# The Soviet/Warsaw Pact Ground Forces Threat to Europe

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# The Soviet/Warsaw Pact
# Ground Forces Threat to Europe

In 1984, SACEUR General Rogers described FOFA as "an attempt to come to grips with the realities presented by Soviet doctrine for offensive operations and the continuing massive Soviet conventional force build-up. This chapter examines some of these realities, both what we know about a potential Soviet ground offensive in Central Europe, and the uncertainties surrounding those realities.

The Soviets have massed in Europe a large number of ground forces with an enormous amount of firepower: at present, the strength of the in-place Warsaw Pact forces in the Central Region-in terms of divisions, tanks, and artillery-is in each category close to twice that of NATO's in-place forces, and Warsaw Pact forces possess a good deal more strategic depth, for defensive purposes and to bring more forces to bear.[2] NATO, being a defensive alliance,

must be prepared to react to however the Soviets might choose to use those forces should a conflict arise. But how the Soviets might actually launch an offensive has generated a good deal of controversy.

This chapter, therefore, examines what we know and do not know about those aspects of Soviet strategy, operational planning and tactics of significance for FOFA: the role of conventional forces in Soviet doