operations and armed conflict. It is also concerned with the use of armed forces and with the support of combat activities from all national resources.

In the Soviet military art there are three main categories:

1. Strategic - national and theatre level.
2. Operational - Fronts and armies.
3. Tactical - divisions.

At the operational and tactical levels, there are lists of principles pertaining to military art in general and tactical doctrine in particular. They are considered the basic guidance for those levels and, sometime, they are inviolate although the Soviet leaders say that they may be updated when applicable.

Soviet principles have been influenced by World War II experiences, training experiences and the probability of conducting conventional and unconventional war. Throughout the Soviet military history principles have a degree of flexibility. Also the Soviet military leaders classify military principles into the following priorities:

1. Concentration of main efforts and creation of superiority of forces over the enemy at the decisive place and time (MASS).
2. Mobility and high rates of advance in all combat operations.
3. Achieving surprise and maintaining security.
4. Preservation of the combat effectiveness of friendly forces.
5. Conformity of the goal.
6. Command and control coordination.
Those are the Soviet general principles, which usually split out into defense, offense and march and engagement principles.

Defensive doctrine, based on the vast defensive battles of World War II, are demonstrated in a thorough recognition of the impact of weapons of mass destruction and in the conventional posture of the defensive use of armored combat vehicles, ground air defense weapons, and anti-tank guided missiles. This is based upon the following principles:
1. Concentrate all weapons fire in the decisive directions and areas.
2. Hold firmly the vital areas and positions which control the enemy’s avenues of approach.
3. The great maneuver by fires, troops and means.
4. Strong counterattacks.
5. Great use on obstacles.
6. Clever exploitation of the defensive feature of terrain and the engineer preparation for it.

Although the Soviets see that the only means to achieve decisive victory is the offense, there are stated reasons for going on the defense:
1. To consolidate gains of the advance elements.
2. To await additional resources when temporarily halted by the enemy during the course of an offensive.
3. To protect flanks of a formation, or along a sea coast.
4. To repulse an enemy counter-thrust.
5. To regroup after severe losses.
6. To protect the withdrawal of troops.
7. As a result of a failure offensive operations.

In organizing and establishing the defensive operation, the Soviet
leaders take into consideration the nature of the mission, the enemy's situation, the terrain features, troops available and the available time. Therefore the defense may take one of the following forms:

1. According to the possibility of contact with the enemy;
   a. Defense under the circumstances of direct combat with the enemy.
   b. Defense without direct contact with the enemy.

2. According to the frontage;
   a. Defense on a large frontage.
   b. Defense on a normal frontage.

3. According to the engineer preparation and the time available for the occupying;
   a. Deliberate defense.
   b. Hasty defense which can be turned into deliberate defense.

4. According to the time;
   It can be conducted during daylight or night.

5. According to the feature of terrain;
   It can be organized and conducted in desert, mountain, cultivated or cold weather area. It also can be adopted along sea coast or water barriers and built up areas.

The Soviet leaders describe the defense as an active defense, which has the ability of causing the enemy heavy casualties by using all fire resources available, by conducting fire, means and troop maneuver from the depth to the threatened directions, and also by using obstacles and launching strong counterattacks. At the same time to counter the modern attacking forces, the defense should include anti-tank, antiaircraft, anti-artillery and anti-airborne resources.

The Soviet leaders recognize the battle location (battle posi-
tions) as a troop grouping, which should be taken according to the far-
seeing and the nature of the defensive battle. The battle positions
should be prepared according to the troop grouping, which was adopted be-
fore, and should be adjusted to the troop location in order to meet the
protection against the nuclear weapons. It should include the total
capabilities of means and equipment of units and subordinates during the
defensive battle. Because of these factors, Soviet defensive area at
division level is divided into:
1. Strong points at the company and platoon levels.
2. Defensive area at battalion level.
3. Defensive sector at regimental level.
4. Defensive zone at divisional level.

The defensive sector at the regimental level consists of the
depth of battalions' first and second echelons and the distance between
them. Battalions' first echelon are located on the depth, which should
facilitate the use of all means of fire in front of the FEBA, to cause
casualties as much as possible, and deny the enemy opportunity to pene-
trate.

Because of the importance of the FEBA from the Soviet point of
view, the Army commander determines it.

The second position is built up on a depth two kilometers or more
and on distance of four to six Kms from the FEBA, and occupied by bat-
talions' second echelon to prevent the enemy, who succeeds in penetrating
the first echelon. It creates a suitable circumstance for going on coun-
terattack. The basic deciding factor of the distance of location of the
battalions' second echelon is to support the battle of battalions' first
echelon by the fire of the primary weapons and by close air support.
which includes the covered maneuver to the flanks and to the depth, besides launching the counterattacks.

Division second echelon is usually sited at the distance which will deny the enemy use of his artillery fire against it, and guarantee cover and concealment: also to allow the maneuver element to launch a counterattack or go into blocking positions.

(for frontage and depth norms see figure 4)

Establishing security zone at the division level, is necessary from the Soviet point of view. The depth of the security zone is twenty to thirty Kms which includes the following elements:

1. Platoon size element as forward fighting point of the battalion level.
2. Company size unit as forward fighting point at the regimental level.
3. Battalion size unit as forward combat detachment at divisional level (see figure 5).

The mission of these elements are:

a. Delay the enemy's attack.
b. Force the enemy to deploy early.
c. Discover the enemy's strength and the direction of the main attack.
d. Protect the defenders against the sudden attack.
e. Cause the enemy casualties before his arrival to the FEBA.

The conduct of the defensive battle is characterized by being positivity, activity and maneuverability as well as struggle spirit and initiative. All these elements can be achieved throughout by carrying out air reconnaissance, distributing the troops in the defensive zone, keeping up a suitable second echelon and reserve. (See figure 5).

The Soviets organize and conduct the defensive battle according
to the following phases.

1. Conduct the defensive battle against the enemy on the avenue of approach.
   a. Since the attack can be launched after occupying initial positions or from march the Soviets should discover the enemy preparing for the attack and his main grouping especially his armored units and artillery, also the starting time of the enemy's attack direction of the attack and the lines of deployment.
   b. As soon as discovering the enemy's grouping and his deploying for the attack, the close air support and the artillery from temporary position begin to suppress him while moving across narrow areas, crossroads and bridges, in order to force him to deploy his forces early and to cause him a great attrition in conjunction with the forward elements. This also is to reveal the direction of his main thrust. The forward elements split from the second echelon of the same level they work for, and they withdraw only by the order of the division commander, they also are reinforced by tanks, artillery, engineer and anti-tank weapons.
   c. Counter-fire preparation starts by the order of the army commander against the enemy's supporting fire, second echelon and reserve to cause the enemy casualties and to effect troop morale. Counter-fire preparation's time depend upon the means of fire and ammunition available, and it could be, as long as thirty to forty minutes.
   d. During the counter-fire preparation, the defenders concentrate fire to destroy tanks, armored personnel carriers and electronic warfare assets.

2. Conducting the defensive battle to halt the enemy in front of the FEBA line:
a. The defenders usually put emphasis on the time of the attack to allow the opportunity for the subordinates to be ready to stop the enemy and destroy him. The Soviets consider the time of transferring the threat's preparatory fire to the second echelons as the time of attacking.

b. As soon as the enemy starts the attack the subordinate units begin to engage him with all available means of fire at the effective ranges, in order to destroy his tanks, which usually accompany the infantry. At the same time the close air support starts attacking the second echelon, reserve artillery and command and control posts.

c. The division commander usually concentrates artillery fire on areas which are more threatened.

d. The enemy who attacks throughout the gaps must be destroyed by coordinated fires, tank ambushes and artillery fire.

e. After preventing the enemy penetration of the FEBA, the Soviet leaders emphasize rearranging the fire systems and restoring ammunition, then reestablishing the destroyed positions.

3. Stopping the enemy penetration.

a. When the enemy penetrated the FEBA, commanders take prompt measures to stop and canalize the enemy's major grouping and prevent him spreading out into the depth of the defense, dividing him into subgroups to facilitate destroying him in detail by all weapons, antitank reserves and the second echelon to secure future action should be taken by reserves.

b. At the same time the commander keeps an eye on the enemy's second echelon and reserves, particularly their locations, direction of movement and line of departure, not only so, but also the appearance of any new
troops in the vicinity of the penetrated areas.

4. Launching the counterattacks:
   a. Soviet leaders place some conditions on launching counterattacks:
      (1) The penetrated enemy must be completely stopped.
      (2) The ratio should be in the best interest of the counter-attacking forces, especially in tanks.
      (3) They must cause the enemy casualties just before launching the counterattack.
      (4) Soviet fire preparation must precede launching of the counterattacks.
      (5) Direction of movement and the lines of deployment should be secured.
   b. If the enemy succeeds in penetrating in various directions, the priority of the counterattack must be given against the major enemy grouping.
   c. The counterattack at the regimental level is launched against the main grouping which did not completely penetrate the defensive area (battalion's, first echelon) (see figure 6).
   d. The counterattack at the divisional level is launched against the enemy's main grouping which did not succeed in penetrating the regimental defensive sectors.
   e. If the defenders failed to stop the enemy in either the defensive areas or the defensive sectors. The division reserve should occupy blocking positions to stop the enemy and cause him as many casualties as they can and to secure future operations of the higher second echelons and reserves.

Throughout the discussion of the Soviet doctrine and principles,
and how the Soviet leaders apply them in the battlefield, the following observed strengths and weaknesses are noticed in defensive operations:

1. The Strengths in the Soviet military doctrine:
   
a. The Soviet defensive system offers a strong defense along all the depth of the defensive sectors and zones.

   b. The Soviet defensive system offers a good observation of the enemy's activities from a long distance in front of the FEBA of the flanks and in the depth of the defensive sectors and zones. This observation system consists of engineer, artillery and chemical observation posts, besides the radar sets.

   c. The Soviet defensive system offers the defenders a second echelon and reserve at battalion, regiment and division levels. The motorized rifle regiment keeps a reinforced tank battalion as a reserve plus a motorized rifle battalion as a second echelon, meanwhile the motorized rifle division maintains a tank regiment as a reserve and up to a motorized rifle regiment as a second echelon, which almost equals one third or more of the total strength of the Soviet regiment or division. In addition to keeping these reserves the Soviet regiments and divisions might also include an anti-airborne reserve, which consists of infantry and tank elements.

   d. The Soviet defensive system offers the defenders quick control to successfully destroy the enemy's airborne or sabotage in the depth of the defensive zones. In the Soviet operational documents, there is a separate plan, called guard and security which discusses in detail the likely action of the enemy in the depth, particularly against the command posts and logistic areas. This plan includes subordinates with a mission of suppressing these actions, besides a complete cooperation among all
combat and combat support units, which are sited in the vicinity of these areas.

c. The Soviet engineer preparation for the defensive sectors and zones is characterized by effectiveness and the ability to bear the enemy fires and offers the defenders cover and concealment. The Soviet defensive areas, sectors and zones consist of main positions, alternative positions (flank and rear) and dummy positions. Other engineer activities, such as the preparation of the command and control posts, observation posts and artillery main and alternative positions, are also carried out.

f. As a result of World War II the Soviet leaders have seen the importance of using minefields on a great scale in integration with engineer preparations to decrease the enemy's attack momentum, and to reinforce his troops going into prepared directions (killing zones). They also use minefields to secure the exposed flanks and the gaps, and they use them as part of the counterattacks strength, by allocating them on the vulnerable flanks.

g. The Soviet system of firmly holding the terrain could be an advantage, particularly if this terrain is a vital objective, such as straits, sea ports, bridges.

h. The integration between the fire system and the system of obstacles is considered a Soviet advantage of defense operations.

i. The Soviet defense doctrine of using the reserves in conjunction with engineers units and anti-tank units is considered an advantage for the defenders. The Soviet commanders consider the integration among the combat elements, engineer elements and antitank elements necessary to canalize the enemy and secure the counterattacks actions.
j. The Soviet organization of defensive positions and alternative positions, both integrated with the fire system, offers the defenders the capabilities of controlling the enemy penetration not only within the FEBA area, but also in the depth.

2. The Weaknesses:

a. It is obvious that the Soviet military principles lack a degree of flexibility, in other words, the Soviet leaders have set priorities to achieve the military doctrine and principles. For example, mass is the first priority to achieve, then the mobility and high rate of combat operation, after that achieving surprise, security and so on.

b. Soviet leaders insist on firmly holding terrain, rather than destroying the enemy. An example is the use of counterattacks which initially aim at restoring lines, positions or areas instead of destroying the enemy as a first priority.

c. The Soviet engineering structure of the defensive areas, sectors and zones, generally takes a normal shape (lines) which are based on World War II experiences. Not only so but also the defensive echelons are built up according to norms. For instance, the distance between the battalions first echelon and the battalions second echelon, should be two to three Kms, and the distance between the battalion second echelon/regiment first echelon and the regiment second echelon/division should be five-six Kms and so on.

d. The Soviet leaders once put the reserves just behind the units in the main efforts, and usually put the main efforts in the middle of the formation. This kind of technique makes it easy to discover the entire defensive plan just from discovering the locations of the reserve. It also denies the reserves complete free maneuver to the flanks.
c. The strong points particularly in the defensive area (battalions first echelon) have very limited abilities to maneuver except by fire. It is easy to bypass some of them under the preparatory fire and by using smoke screens. The strong points in the defensive second echelon (battalions second echelon/regiments first echelon/division) have the ability of limited maneuvers into alternative positions in the vicinity of the major area.

f. The borders between subordinate units and units are unchangeable,
especially at the same level. For instance, it is difficult to find a regimental reserve launching a counterattack in another defensive sector. But the division reserve has the freedom to go anywhere within the division zone.

g. The Soviet counterattack at all levels aims at restoring positions rather than following the enemy to destroy him to realize a total victory. Namely the counterattack forces have no mission to follow the
enemy to completely destroying him beyond the FEBA, and the FEBA is considered an iron fence. So, Soviet leaders usually need time to stop at the FEBA, then estimate the situation to make a decision to consolidate these areas or to continue (although the time is a major key in such cases).

h. The lack of coordination between units is considered a disadvantage, particularly between regiments and divisions, and the gaps between them are weak areas, if the attackers concentrate on them. Usually the regiments and the division commanders protect these gaps, initially by artillery fire and tank ambushes, which consist of no more than teams.

i. Because of the military norms, which go into any Soviet decision at all levels, it is obvious that the Soviet leaders, particularly at regimental level and below might face problems to confront any unforeseen situation.
THE MAIN BATTLE AREA
(Figure 2-2)
THE MANEUVER IN THE US ACTIVE DEFENSE

DOCTRINE

(Figure 3-2)
THE ORGANIZATION OF THE RECON ACTIVITIES
AT DIVISION LEVEL AND BELOW

(FIGURE 5-2)
CHAPTER II

FOOTNOTES


7 FM 71-3, Armored and Mechanized Brigade, Headquarters, Washington, Department of the Army, 25 July 1980, pp. 4-3, 4-17, 4-26 - 4-32.


10 Hafiz, Notes on Vestrel Academy, Moscow, 1974-1976.


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Section 1: The US offensive operational doctrine:

Questions of military doctrine and force structure may seem somewhat esoteric to many officers. But doctrine and force structure are nothing more than the method of fighting and the number and type of forces that method requires. Doctrine and force structure ultimately define the job of every officer, and the correctness of that definition determines whether each officer's effort will lead to success or failure.

The US ground force doctrine is generally divided into two basic areas: Firepower/attrition and Maneuver. Both employ the same elements, fire and maneuver, but firepower attrition doctrine uses maneuver primarily as a way to move and position delivery systems so that firepower can physically destroy the enemy by attrition. According to current doctrine regarding firepower attrition, the objective of military action is physical destruction for enemy. This is not the objective stated in the maneuver doctrine, where firepower is used only when necessary to create opportunities for maneuver. The objective expressed in the doctrine is to break the spirit and the will of the enemy command by using surprise to place enemy forces in a dangerous operational or strategic situations.

The primary objective of the US offensive operations is to destroy the enemy by breaking through his defensive system and driving rapidly and violently into his rear to destroy artillery, command posts,
air defense, logistic support, and command systems.

From time to time, offensive operations may also be conducted to secure key terrain, to gain information concerning enemy strength and dispositions and occasionally to deceive the enemy. Even though defensive operations are often necessary and sometimes preferred, as a general rule offensive action is the only way to achieve decisive results on the battlefield.

Since the threat forces can not be equally strong everywhere, it is usually possible to concentrate sufficient combat power to outweigh them at a place decided on by the attacking commander. Even during defensive operations, the commander should never miss an opportunity to attack.

The US military leaders have established criteria for the commander in the conduct of offensive operations. Although the application of each of the following criteria may vary from time to time and from the situation to another, they are the same for any offensive operation:

The US leaders believe that to be successful in offensive operations, it is first necessary to know the enemy (see the battlefield) that is having knowledge of his organization for defense; the capabilities of his weapon systems; and how he customarily disposes his forces on the ground.

Battalion task force and small unit commanders, for example must understand how the enemy normally defends from a series of strongpoints in depth, attempting to draw the attacker into fire traps.

Division commanders and their staff must know much more. They must understand how the enemy uses field and air defense artillery to support the defense; how divisions, regiments, battalions are controlled;
how the defensive battle is logistically supported at the division level and below; and where the tank reserves are usually located and when they are deployed. The division commander must also tell his information gathering agencies what else he needs to know, such as where the enemy is weak or can be weakened.

In the attack, the battalion task force commander can seldom see the terrain or the enemy beyond the terrain feature to his immediate front. The division commander has the means available to see the terrain and enemy at a distance and provide the information gained to brigades and battalion task forces.

The second offensive fundamental the US military adheres to is creating an overwhelming concentration of combat power. While the enemy weaknesses may be known from outset, most attacks begin with a movement to contact, often on a broad front. Once contact is made and an area where the enemy is weak or can be weakened is found, it is necessary to move quickly to concentrate superior forces in that particular area. Tanks and mechanized infantry forces are concentrated on a narrow front to breakthrough enemy forward defenses. Field and air defense artillery concentrate their fires to protect advancing tank and mechanized infantry forces at the point where the main effort is to be made. Engineers concentrate to assist in breeching and clearing minefields as well as obstacles, such as barriers or fortifications which can slow or stop advancing tanks and mechanized infantry. Electronic support measures are concentrated to locate enemy emitters so they can be attacked by fire or jammed by electronic countermeasures. These actions will disrupt enemy weapon systems and break down his command and control.

Mobility of armored and mechanized forces allows them to move
rapidly from one place to another and fight on arrival. However, in concentrating forces the thinning of units elsewhere involves some risk. As a consequence, it is necessary to deceive the enemy as to the division's intention; the location of its main effort and the strength of its units.

The suppression of enemy defensive fire is also considered one of the fundamentals of the offense to US military leaders. Attacking forces are concentrated and therefore are vulnerable to enemy fires. It is necessary to suppress enemy weapons by obscuring the vision of enemy gunners to preclude their interference of advancing tanks, mechanized infantry attack helicopters and close air support operations. Gunners of direct-fire weapons are usually suppressed by battalion task force weapons and direct support field artillery. More important to the division commander is suppression of field artillery units which can slow or stop the division attack and interfere with command post and combat service support operations. Field artillery counterfire and sometimes US Air Force (USAF) offensive air support sorties are concentrated in sufficient numbers and are of adequate duration to substantially degrade the enemy's field artillery capability to interfere with the main effort.

For attack helicopter and USAF aircraft to operate, enemy air defense systems must be suppressed. Electronic support measures and other target acquisition means can be used to locate enemy air defense weapons, field artillery, and sometimes electronic countermeasures can also be used to suppress or disrupt air defenses, attack helicopters and close air support. It is also important to destroy enemy electronic warfare assets to avoid disrupting friendly command and control.

Once the attack is launched, the US commanders put into effect or action shock tactics to overwhelm and destroy the enemy. Therefore
they carefully coordinate the action of their commands to ensure maximum speed, surprise and violence. Maneuver units cross exposed areas as rapidly as possible, their advance timed to coincide with intense suppressive fires supporting the attacks. Close air support (CAS), electronic warfare, air defense support, and other operations. These actions build up in intensity for maximum effectiveness during critical moments of the attack. The attack must be narrow and in depth. The enemy's stalled or disorganized units must be bypassed by fresh formations pressing on to deeper objectives. Once the initial attack takes effect on the enemy, there must be no let-up. Initial success should cause dislocation and redispersion of enemy forces, and this in turn destroys the integrity of his defensive system.

Attack the enemy rear: The US commanders consider enemy combat support units, engineers, signal, artillery, and enemy command and control facilities as less well protected and usually less capable of self-defense than maneuver units. Least likely to be protected, least well armed, and weakest overall are enemy combat service support elements, including supply, maintenance, transportation, and administrative units which usually exist in the rear areas. Once the forward combat elements are penetrated, the attacker should seek out the enemy rear, destroying headquarters, combat support and combat service support assets. Attacks should aim at wide destruction among these assets. Disrupting enemy command and control, interrupting the flow of fuel, ammunition, repair parts, food and other necessities and interfering with enemy air defense and artillery, supports, weakens or destroys the entire system of defense and makes it possible to overpower the enemy with fewer forces. Successful attacks into the enemy rear will often force an abandonment of the advan-
tages of prepared defensive positions, and will force the enemy to commit his maneuver units to hasty countermoves where they are significantly more exposed. In general, the most decisive offensive is one which strikes with overwhelming force into the enemy's rear, and destroys or captures his service support, combat support and disrupts command and control.

A successful attack requires continuous combat support and combat service support to sustain the weapon systems essential for the momentum of the attack.

Field artillery, engineers, air defense, and another combat support and combat service support elements must carefully plan forward movement to keep pace with the maneuver units. The weapon systems must not run out of ammunition or fuel. When combat vehicles break down in use, or are damaged, they must be repaired quickly or replaced. The deeper the attack strikes into enemy controlled territory, the more difficult it is to maintain support and keep lines of communication open.

Imaginative planning, vigorous execution, and flexibility of response must be as characteristic of support commanders as of combat commanders: they must work together as a team.

The US division commander prepares for offensive operation based on intelligence information concerning the enemy and terrain. He then estimates the situation and this staff provides appraisals. The commander then decides on and announces his concept of the operation to his staff and subordinate units commanders.

The commander should describe his concept of the operation in sufficient detail to clarify the time and place of the attack, scheme of maneuver for the force as a whole, task organization and control measures.
Time of attack might be provided by higher headquarters. If the commander is free to choose the time, he must consider the time required to reconnoiter the terrain, to gather additional information about the enemy if needed, and time required by subordinate units to prepare for combat.

Often, when opposing an enemy in strength, it may be best to attack under cover of darkness or during other periods of limited visibility - fog, snow, or rain - even though control may be somewhat more difficult.

The place to attack is that location which offers the greatest likelihood of success. The weak points in the defensive system are usually the places to consider as an initial objective. If no weak point can be found, then one must be created. This can be done by fire, fire and maneuver, or deception such as a feint or demonstration to cause the enemy to shift his forces or concentrate elsewhere.

The commander's intentions and the best direction of approach to the enemy will determine the scheme of maneuver used by the division. The commander's intentions can be described in one of four ways: Overrun and destroy a weaker enemy in position, fix or hold an enemy force in position, rupture and pass through enemy defenses to secure a deep objective, or pass around enemy main defenses to strike him from flanks and rear - causing him to fight in an unexpected direction or perhaps more than one direction.

Enemy positions can be approached in three directions: from the front, the flanks or the rear.

In the attack, subordinate units may maneuver differently. A division attack may be conducted with one brigade fixing enemy units
in position, another brigades passing around those positions to strike deep, while a third brigade is poised to move through the hole created (see figure 1).

In an envelopment, the attacker passes around enemy strength to strike on a lightly guarded flank or into the rear of the enemy defense. If no open flank or gap in the enemy defense system exists, gaps can be created by fire, fire and maneuver or deception operations. Nuclear weapons are particularly useful for creating gaps, while chemical weapons can be used to protect the flanks of the enveloping force.

Success often depends on speed and on preventing the enemy from reacting in time with sufficient force to slow the attack. It may be necessary to fix the enemy in place, from the front by a supporting attack, or by some other means which will delay enemy reaction to the enveloping force. The enemy then is forced to fight in several directions or abandon his positions.

In a penetration the attacker concentrates to strike at an enemy's weak point, breaks through the positions to rupture his defense, holds the shoulders of the gap created, and advances rapidly to the objective (see figure 2).

A successful penetration depends upon the ability of the attacker to suppress enemy weapons, to concentrate forces sufficiently to overwhelm the defender at the point of attack, and to pass sufficient force through the gap to quickly secure the objective. Once this is accomplished, the commander has two options. He may continue forward to rupture successive defense lines, and ultimately enter enemy rear areas, or he may turn forces to roll up enemy positions from the flanks.

To succeed in the attack it is necessary to concentrate combat
forces on a narrow front, however, at times it may be also necessary ini-
tially to advance on a wide front until an enemy weakness is found.
There are several ways to do this:

Two brigades make the main effort while one brigade is held, ready to pass through the gap created and widen the flanks so other forces can pass through. This type of operation is usually conducted against strong well prepared enemy defenses (see figure 3).

One brigade makes the main effort; one brigade makes a supporting attack to fix the enemy's forces in position, and one brigade is held ready to reinforce success. Sometimes a smaller force can be used to fix enemy forces in position when larger forces are not available (see figure 4).

One brigade attacks while the remaining two brigades are held ready to pass through the lead brigade. Under these circumstances, it may be necessary to fix enemy forces elsewhere by indirect fires or by deception operations. This type of operation may be conducted when attacking a flank, or when the enemy is weak, and his forward defenses can be quickly penetrated (see figure 5).

Task Organization: the US divisions are organized to destroy the enemy. To do this the division has a variety of weapons systems - tanks, anti-tank weapons, infantry, field and air defense artillery, and sometimes, attack helicopters. Close air support is provided by the USAF.

Tank and mechanized battalions are grouped by the division commander to fight under a brigade headquarters. The brigade commander organizes for combat by grouping tanks and mechanized companies under a tank or mechanized battalion headquarters. This organization is called
a battalion task force.

A brigade may be organized as a tank heavy, mechanized heavy, or balanced, depending upon the mission, enemy, terrain, and forces available.

The armored cavalry squadron generally reconnoiters screens, guards, or covers the division advance.

Control measures; the division commander usually determines the following main measures to assume control over the division formation, from the assembly areas up to the limited objective.

Route(s) of advance to show the assigned route of march. Indicates number, letter or name on it and start point (SP) and release point (RP).

Assigns the line of departure (LD) to coordinate the departure of the attack elements, indicates boundaries (sectors) of responsibility and coordination points. Determines contact points, where two or more units are required to make physical contact and coordinating fire lines (CFL) which field artillery may fire at any time without any additional coordinations. The division commanders must also determine the axis of advance, which shows the general direction of the movement of attacking units, or zone of attack.

The division attacks under a variety of circumstances. Most often, it attacks from defensive positions after an enemy attack has slowed or stopped, as an extension of a movement to contact, or following a passage of lines through an attacking or defending force.

Once contact is made, information about the situation must be reported to higher headquarters as quickly as possible. It is necessary to determine as rapidly as possible whether the enemy can be bypassed
or must be attacked and destroyed. Bypassed enemy forces must be reported to the next higher headquarters which then assumes responsibility for their destruction, suppression, or containment.

As a general rule, if a leading battalion task force cannot quickly defeat, bypass, or fight through the enemy, the division commander must decide whether to conduct a hasty attack, or if it is necessary, to take more time to develop the situation and conduct a carefully planned deliberate attack. In any event, a hasty attack may be conducted to insure that the division is not being held up by inferior forces conducting a delay.

If a hasty attack is to be conducted, fragmentary orders are issued immediately. Those orders set in motion battalion task forces, supporting field artillery, attack helicopters, and offensive air support in sufficient strength to fix enemy forward elements in place, break up weak points or open flanks and move friendly forces quickly through. Speed is most important for if the momentum is lost the hasty attack can fail (see figure 6).

When enough information is available about the enemy, the attack may be deliberate from the outset. Such an attack usually starts with the passage of units through a force in contact. In any case when a division encounters a strong enemy force in well prepared positions that can not be overcome by a hasty attack, it must take sufficient time to prepare and conduct a deliberate attack. However, only that amount of time absolutely necessary should be taken to prepare for the attack.

The US military leaders believe it is unlikely that terrain can be seen or reconnoitered in detail more than four to five kilometers into enemy territory. Therefore, detailed planning of maneuver and
fires will usually be limited to this area. Planning for actions beyond this limit must be more general with the maneuver of forces and fires sketched out in broader terms. Units must be prepared to exploit any opportunity presented by terrain and enemy weakness.

Two broad options will normally be present when a deliberate attack has successfully breached enemy defenses. The first is to press forward with committed forces toward the next echelon of the enemy defenses. This is done to encounter and defeat the second defensive belt (second echelon) as rapidly as possible, relying heavily on the disruptive effects of speed, violence, and continuous attacks to carry through second echelon defenses. The second is to turn left or right to roll up additional enemy positions, one after another, from the flank, while another force exploits the breach.

When employing this course of action, US commanders are aware of the fact that enemy second echelon defenses are usually sited to support and back up first echelon defenses. The rollup operation must be conducted within the range of at least the fires of the second echelon and pose a potential threat. This means the rollup force can become engaged to the extent that it cannot support forces moving to exploit the breach. US leaders also consider holding and widening the breach especially at the shoulders is essential and can be accomplished by attacking or following echelons. As a general rule it is better to press home with the attacking force, seeking to destroy the cohesiveness of the enemy defense with the violent disrupting effects of a coordinated armored attack.

Exploitation: The US purpose of exploitation is to prevent the enemy from reconstituting an organized defense or conducting an orderly
withdrawal. The US military leaders see that this can be done successfully, by rapid advance toward the enemy rear area, bypassing small pockets of resistance, and by destruction of lightly defended and undefended installations and activities. The US division normally will exploit on a broad front, usually with brigades moving abreast (as one echelon). They see also that exploitation is continued day and night as long as the opportunity permits. Exploitation may be limited more by vehicle breakdown and by fuel than by combat losses and ammunition. As the exploiting force penetrates deeper into enemy rear areas, the length of supply lines increases. Adequate stocks of fuel, ammunition, food, and spare parts should accompany the force so momentum is not lost for lack of support (four to six days of supplies should be carried).

The following are the main strengths of the US doctrine and fundamentals in offensive operations:

The US is able to concentrate fire support and maneuver units from dispersed positions in a short period of time to accomplish a penetration. Rather than consolidate forces immediately forward in the area of penetration, the US will attempt to concentrate as the units advance and achieve the penetration without massing just forward of the line of deployment.

US offensive operations permit a great deal of flexibility on the part of the commander. It is easy for US commanders to redirect the main effort from one area to another during the course of the battle. This flexibility is not limited to the conduct of the battle, it is also evident during planning. The commander has the ability to organize his maneuver units, fire support and other combat support and combat service support within very wide limits. The US relies on mission type orders
quite frequently, and subordinate commanders are expected to be able to transform general instructions into an effective detailed operation order.

Inherent in the flexibility enjoyed by the US commander is the ability to use his initiative to the utmost. While the senior commander can direct the specific actions to be taken by the subordinate commander to accomplish his mission, this is almost never done. The senior depends on the subordinate to use his initiative to accomplish the mission and overcome any unexpected occurrences. For example, during a penetration the senior commander will require the subordinate to accomplish certain specific objectives. However, once these objectives are achieved the senior expects that the subordinate can continue the mission with minimum guidance. He relies on the subordinate to make appropriate decisions and he also depends on the initiative of the subordinate to exploit the success of the operation.

US offensive operations require a thorough integration of fire and maneuver. Due to limitation of men and equipment it is incumbent upon the US commander to effectively integrate his fire support and maneuver units to accomplish his objective. As was mentioned earlier he has maximum flexibility to accomplish his end, and he has the capability to reorient his fire and maneuver units to take advantage of enemy weaknesses as they revealed during the course of the battle.

Offensive operations enable the commander to deceive the enemy as to the true nature of the attack. Therefore the US emphasizes supporting attacks and deception operations to hold the enemy reserves and insure the success of the main attack. These can be conducted by as small a force as battalion or as large as brigade depending upon the
tactical situation.

The US division commander usually assigns the least number of control measures possible to his brigade commanders. Often these are limited to an objective and an axis of advance. This allows the brigade commander to analyze the situation in his own way and apply his resources to their best advantage. It allows the brigade commander the flexibility to exploit the terrain and enemy weaknesses within his sector and to accomplish the objective in the most effective way.

The following are perceived as weaknesses in US doctrine and fundamentals in the offensive operations:

A US division suffers from a lack of organic reconnaissance. Although the cavalry squadron is available, it is usually assigned flank security or screening missions and is often committed after the penetrations are accomplished. This lack of organic reconnaissance requires the commander to depend on intelligence from higher headquarters, which may be neither timely nor relevant to the conduct of the division engagement.

Excessive flexibility on the part of subordinate commanders can undermine the division commander's ability to accomplish his mission. Maintaining control of division assets during the battle will severely tax the command control and communication means of the commander and make it possible for him to actually lose control of the battle. Therefore, the price of flexibility may be the inability to finish the enemy once penetration is achieved.

At times deliberate attacks are conducted by tank heavy forces. This type operation is not suited for such forces. They are needlessly exposed to enemy anti-tank weapons and dug in infantry. Penetration of
a prepared position should be made by infantry units. If an armored
division is required to make a quick penetration, it should be assisted
by elements of the unit through which it is passing. This unit can seize
key positions to assist in the penetration and insure the success of the
operation.

The shortage of artillery limits the division's ability to sup-
press the defending enemy in order to achieve a penetration. The dura-
tion of US preparatory fires, "ten to fifteen minutes," is not sufficient
to significantly destroy a well dug in enemy. In addition, there is
insufficient artillery to attack critical targets of opportunity which
may arise during the course of the engagement.

Enemy units bypassed by the penetrating force will severely ham-
per operations in depth of the enemy's defenses. Bypassed enemy strong
points could tie up US reserves and disrupt the flow of combat service
support items needed in the forward area. It also provides the enemy
a base from which to launch counterattacks.

Concentration on deception operations and supporting attacks
could divert necessary forces from the main attack. This may result in
the main attack not being powerful enough to accomplish the penetra-
tion. The lack of forces requires the US limit its size and number of
supporting attacks.

Due to the lack of maneuver and artillery units the US is very
dependent on attack helicopters and close air support to accomplish its
mission. Neither of these means has the capability for all weather and
night operations. This fact severely limits the US's ability to con-
duct offensive operations during adverse weather and periods of limited
visibility.
US divisions have extremely limited nuclear, biological and chemical (NBC) capabilities. Decontamination teams have a limited capacity, individual protective clothing is limited, and available equipment is not issued to the soldiers. Also the training rarely includes a realistic simulation of an NBC environment.

Section II. The Soviet offensive operation doctrine:

The Soviet military consider doctrine as a state's officially approved system to solving the problems of war. Their military doctrine covers the nature of future war and the methods for waging war, as well as the organization and preparation of the armed forces for war. In the USSR, the basic principles of doctrine are determined by the political leadership. Military strategy is an elaboration of the forms and methods for conducting and directing war, the problems regarding comprehensive strategic support of combat operations, the training objectives of the armed forces as a whole, and the strategic employment of the individual force components in war. Both the political and military leaderships are involved in developing strategy.

Strategy from the Soviet point of view is subordinate to doctrine. Military doctrine is the overall policy in principles using doctrine as a starting point, military strategists amplify and investigate concrete problems regarding the nature of future war, the methods of warfare, and the organization and preparation of the armed forces for war.

The Soviets view the following as main principles for offensive operations: mass, dispersion, cooperation, continuous combat action, initiative, surprise and the total security for the troops.

Mass is the basic principle for offensive operations from the
Soviet point of view. It is the timely concentration of troop and means against enemy weaknesses.

The Soviets usually encounter problems in matching massing with the use of dispersion therefore they consider that the modern mass can be accomplished by grouping forces and means from movement state.

The continual Soviet development of conventional weapons, the probability of their using unconventional weapons, and their superiority in manpower and equipment, give the dispersion doctrine great importance among the Soviet military leaders. Soviet leaders usually assign units initial and alternative positions as well as assigning a number of artillery position for each artillery battery. They also emphasize the establishment of command posts and alternative command posts to avoid the possibility of having a unit totally disabled because of the destruction of its command situation.

Cooperation among combat elements is considered a necessary factor to achieve victory over the enemy. In training, Soviet commanders emphasize working as a team to achieve the maximum effect of supporting fires and the maneuver elements. A good example is the Soviet system.
of guarding exposed flanks. The Soviet commanders use a combination of fire power, engineer elements, anti-tank weapons and maneuver units in conjunction with close air support, and reconnaissance agencies to obtain the maximum offensive flank protection.

Surprise, which is considered one of the Soviet offensive principles comes in the fourth priority of achieving these principles. The Soviet leaders view surprise as, carrying an unexpected action, surprise may also mean applying a new fighting technique using a new weapon system. An example of this may be seen in the 1973 war on the Egyptian front. The Egyptians used the anti-tank guided missiles as infantry weapons against Israeli armor.

The Soviet leaders consider keeping the momentum of the attack up as a necessary factor to defeat the enemy and to disrupt his defensive system. The Soviet commanders carry out this principle by committing fresh forces (second echelons and reserves) into the engagement, as well as the maximum exploitation of artillery support close air strikes. The Soviets see no reasons to reduce the speed of the attack or to stop day or night, even during conditions of poor visibility.

The Soviet concept of tactical operations is based upon seizing and maintaining the initiative. The Soviet leaders believe the initiative can be gained by maintaining contact with the enemy to keep him under continuous pressure and to allow him to act, not to react.

Soviet commanders are paying a great deal to achieve total security for the troops on the battlefield, which offers the troops combat and combat service support. The total security for troops aims at creating suitable circumstances for using all the weapon and means available to destroy the enemy in sufficient power, and to maintain forces.
in a high combat readiness state. This includes carrying out recon-
naissance actions against the enemy in the likely operational areas,
establishing all defense systems to cover all ground forces particularly
against the nuclear weapons and organizing the medical, technical and
logistic system to support the maneuver units.

Besides the main principles which were mentioned earlier, the
Soviet leader considers the following items as necessary factors to
gain victory on the enemy: A comprehensive study of the enemy situa-
tion and capabilities by the use of all reconnaissance elements avail-
able. Correct determination of the direction of the main thrust and
the massing of superior troops against the enemy weaknesses. The cor-
rect use of the support fire in sufficient quantity and the successful
carrying out of troop maneuvers during the offensive battle as well as
the timely committment of the second echelons.

The Soviets identify three basic forms of offensive operations
on the modern battlefield; the deliberate attack, the meeting engage-
ment and the pursuit.

The Soviets attribute such importance to the meeting engagement
that military authors usually organize discussions of combat operation
into three phases: the defense, offense and the meeting engagement.
Also the meeting engagement cannot occur as part of either a large of-
fensive or defensive operation for division level and below its place
in Soviet doctrine will be discussed later.

The Soviet offense against a defending enemy is divided into
several possibilities: an attack from direct contact with the enemy,
either by forces on the move, or from forces occupying positions in
depth through defending forces, or by regrouping forces, to take on a
new mission and attack after moving forward.

Besides the types of attack mentioned earlier, there is another type of attack which is literally the attack after short preparation. It is usually carried out after the failure of one of the other types. In this case the Soviets pull out the main forces from unsuccessful engagement place, farther to the rear (ten kilometers at the division level) to reorganize, rearm and refuel. At the same time the commanders determine another direction to attack based on reconnaissance information and the enemy situation. The new direction of attack, at the division level, should be somewhere around ten kilometers from the previous direction.

The organizations for combat, the distances, and frontages are all from the Soviet point of view within limits.

In a movement to contact, the Soviet divisions (MRD, tank div)
are assigned a sector of responsibility up to twenty to thirty kilometers. The division second echelon usually consists of a regiment size unit.

A reserve, is usually created when enemy defensive system and reserves are not known. In this case the Soviet commanders do not establish a second echelon, because the second echelon must be given a limited mission. Also reserves can be established when the attack frontage is narrow. Reserves can be established also in addition to second echelon. The reserve commander does not receive a limited mission, but he should prepare for a general mission which he thinks will be assigned. The general mission which the reserve is supposed to receive is usually to exploit the attack and to keep up the momentum of the attack. When conducting actual offensive operations however, the division may engage the enemy on a wide frontage or as narrow as eight kilometers, depending upon prevailing conditions. If the division is deployed in a secondary direction its frontage can be sixteen kilometers, or more. This frontage is usually spelled out into regiment's frontage. The regiment in the main attack can be assigned frontage of four to six kilometers, meanwhile the regiment moving in a secondary direction can be assigned frontage of six to eight kilometers. A regiment which is assigned to the division penetration sector is assigned a frontage of three to four kilometers. The regiment's second echelon or reserve is assigned a line of commitment of three to four kilometers or more (see figure 7).

The Soviet terms of "first and second echelon" and "reserve" are often misused in studies of their tactics.

The first echelon consists of up to two-thirds of the total
force. It is the first part of the unit to be committed in an operation. The division's first echelon might consist of two or three reinforced regiments according to the given mission, terrain and enemy situation.

The second echelon when created, normally consists of up to a third of the total force or more. It receives a tactical mission simultaneously with the first echelon forces. The Soviet leaders establish a second echelon as a rule, when the enemy situation is known in depth. The second echelon commander, upon receiving his mission, organizes and plans for future operations just like the first echelon.

In addition to the combat reserve, the Soviet's emphasize establishing combat support reserves, such as anti-tank reserve, engineer reserve, and chemical reserve. The division might also establish an anti-airborne reserve, which usually consists of a reinforced battalion or company.

The division task organization for an offensive operation, might include a forward detachment of a regiment or battalion size unit reinforced by artillery, anti-tank weapons and engineer units, as well as anti-aircraft and chemical elements. A forward detachment if formed, would follow the reconnaissance element of distance of ten to fourteen kilometers for a forward detachment of regiment size unit, or at eight to ten kilometers for a forward detachment of battalion size unit.

In addition to establishing a forward detachment, the division commander might form an envelopment detachment in reinforced battalion or company size. An envelopment detachment moves out of the division combat formation through an enemy forces' exposed flanks, or gaps to attack enemy command posts, communication centers, or to occupy criti-
cal areas. This is done to prevent the enemy reserve from launching a counterattack against the division formation during a critical period. It is done in conjunction with artillery fire support and air strikes. The division commander himself or his deputy exercises control on this element (see figure 8).

The Soviet concept of giving commanders various depths for offensive missions is based upon general studies of the Soviet unit's capabilities and threat capabilities as well as the way they organize and conduct defense operations. These depths are dependent also on the organic air defense capability and the capability of the tactical air support. Soviet military theorists expect mechanized units to advance thirty to fifty kilometers per day in conventional operations, and up to eighty kilometers per day in a nuclear environment. The Soviet leaders see operations to be continuous under all various circumstances "day and night" regardless of weather conditions. The Soviets consider that the offensive affords the attacker the advantage of selecting the direction, time and method of combat. They appreciate the fact that the attacker does not necessarily need numerical superiority in manpower or equipment as long as he makes effective use of supporting nuclear or conventional fire and rapid maneuver against the enemy's flanks and rear areas.

The Soviet division, which is employed in the army's first echelon is given the mission of destroying elements of the enemy's security zone, making contact with the enemy's main defenses, penetrating the enemy's first echelon positions to the depth of a battalion, destroying a brigade's first echelon, and occupying a line at a distance of eight to twelve kilometers from the FEBA as a primary mission. These missions include de-
stroying the enemy's field artillery and air defense assets. This di-
vision also is given the mission of developing the attack and destroy-
ing enemy's division second echelon or reserve and occupying a line at
a distance of twenty kilometers from the FEBA, as a subsequent mission. Also it is given a general direction for exploitation toward the di-
vision's final objective (approximately thirty kilometers from the
FEBA. The initial mission must coincide with the army's immediate
task. The division's final objective is called the initial task. The
division, which is employed in the army second echelon or reserve is
always given the mission of exploiting the attack. It is committed
after carrying out of the army's immediate mission or before. It is
usually given the mission of destroying the threat reserves (corps
reserve), and occupying a line at a distance of fifteen or twenty kilo-
meters as an immediate mission and a general direction of exploitation
to the final objective (initial mission or the mission of day) at a
distance of thirty to fifty kilometers from the FEBA. The division is
always supported by an airborne assault and tactical air support.

The Soviet division might be given a separate direction to
launch an independent attack, therefore it is given either immediate
and subsequent missions or an immediate task and then a general direc-
tion of attack depending upon how much information the Soviet army com-
mmander has about the enemy.

When the division commander receives a mission, he usually
breaks it down into regimental missions (tasks).

Regiments first echelon is given the mission of enemy main line
of resistance, destroying the enemy battalions' first echelon and occupy-
ing a line at a distance of six to eight kilometers. This task includes
also destroying the enemy's field artillery which exists within this area. Then they are assigned the mission of halting anticipated enemy counterattacks destroying the brigades' reserves and holding a line at a distance of twelve to fifteen kilometers. They are also given a general direction to exploit in the attack toward the division's initial mission.

A regiment's second echelon is given a mission of complete destruction of the enemy reserves and occupying a line at a distance of fifteen to twenty kilometers and a general direction of attack toward the division's initial mission.

In short, the Soviet mission at all levels are interrelated. For instance, a division assigns its first echelon regiments the immediate task of penetrating the US main battle area (MBA) and the subsequent task of securing a line that coincides with the division's immediate mission. Thus, the subsequent task of the first-echelon regiments accomplishes the immediate task of the division. Likewise, the subsequent task of the division coincides with the army's immediate task.

The effect created by this type of offensive organization is an attack in waves. If the enemy has a well organized defense in depth, the offensive is constructed to throw fresh troops (wave) against each subsequent line or area of defense. If the defense is organized with most forces forward, offensive forces in the second echelon, or second wave, are prepared to advance quickly to objectives located far beyond the enemy main defenses (main battle area) after the penetration is achieved. An army for example, is prepared to advance to a depth of one hundred kilometers or more, with its second echelon divisions.
The Soviet leaders believe that the rate of an offensive operation must be governed by limited norms to maintain the momentum of the attack at all levels and under the various circumstances:

The penetration rate through fortified positions should be half kilometer per hour, meanwhile this rate through well prepared positions, should be one to two kilometers per hour. The rate of attacking unprepared positions should be two to three kilometers per hour for the tank and motorized units and four to six kilometers for the tank and motorized units.

The rate of the advance between the enemy positions (battalion positions) must be two to three kilometers per hour, meanwhile it should be four to six kilometers for the advance between defensive sectors and ten kilometers or more between defensive zones.

Command and control: Soviet leaders believe that commanders at all levels must be located forward to see the battlefield and control their units' activities.

In this aspect the Soviets believe that the division commander must be located with his chief of operations, chief of reconnaissance and the artillery commander in a forward command post on a distance of approximately six kilometers from the first attacking forces.

The chief of staff located with the rest of the staff except the chief of the logistics affairs and the chief of personnel affairs in the main command post which is located on a distance of ten to twelve kilometers from the first attacking forces.

The chief of logistic affairs and chief of personnel affairs are located in a rear command post at a distance of twenty-five to thirty kilometers from the first attacking forces.
All these command posts move during the fighting steps. The main command post might move two to three times up to the end of the fighting day, meanwhile the rear command post might move once or twice.

The Soviet doctrine gives the division commander the right to move independently or with some of his staff officers to wherever he believes that he might see the battlefield better during critical times such as commitment of the second echelon or facing serious counter-attacks.

Soviet military leaders recognize the value of the time between the last stages of the organization of the combat actions and zero hour. They believe that this period of time is considered a critical time for the attacker.

If the attack is conducted from the initial contact with the enemy the commander must regroup his units from a defense frontage into an attack frontage. As a rule the division is regrouped into regimental positions, and the regiment is also regrouped into battalion positions.

If the attack is conducted by forces from the rear after substitution with the defenders, the division substitutes a defending regiment and the regiment substitutes a defending battalion and so on.

These measures might take two to three nights at division level, and one to two nights at regiment level.

If the attack is conducted by a division from waiting positions, the unit leaders, up to company commander, must be given the opportunity to see the enemy positions and his objective before the attack will be launched. Also the division commander sends the necessary reconnaissance element to the force which is in physical contact with the enemy to share
observation of the enemy and inform the commander of any change in the enemy situation within the division's attacking zone.

**How to the Soviets see and conduct a breakthrough operation?**

The Soviet concept of a breakthrough operation envisages the destruction of an enemy force in prepared positions in a small sector of the FEBA, and subsequent penetration and reduction of positions in depth. Breakthrough operations are conducted as a last resort by concentrations of maneuver elements and firepower at selected points. The Soviets seek to establish decisive superiority in the breakthrough sector, while maintaining pressure all along the enemy's front. Divisions take part in breakthroughs as part of an army operation. Each division normally is organized into two echelons, or two echelons and reserve, for the operation, and is reinforced with four to six artillery battalions engineer battalion, and others. Regiments in turn may be organized in one or two echelons. A division may attempt to breakthrough in one or two sectors within its zone of responsibility. In either case, the attack from the Soviet point of view is generally led by tanks (see figure 9).

The division artillery is usually augmented from army or front units. The Soviet doctrine envisions sixty to one hundred tubes per kilometer of front. This figure includes all indirect fire weapons within the division's organization.

The division usually begins an attack just before the end of the preparatory fire which allows it to approach the FEBA safely.

During the security zone operation the Soviet division's first echelon tries to employ as many small units as possible to fight the enemy's security zone elements and to achieve quick contact with the
enemy main positions. Meanwhile the rest of the force is moved in pre-combat formation.

As soon as the main body of the division's first echelon make contact with the enemy main positions (MBA), the first echelon regiments, led by tanks begin attacking the enemy's weak points and concentrate their efforts to make a quick penetration of the enemy's MBA, in conjunction with fire support, bypass enemy resistance.

The division's second echelon may be committed into action to reinforce the attack of the first echelon force, to destroy the bypassed pocket of resistance, to repel the enemy's counterattacks or to replace heavily decimated first echelon units.

Generally, when the first echelon is halted or repulsed on a main axis an attempt may be made to commit the second echelon on a more weakly defended axis or on a flank, while at the same time, maintaining pressure on the original axis with the first echelon. When the first echelon achieves its initial objectives, the second echelon may be committed as planned (normally from the march) to widen the breach and initially to exploit success.

The division's reserve, which is usually composed of a reinforced battalion or regiment, is assigned the mission of destroying the enemy airborne/air assault elements, defeating attacks on flanks or rear and participating in exploiting the attack.

After the immediate mission is achieved and initial tactical gains consolidated, most first echelon units, if they are still combat effective, will continue the attack with new units of their second echelon. If the entire second echelon and reserve are committed, a combined arms reserve will be formed from first echelon forces.
The following are the main strengths of Soviet doctrine and principles in the offensive operations:

Reconnaissance capability: Soviet doctrine requires each echelon to send a unit from the next lower echelon on a combat reconnaissance patrol, to supplement the division's reconnaissance elements. The maneuver battalions send a company and the platoons send teams. This provides the division with tremendous intelligence gathering capability.

Strength of numbers: The Soviet armed forces has many divisions which allow for attacks in waves or echelons, (even at division level). The division commander insists on organizing his action into echelons to maintain the momentum of the attack.

Weather conditions: Soviet offensive doctrine is to maintain the rate of the attack and its momentum regardless of weather conditions and hours of darkness.

Artillery support: The Soviet division has a large number of organic artillery pieces. This allows them to fire extensive preparatory barrages, and strongly support maneuver units in a course of action. Additionally, the organic artillery is augmented by the next higher echelons' assets, either physically or through fire coordination. For instance, the division artillery group (DAG) consists of four to six artillery battalions, and the regimental artillery group also has two to three artillery battalions or more, depending upon the situation.

Planning: Detailed planning at division level gives each subordinate commander a thorough understanding of what will happen and how to fight. The G2 estimate, and the commander's decision, based on that estimate, provides subordinates with the data needed to accomplish exact missions all the way to the division's objective of the day. When a
division commander's decision is communicated to the subordinates, each individual knows exactly what his tasks are for the remainder of the day.

Working as a team: Soviet divisions have the opportunity to train together often, which develops teamwork, particularly at regiment and battalion levels. The low turnover rate in Soviet commanders allows each unit commander to get to know and understand his own junior commanders and the higher commanders.

Nuclear chemical environment: The Soviet division trains for a nuclear, biological and chemical (NBC) environment. Their organization and individual equipment is designed to operate in NBC environments, and training includes extensive NBC warfare simulation.

The following might be some weaknesses of the Soviet doctrine and principles in the offensive operations:

Massing: Extensive massing of troops provides a good target for the opposing force's fire weapon systems, and it provides indication of where the main attack will be launched. Support units are massed to assist the main attack, so it can also reveal the main effort.

The Soviet doctrine of moving the second echelon and reserve might reveal to an alert G2 the exact location of the intended penetration and the general direction of the main effort. The Soviet leaders see that the second echelon and reserve move just behind the units which are attacking in the main effort to augment it and to be able to exploit its success.

It became possible in modern warfare to locate threat command posts, which in turn and according to the Soviet doctrine, makes it easy to reveal the direction of the Soviet main effort. The Soviet doctrine emphasizes locating the command post behind the units in the main attack.
**Inflexibility:** The Soviet commanders at division level and below might face serious problems, because of reliance on the attack planning and will have difficulty meeting an unexpected reaction of the opposing forces. During the course of planning and due to the Soviet doctrine, the commanders are obliged to give the subordinates a complete picture as to what will happen including the action, reaction, and the counter-reaction. Therefore the Soviet subordinates normally have detailed and exact missions to carry out.

**Restrictive boundaries:** The boundaries normally at division level and below are restrictive and the commanders do not cross them. This inflexible border can cause failure to exploit success or to receive help from neighbors. For instance the commander of division "A" can not use space maneuver throughout the division "B"s zone, even though this division is meeting strong resistance and is not able to carry out its mission.

![Diagram showing possible lines of commitment and unexpected maneuver from the Soviet leaders.]

The division commanders depend mainly upon army for helicopter
and air close support. Therefore, time lag between perceived need and arrival of helicopter or close air support may be excessive.

These are the main US and Soviet strengths and weaknesses in organizing and conducting offensive operations. There is no doubt that each has significant strengths in military doctrine, which we as developing countries, can use as guidance for our own doctrine. At the same time, both of the super powers have some weaknesses which we should avoid.
US DIVISION ATTACKS ENEMY POSITION
(Figure 1-3)
(THE US METHOD OF PENETRATION)

(Figure 2-3)
TWO BRIGADS MAKE HOLE THROUGH PREPARED DEFENSE

BRIGADE READY TO PASS THROUGH

CORPS RESERVE

US DIVISION PENETRATING POSITIONED ENEMY

(FIGURE 3-3)
MAIN ATTACK

ENEMY FORCE FIXED IN POSITION

BRIGAD READY TO REINFORCE SUCCESS

US DIVISION BYPASSING ENEMY POSITIONS

(Figure 4-3)
US DIVISION BYPASSING ENEMY POSITIONS AFTER FIXING HIM WITH INDIRECT FIRE AND SMOKE

(Figure 5-3)
THE HASTY ATTACK
(FIGURE 6-3)
THE SOVIET FRONTAGE IN OFFENSIVE OPERATIONS
(FIGURE 7-3)
CHAPTER III

FOOTNOTES

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CHAPTER IV
MARCH AND ENGAGEMENT OPERATIONS

During the past several decades, the nature of battle has changed—not abruptly but nonetheless significantly. Today's battlefield presents challenges beyond those any army in the world has ever faced. Great numbers of weapons of advanced destructiveness are provided by major powers to client states; arms purchased by small but affluent nations have further spread the latest military technology throughout the world. Recent wars between small nations have developed intense conflicts formerly considered only within the capabilities of large states.

The war in the Middle East in 1973 might well portend the nature of the modern battlefield. Arabs and Israelis were armed with the latest sophisticated weapons, and the conflict approached destructiveness once attributed only to nuclear arms. The use of aircraft for close support of advancing armor, in the fashion generally practiced since 1940, was greatly reduced by advancing surface-to-air missiles and air defense guns. In clashes of massed armor such as the world had not witnessed for at least thirty years, both sides sustained devastating losses approaching fifty percent of the forces engaged in less than two weeks of combat.

The 1973 war showed the importance of achieving maneuver side by side with the firepower. For instance, Egypt, during the phase of preparation for this war, carried out massive movements of units from rear areas toward the Suez Canal. The Egyptian Army also, in order to face the Israelis troops on the West Bank of the Suez Canal, was required to accomplish complicated maneuvers to canalize the Israeli forces and to
deny them the opportunity to spread out or develop their operation in the direction of the major cities.

On the other side, the Israeli Headquarter was forced to carry out incredible maneuvers after the Egyptian crossing of the Canal. Most of the Israeli armored forces were pushed forward from mobilization centers at the international borders immediately to the Suez Canal in order to attempt to destroy the Egyptian forces and deny them the accomplishment of a successful operation. On 14 October, during the course of developing the attack on the Egyptian front, the Israeli leadership was also forced to transfer major units from the Syrian front to the Egyptian front (this distance is over three hundred kilometers).

All the above give a strong indication of what kind of war is coming and the importance of successful carrying out march and engagement operation (movement to contact) on the modern battlefield.

US military leaders do not see an urgent need to conduct engagement operations and they view these kinds of operation as movement to contact. The Americans also do not see that the march is of great importance and must be taught and troops trained to conduct it as an individual type of operation. However, they view it as a measure which must be organized by the commanders at all levels in the conduct of defensive and offensive operations.

Movement to contact: whenever units of the US Army conducts an offensive operation, and are moving, but are not in contact with the enemy, they are said to be "moving to contact." Most attacks begin with a movement to contact. The purpose of the movement to contact is to gain or regain contact with the enemy and to do it in such a way that risks the smallest possible part of the force while the remainder is
available to immediately respond when contact is made. Once contact is made, the commander can further develop the situation, maneuver, concentrate forces, and attack. When out of contact he can do none of these against the enemy. Two situations can exist: the more common situation is one in which a US division is attacking and the leading battalion task forces are moving to contact. Armored cavalry (reconnaissance unit) may be employed to screen forward of the leading battalion task forces or to screen or guard the flanks of the division. Supporting forces are employed much the same as when the entire division conducts a movement contact.

Field artillery batteries may be dedicated to leading company teams or battalion task forces when considered necessary by the brigade commander and his direct support field artillery battalion commander. Vulcan platoons may also operate with the leading battalion task forces.

The other situation occurs if the entire division is out of contact and the distance between friendly and enemy forces is many miles. A formal movement to contact operation may then be conducted. In a formal movement to contact, the division may organize for combat with a covering force, an advance guard, a main body, flank guards, and a rear guard (see figure 1).

The division covering force is normally organized around the armored cavalry squadron or a tank heavy (reinforced tank battalion), or balanced (reinforced mechanized battalion) battalion task force. It is usually reinforced with field and air defense artillery and engineers. An attack helicopter company in support may also operate under the operational control of the covering force. More often, attack helicopter units are retained under division control. A covering force may be used to:
1. Locate the enemy, develop the situation, and penetrate the forward defenses of an enemy force deployed or deploying to defend.

2. Destroy enemy reconnaissance and advance guard units and force first echelon regiments of the enemy forces to delay.

**An advance guard** may be used to assist the covering force and to prevent premature deployment of the main body. It develops the situation along designated routes or axis of advance.

The advance guard is usually a tank heavy or balanced battalion task force moving in front of the leading brigade. It operates within range of field artillery, which moves within the main body.

**Flank and rear guard** may be used to protect the main body from ground observation, surprise, and direct fire. A flank or rear guard usually consists of one to two company teams or sometimes armored cavalry troops. Pure mechanized forces may be preferred for rear guard operations.

The remainder of the division moves with the **main body**. The main body normally moves with at least two brigades leading on generally parallel axis. When enemy forces are not organized in depth, it may be preferable for all brigades to move abreast.

Direct support field artillery battalions move with supported brigades with some batteries positioned well forward in the column. The rest of the division artillery moves on multiple routes and is dispersed throughout the main body. As previously described, some field artillery may operate with the covering force. In any case, field artillery support for covering and guard forces must be provided.

**CHAPARRAL** batteries operate in general support of the main body while **VULCAN** batteries operate in direct support of the covering and guard forces.
Engineers operate with leading units. An engineer company or company minus may be attached to the covering force and engineer Platoons to the leading battalion task forces.

The combat intelligence and electronic warfare battalion operates to locate the enemy strength. Its collection and jamming Platoons and ground support radar teams usually operate with the covering force and with the flank guards. Electronic countermeasures can be used against enemy command control and fire support nets. Electronic deception may be used to deceive the enemy as to the location of the main body and its activities.

Meeting engagement: American military leaders believe that a meeting engagement occurs when a moving force makes contact with a moving or stationary enemy force about which it has little or no information. The action ceases to be a meeting engagement when the situation has developed and other actions are undertaken, such as a hasty attack or defense.

The primary goal, once contact is made, is to gain the upper hand by taking actions to overcome the enemy before the enemy can effectively react. To do this, the commander must have his force in a good posture at the time of contact, must have good information as to the situation, either through good reports or personal observation, and must immediately issue instructions for a course of action.

If the enemy force is also moving, which is frequently the case in the exploitation, the counterattack, and even in the defense, speed, in both decision and execution, is most important. The commander must make a very quick estimate of enemy strength and either adopt a hasty defense or implement a hasty attack, outflank the enemy, and destroy him.

In short, this kind of combat action (meeting engagement) is rarely found among the American military manuals. The US commanders are not
concerned about this type of action, so that they describe it as an acceptable condition which can happen at battalion or task force level.

This concept may refer to the nature of the European theater, which does not offer space to organize and conduct such operations. At the same time, the Soviets are much concerned about march and meeting engagements as will be discussed throughout the following section.

The following are the main strengths and weaknesses of the US organization and conduct of march and meeting engagements.

The strengths:
During the movement to contact, the use of organic and allocated airpower gives the US division two significant strengths:

- Organic air cavalry and attack helicopter companies.
- Allocated close air support.

The division air cavalry troop is most often deployed under the control of the armored cavalry squadron and conducts an airborne screen forward of the covering force and to the flanks along the axis of advance. This aerial screen extends the reconnaissance capability of the covering force and provides the commander of the main body additional time to maneuver his forces against the enemy prior to contact between the advancing guard unit and the enemy's initial positions. The information provided by the air cavalry unit is passed, not only to the main body, but also to the commander of the division's combat aviation battalion, who provides this intelligence to his attack helicopter companies.

The air cavalry has a limited capability to engage targets with its platoon of attack helicopter; however, the unit's main objective is to provide intelligence, and it should avoid decisive engagement. Should the division commander desire to increase the capability of the
unit to engage enemy targets far forward, he can place one of his attack helicopter companies under the operational control of the covering force commander.

In making this decision the commander may consider:

-- Enemy strengths and dispositions (static or moving).
-- Enemy air defence artillery (ADA) threat.
-- Terrain.
-- Reaction time for refuel and rearm.
-- Available attack helicopter assets.

Should the enemy forces be occupying prepared positions, attack helicopter units are best retained under division control for use at a more opportune time.

When attack helicopter units react to target locations provided by the air cavalry, the cavalry scouts should maintain contact with the enemy until the target is engaged by the attack helicopter unit. If the target is company size or smaller the attack helicopter may use the one-third rule. One platoon engages, while one platoon rearms and refuels and the third is enroute to the battle location.

Should the target be of sufficient size, the commander may have his attack helicopters attack in mass with one or both companies. This technique will provide the greatest destruction of the enemy force, however, the prime consideration is the time required for the attack helicopters to rearm and refuel following such an engagement.

Close air support provided to the US division is of two types: immediate and pre-planned. For immediate sorties, close air support elements react to the enemy situation facing the division based on the priorities established by the corps. The most common use of the
Immediate sorties is the use of A-10's to augment the attack helicopters. When the attack helicopter unit makes contact, the target data is relayed through air force channels to the A-10 unit which is either airborne or on strip alert. The use of A-10's and cobras together for the same target is called a joint air attack team (JAAT) operation.

Fighters enroute to pre-planned missions may also be diverted enroute to react to enemy targets engaged by the division. These diverted sorties are also considered immediate airstrikes.

The division is allocated a certain number of preplanned airstrikes based on the unit priority and the number of sorties available. Division planners allocate these strikes against projected enemy target locations or against nonmobile, point type targets. These pre-planned sorties may be diverted to other target locations within the division sector as directed by the commander. The pre-planned system gives the commander a specific number of strike sorties upon which he can plan. It is important to remember that these sorties may be diverted to another area by higher headquarters and may also divert to alternate targets should weather conditions in the division area be below required minimums.

Another significant advantage enjoyed by US commanders is flexibility. The commander will tailor the composition of his forces, the distance between units, and the routes over which they will advance. Soviet doctrine is very rigid concerning the size and composition of the advance guard units and the main body. Soviet doctrine also specifically describes the distances to be maintained between units, location of the reserve and the routes to be used. US commanders may place the units on multiple routes, reduce or increase the distance between units and may place the reserve at any position within the maneuver plan. These techniques allow
a more flexible response to unsuspected enemy movements and reduces confusion caused by a deviation from the operations plan.

As the US division moves forward it has an important advantage in the distribution of combat support elements, specifically artillery units. These direct support and reinforcing elements are placed within the maneuver plan based on priorities and are not massed at any one location.

Direct support artillery battalions key on the maneuver of the units they support and may be located on multiple routes. The remainder of the division's reinforcing artillery is echeloned within the main body and is spread from the front of the column to the rear. Some artillery may be moved forward to augment the covering force and other units will provide support to the advance, flank, and rear guard units.

The weaknesses:

The only reconnaissance unit within the US division dedicated to the gathering of intelligence is the armored cavalry squadron. Each maneuver battalion has, as a part of its organization, a scout element; however, these units are normally regulated to duties other than gathering intelligence and providing information to the maneuver commander. They often control routes, direct traffic, and provide route information by orienting on the movement of the friendly unit rather than the movement of the enemy forces.

Another significant disadvantage is the lack of sufficient artillery within the division. Artillery is allocated by habitual command relationships and the number of tubes available to the commander may be sufficient to deal with the force encountered. As artillery support is shifted to critical points, other units may lose their dedicated artillery for periods of time.
A similar situation exists regarding air defense artillery. The current mix of mobile ADA weapons is insufficient to adequately cover all units within the division. Therefore, the US commander must consider a trade off between which units receive air defense artillery support.

If the mass of ADA weapons is moved forward, then the rear units are exposed. If the rear units are adequately covered, then the combat units are exposed. When the available ADA assets are spread from front to rear, then less than total coverage exists throughout the division. The Vulcan, twenty millimeters, air defense gun is especially critical as it has a range of only 1500 meters and has radar for range finding only.

FM 71-100 describes an advance guard as a tank heavy or balanced battalion task force. With the tank heavy force the advance guard would have a force of about fifty-four tanks. Since it must operate under supporting artillery fire, it would be located not more than eighteen kilometers from the artillery supporting it. These requirements cut down the distance between the advance guard and the main body, which in turn reduces the reaction time available to the division commander. Additionally, the tank battalion might be insufficient to decisively engage the enemy force when encountered. The Soviets have large numbers of antitank weapons within their BMB regiments, and they possess the capability to mass these long range weapons. As the tank battalion normally advances within a three to five kilometers area, it is highly vulnerable to the fire of massed antitank missiles and artillery.

The meeting engagement is defined as an operation which occurs when a moving force collides with another moving or stationary force about which it has little or no information. The meeting engagement ends when reaction movements such as hasty attack or defense are made it is
considered unwise to apply this concept to offensive operations. When a commander wishes to secure an objective or to destroy an enemy force, such as a second echelon or reserve force, a great deal of prior planning should be conducted. The terrain and enemy situation should be carefully considered so that the enemy's reaction and eventual engagement occurs at a time and place which is most suitable to the friendly force. When considering the enemy's reaction to friendly movement, the most critical aspect is accurate information about the enemy. Only by analyzing his capability to react, when, and in what strength, can the main purpose of the meeting engagement be conducted--the destruction of the enemy force or the attainment of the desired objective.

Section II. The Soviet March and Meeting

Engagement Operations

Soviet doctrine calls for high rates of movement while maintaining a deployment balance which allows the rapid commitment of the unit into combat.

The Soviet units usually move under cover of darkness or in conditions of limited visibility whenever possible. Populated areas are bypassed to avoid traffic congestion, but roads are used to maintain a high speed. Areas contaminated by radiation or chemicals are avoided unless it is imperative for tactical reasons to cross them. In the latter case, they are crossed with the greatest possible speed.

The Soviet leaders believe that the tactical movement must be organized and conducted to transfer troops and equipment from point to point on time and in a good shape in order to carry out an assigned mission. Therefore, troops can move by the use of mechanized equipment (tanks and armored carriers) or on foot in columns over roads and cross
country routes. Also movement of tracked vehicles (tank, self-propelled artillery equipment) is possible on heavy-duty low bed tractor trailers.

March movements: Troops may be transported by rail, air and water. Movement by railroad and water ways preserves the strength of personnel, protects machines from wear and saves other resources. Air transport, ensures speed of troop movement over considerable distances. The movement, from the Soviet point of view, can be also conducted by a combination of march and transport of troops. One or another method is applied, depending upon the problem at hand, the number of troops, the number of troops, the distance they must travel, the availability of transport, weather conditions and the condition of movement routes. All troops learn to move by any method and are constantly ready for whatever mode is required.

In this aspect, the Soviet military leaders believe that when both sides, on the battlefield, are moving toward contact, a meeting engagement is the expected result.

Therefore, this section will be divided into two portions--the march, and the meeting engagement.

The march is initially accomplished after considering the capability of personnel and combat materiel to sustain defined loads for a prolonged period. Any march, especially one made on foot, is a great strain on the physical strength of all personnel. If troops move on vehicles, then the greatest load must be borne by the drivers of the tanks, armored carriers, tractor trailers and other motor vehicles.

A march to contact may occur at the outset of a war, when columns move from a concentration area to cross a border, when units move through or between friendly units in the direction of the enemy, when a force,
having penetrated enemy defenses, is ordered to pursue a withdrawing enemy, and when a force must relocate to meet a probable counterattack.

The march to contact may be required in any type of offensive action, or when making the transition from defense to offense.

In any march to contact, the problem facing the Soviet commander is the proper disposition of his combat, combat support, and combat service support elements within the column, with the end goal the defeat of the enemy. The column organization, to include the proper disposition of combat, combat support, and combat service support elements, must be accomplished prior to initiating the march. This minimizes or precludes any reorganizing prior to commitment. In whatever form the actual engagement may take, the commander faces a multitude of considerations and potential hazards.

The following is an explanation of the plans for, and conduct of, the march to contact at division level.

A tactical movement by a Soviet division must accomplish two fundamental goals: the division must move from one location to another while maintaining unit integrity, and its march organization must establish the organization for combat. As a result, Soviet doctrine gives division commanders several basic factors for consideration when planning a march.

In order to protect the division on the march, the Soviet commander adopts measures to reduce vulnerability to nuclear weapons, conventional artillery, air strikes, and surprise attacks. Such measures include secrecy, marching during periods of limited visibility, dispersion, and marching at the maximum rate of speed possible for existing conditions. Maintenance of unit integrity requires the
commander to establish control measures and to organize the march to facilitate control.

If the division encounters the enemy during the march, or is expected to attack from the march, the units of the division must be placed in a formation that permits them to deploy quickly into the required combat formation. In most situations, time for detailed tasking or combat tailoring is not available. As a result, march organization establishes organization for combat. The commander must consider terrain, possible areas of contact, and avenues of approach when organizing for the march.

March planning and organization: specific march organization which is selected by any Soviet commander depends initially upon the commander's concept to accomplish the mission, the situation, terrain features, and the routes available. As a rule, a division marches within boundaries assigned by the higher headquarters. The area between the boundaries is called "a movement zone" (twenty to thirty kilometers wide), and is wide enough for the division to maneuver. The division commander decides how his division will transit through the zone.

The Soviet division may be assigned two to three routes to move on and sometimes it is assigned one route according to the road net available and the role of the division in the expected battle. In general, a division moves on multiple routes. Commanders, where possible, select routes which avoid urban areas, road junctions, defiles, and points close to railroad stations. Additionally, routes should be several kilometers apart to ensure dispersion. From the Soviet point of view, the routes selected must be at a distance of five kilometers from each other to offer fire and tactical cooperation within the division.
The commander conveys his decision concerning the march, to subordinates in the form of an operation order, known as a march order. The march order initially includes available information on the enemy, points of possible contact with the enemy, composition of the division's march column and rate of movement, time of passing the initial control points or lines, communication procedure, and the location of command posts.

The commander organizes the division for the move into the following elements: reconnaissance, march security, advance guard, flank and rear guards, and main body. The strength and composition of these elements varies according to the commander's decision. In some instances, for example, the commander may attach artillery and special units to the reconnaissance battalion, or augment an advance guard regiment with artillery from the division artillery regiment (see figure 2).

The division commander uses his reconnaissance battalion as a screen in front of the division which provides a continuous and timely flow of information on the enemy and terrain. Reconnaissance is conducted often by platoon-size groups which may operate from fifty to one-hundred kilometers in front of the main body. Regimental reconnaissance companies operate behind this screen, and up to fifty kilometers in front of the main body of their regiments. Generally, reconnaissance units do not engage in combat. At times, however, the division commander may reinforce the reconnaissance battalion initially by tanks and order it to seize and hold key terrain.

A division usually marches with a motorized rifle or tank regiment reinforced by additional artillery as advance guard. The advance guard's lead is twenty to thirty kilometers in order to give the main
body room to maneuver when the advance guard makes contact with the enemy, as well as giving the division commander an accurate picture of the enemy strength and maneuverability. The advance guard is expected to preempt the enemy in opening fire, to seize key terrain, and to neutralize enemy reconnaissance and security forces while the main body maneuvers.

When the location and strength of the enemy are known, the division commander may assign a clearly defined mission to the advance guard. This may be, for example, to bypass certain enemy positions and seize a key objective in the enemy's rear. When the mission is clearly defined in this manner, Soviet terminology for the leading regiment changes from "advance guard" to "forward detachment." In some cases, the division commander may form a forward detachment from units other than the leading regiment, and may send out a forward detachment ahead of the advance guard. An example could be a reinforced battalion operating independently ahead of the advance guard to hold a bridge or a river ford.

The advance guard or forward detachment may be supported by a detachment consisting of an engineer company augmented by chemical and motorized rifle troops.

March security elements protect the front, rear, and flanks of the march column. Security in front of the column is provided by an advance detachment and may be up to reinforced battalion dispatched by the advance guard or forward detachment. The advance detachment moves on the march route twenty to thirty kilometers ahead of the advance guard or forward detachment. It is a security screen for the movement of the main body, prevents surprise enemy attack, prevents ground reconnaissance by the enemy, and helps create favorable conditions for
the deployment of the main body. Flank security is sent out by units in the division. The division main body sends out company size units that operate at least three to five kilometers from the march column. The rear guard is normally reinforced company up to battalion size unit, reinforced by antiaircraft weapons, and tanks which follow the last element of the march column by three to five kilometers or more.

The main body consists of division headquarters and all combat, combat support, and combat service support units. The organization of the main body depends on the mission. There are two basic situations which must be considered. First, the division may be moving to attack an enemy in prepared positions. Second, the division may be moving under conditions when the point of attack and strength of the enemy are known. In either case, the commander selects the number of routes and the sequence of units in the march to best accomplish the mission.

In most cases, the tank regiment marches in the rear. When the division is attacking a defending enemy, the tank regiment generally is used, in the second echelon, as an exploitation force. In anticipation of a meeting engagement, the tank regiment is expected to conduct the widest maneuver and attack the flank and rear of the enemy.

Regiments march in column of battalions. Regiments may be separated by a distance of five to ten kilometers, while battalions move at an interval of three to five kilometers. The regiment which does not move on the same route with its advance guard might send a battalion or company size unit as an advance guard for this route. (See figure 3.)

Division artillery marches at the head of the division main body. The antitank guided missiles battalion moves just behind the regiment advance guard to take part in its operation.
The antiaircraft regiment's weapons are dispersed throughout the main body, particularly to protect the command posts. Additionally, aircraft missiles or guns are found in the advance detachment, the advance guard (forward detachment), the rear guard, and flank security elements.

A small chemical reconnaissance group from the chemical defense battalion supports the march by monitoring radiation levels on the march route, marking contaminated areas, and locating suitable routes around or through contaminated areas. Chemical defense personnel are found in all units of the division march organization.

Combat service support units, controlled by the deputy commander for the rear, move in column formation behind the maneuver units with the following exceptions: Vehicles that provide repair and maintenance assistance, refueling capability, and medical aid are interspersed with the maneuver units, are generally in the rear of maneuver battalions.

Conduct of the march: The division commander controls the march. When moving in front or army rear area, however, the division must follow traffic control procedures established by higher commanders. In this instance, the most important factors are the speedy and efficient movement of the division, and the tactical formation is of secondary importance. However, passive defense measures, such as dispersion, are still enforced.

The chief of staff is responsible to the division commander for movement control. He organizes a group of division staff officers who man checkpoints at phase lines and the start and release lines. These officers are accompanied by a small party of enlisted men from the traffic and control company and have radio communications with the appropriate
division command post.

Once the unit moves forward of the army's area into regions where contact is likely, the division must deploy into a tactical formation. In this situation, it is impossible to send forward staff officers and a command post to control the march. The division commander controls the march from a position near the front of the main body. Battalions usually move from assigned assembly areas to reach a specified starting point or starting line at the appointed time. Additionally, intermediate phase lines along the route are assigned, and scheduled rest and maintenance halts further help the commander control the operation. Phase lines are scheduled for every two hours march.

When the division is marching, the Soviets attempt to maintain radio silence as much as possible, with the exception of short codeword messages to report phase line crossings or emergencies. Therefore, the Soviets depend on messengers, liaison officers, helicopters, and visual signals. When division makes contact with the enemy they break the radio silence.

Columns of tanks and motorized rifle units usually move at fifteen to twenty kilometers per hour at night and thirty kilometers per hour by daylight. Normally, a division plans to move for eight hours, with twenty to thirty minute halts every two to three hours movement.

If the division is marching to attack a defending enemy, the division commander usually forms the division into approach march formation ten to twelve kilometers from the line of contact. The approach march is simply a formation from which the division deploys to attack. The division disperses laterally and in depth. At a pre-arranged line of deployment, the troop columns deploy into combat.
Regiments deploy into battalion columns at a distance of eight to twelve kilometers. The battalions deploy into company columns at a distance of four to six kilometers and into platoons columns at one and a half to three kilometers. At less than one thousand meters, the Soviets assign an "assault line," which is roughly equivalent to the US final coordination line (see figure 4).

When enemy dispositions are not known, the division marches in anticipation of a meeting engagement until contact is made.

If the commander believes the enemy to be of comparable strength, or even slightly superior strength, he conducts a meeting engagement. If the division encounters an enemy with overwhelming strength, the commander must organize a defense to delay and disrupt the enemy force until other units can defeat it or achieve a suitable ratio to attack it.

The meeting and engagement: The Soviet military leaders view the meeting engagement as one which will be the most common form of combat and, therefore, is a logical extension of the Soviet concept of the offensive.

The Soviets believe that the offensive will develop unevenly over a wide front. For a variety of reasons, some divisions will achieve greater rates of advance than others. This situation will result in numerous gaps, exposed flanks, and a confused and varying enemy response. The characteristic features of the resulting meeting engagements a rapid approach by the two opposing forces, an unclear fluid situation, and a relatively short but intense combat over a wide front with room to maneuver (see figure 5).

Under these conditions the Soviets believe, the side that most aggressively seizes the initiative will win. When contact is likely,
the Soviets march in anticipation of meeting and thus are organized for combat before contact with the enemy.

The concept of a meeting engagement is based on the following: the advance guard aggressively attacks when the enemy's leading elements are encountered. This stops the enemy advance and drives in his reconnaissance and security elements. While the enemy is attempting to clarify the situation, the main body attacks on the flanks and rear (see figure 6).

The Soviets require units marching in anticipation of meeting engagement to conduct a vigorous and deep reconnaissance to clarify the situation in order to facilitate a command decision. The Soviet commanders emphasize, however, that time is of the essence and that the unit should assume the offensive without waiting for clarification of the situation. A unit that blocks the enemy advance and attacks the flanks and rear of a still undeployed or partially deployed force can defeat an equal or larger foe.

The Soviet commanders recognize the risks entailed in attacking when enemy strength and exact locations are unknown, but they believe the very nature of the meeting engagement demands aggressive action and that conditions will be unclear, not only at the start but throughout the course of the battle. The gains of aggressive action, they believe, far outweigh the risks.

The commander must be alert to sudden changes in the situation and be prepared to shift fires, change direction, and establish new objectives. If he fails to seize the initiative, he must be prepared to organize a defense, halt the enemy, and launch a counterattack. If the enemy attacks with superior forces, the commander must be prepared to organize a defense in depth to contain the enemy attack until other
units can attack the flanks and rear of the enemy.

The following are the main Soviet strengths and weaknesses in organizing and conducting march and meeting engagement operations:

The way the Soviets deploy the long range reconnaissance elements during the phase of the march and meeting engagement operation can be considered an advantage for the division commander. Soviet doctrine emphasizes using these elements on the key terrain at a distance of eighty kilometers, from the main body in order to give the division commander a clear vision of threat activities at least two to three hours early. When the distance becomes shorter than forty to fifty kilometers, the division G2 is responsible for sending the long-range reconnaissance reserve (which usually consists of two to three groups) forward to provide the division commander with two to three hours advance warning. Helicopters and light transportation, such as light general purpose vehicles are usually used by this type of reconnaissance unit.

The Soviet doctrine of keeping the tank regiment, as a rule, in the second echelon and on the most flexible direction is considered an advantage. Studying the terrain is considered one of the main factors, the division decision to deploy based on. Therefore, the division commander is usually concerned about the location of the tank regiment column within the division march formation. He normally allocates the tank regiment to a direction which offers it easy deployment and maneuver space, in order to allow quick action into the threat flanks and rear.

The Soviet doctrine of moving the division command post at the head of the division main body is considered an advantage. Moving the division commander at the head of the main body gives him the opportunity to assume control of the division main force and to keep continuous contact
with the advance guard regiment and the reconnaissance elements. Also, it gives him the opportunity for quick movement to the advance guard area once the actual contact with the threat is made in order to supervise the advance guard combat action and reemphasize his previous decision or change it according to the situation. During this period of time the division chief of staff assumes control of the division main body.

The Soviet commanders usually employ a reinforced motorized rifle regiment, as an advance guard.

The motorized rifle regiment has the capability to seize terrain and to destroy up to two hundred tanks and armored vehicles. The Soviet motorized rifle regiment includes ninety-eight BMP's which carry antitank guided missiles. One BMP has the capability to destroy two tanks or armored vehicles. The motorized rifle regiment also includes an anti-tank guided missile company (five vehicles) with the same capability as the BMP. These are in addition to the antitank weapons in the motorized rifle battalions.

The method by which the Soviets move the antitank guided missiles assets behind the advance guard is advantageous to the division commander and the advance guard commander. The antitank guided missile battalion usually marches four to five kilometers behind the advance guard. This gives the division commander the opportunity for the immediate deployment of these assets to the most vulnerable flank. At the same time, it gives the advance guard commander the opportunity to coordinate with these assets to ensure the maximum effectiveness of their fires. The antitank guided missiles are always employed in conjunction with an engineer company operating as a forward mine detachment.
The weaknesses:

In march and meeting engagement, the Soviets are overly dependent on a huge number of reconnaissance elements. These elements could give the other side an indication about where and when the main body arrives in limited areas or lines. The Soviets normally send these elements at a distance of sixty to eighty kilometers or three to four hours from the main forces. This could give the opposing side the opportunity to organize a hasty defense, from the march, depending on the terrain features, in order to await the Soviet main forces in a suitable place and circumstances, to inflict a large number of casualties—a prelude to their complete destruction.

The Soviet march and meeting engagement operation needs air superiority along the routes of advance and over the likely area of conflict. This area might extend to more than a hundred kilometers due to the length of the division columns. On the other hand, the Soviet organization does not include any kind of aviation, and the army usually does not provide the division with enough aviation for air superiority or even for close air support.

The way the Soviet commanders calculate the likely area of the meeting and engagement is a disadvantage. The Soviet calculation depends initially on speed and distance, as well as the threat location and his normal speed. This might lead the Soviet commanders to fight the enemy in an area unsuitable for his forces, and this calculation should contain key terrain features, and should be calculated based on the actual speed of the threat.

The way the Soviets move their main body is an advantage. The Soviets usually march the main force on the same route taken by the
advance guard. Therefore, it gives the other side an easy way to determine their direction and follow the Soviet main strike.

The distance between the last vehicle in the advance guard and the first vehicle in the main body is estimated to be at twenty to thirty kilometers. This gives the other side at least one to two hours to carry out any special action, such as airmobile or air assault operations in order to isolate or delay the Soviet division main body as well as causing serious attrition before the actual engagement.

The way the Soviets march their combat service support units on one route and five to ten kilometers behind the combat forces, is a disadvantage. In the organization of the march operation, the Soviet commanders compose what they call a logistic tail. The division logistic tail usually consists of most of the division's combat service support units except small repair teams moved forward to support the combat units. The division does not assign any close guards to the logistic tail except those assigned for the overall march. Therefore, the Soviet logistic tail is usually exposed to enemy sabotage action which might delay or isolate it from the march columns of the division.

There is no doubt that the march and engagement operation is a relatively recent means to conduct maneuver.

It should be well organized, secured and protected. Engagement operations should also be seen as an important type of military action, and should be well pre-organized and foreseen. The march and engagement operations are definitely not accidental operations or operations which can be conducted when there is little information about the enemy. Indeed, it is considered a major type of the modern military action, and it requires a lot of information about enemy activities.
THE ORGANIZATION OF MARCH / US DIVISION
(FIGURE 1-4)

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A DIVISION MARCH ZONE 20-30 KMS

THE MARCH ORGANIZATION/SoviET DIVISION
(Figure 2-4)
The distance between columns at the Soviet division level

(Figure 3-4)
THE SOVIET SYSTEM OF DEPLOYMENT
(Figure 4-4)
THE MEETING ENGAGEMENT (FIGURE 5-4)
CHAPTER IV

FOOTNOTES


6FM 17-95, Cavalry, Headquarters, Washington, Department of the Army, 7 January 1980, pp. 4-15, 4-16, 5-27 - 5-28, 5-45 - 5-46.

7FM 71-2, The Tank and Mechanized Battalion Task Force, Headquarters, Washington, Department of the Army, 30 June 1977, pp. 4-10 - 4-11.


9FM 71-100, Armored and Mechanized Division Operations, Headquarters, Washington, Department of the Army, 30 March 1979, pp. 4-20 - 4-24.

10FM 100-5, US Army Operations, Headquarters, Washington, Department of the Army, 1 July 1976, pp. 4-9 - 4-11.

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CHAPTER V

Conclusion:

Over the preceding pages I have attempted to provide the reader with a broad comparison of US and Soviet doctrine as it applies to division size units engaged in offensive, defensive, march and engagement operations. As an observer and student of both nations' military doctrine as well as experiencing the application of Soviet tactical doctrine in combat during the Arab-Israeli war of October 1973, I believe I possess unique credentials to accomplish this unbiased comparison now for the reader.

It is readily apparent that there are important differences in the organization, equipment, training, command/control and tactical doctrine of the armies of the Soviet Union and the US. These differences, as I have hopefully indicated, are the product of the historical past, political system, geography, industrial capacity, technology, demography, and what I would like to refer to as national will as described in chapter I. All of these are ingredients which have gone into shaping the armed forces of these two superpowers. These individuals in government and military commands responsible for the deployment of their respective armies, have analyzed their forces and come to conclusions regarding their own strengths and weaknesses as well as those of potential enemies. They have, I assume, taken into consideration these conclusions in the development of tactical doctrine governing offensive, defensive, march and engagement operations discussed in this paper.

There are a number of distinct differences which, I hope, I have brought to the reader's mind as I have discussed the strengths and
weaknesses of the applicable tactical doctrine. On one hand, the
Soviets have paid close attention to the lessons learned in World War II. Their high ratio of artillery and their emphasis on armored forces, antitank and antiaircraft assets can be attributed to their past experience in Europe. The unwillingness to allow subordinate commanders freedom of action and the concern for detailed operational plans both mirror the political system of their country. On the other hand, the US Army has had a variety of combat experiences since World War II in the limited and counter-insurgency wars it has engaged in. The US awareness of their weaknesses in the numbers of both men and materials and the faith Americans have always had in technology to solve problems has led them to place a great deal of reliance on sophisticated weapons systems such as fire control, advanced attack helicopters, and nuclear weapons. The US, for example, has in its wars additionally enjoyed air superiority. This has led to the present neglect of antiaircraft assets. The US experience from the early days of the creation of the nation has bred initiative and independence in its soldiers and commanders. There is also the faith and willingness to trust subordinates to carry through tactical missions with only the minimal guidance.

I hope that in studying this comparative study that the reader will gain a clear understanding of the composition of a US or Soviet division. The reader should also have a clear picture of the tactical doctrine governing the respective offensive, defensive, march and engagement operations of the two nations. I have, in no way, attempted to indicate which forces I believe superior in regard to tactical doctrine, although I have pointed to what I perceive as their respective strengths and weaknesses.

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Finally, the determination of superiority can be decided by the informed reader. Hopefully, for the sake of world peace, the final proof of doctrinal superiority will never have to be determined by these two nations on the field of battle.
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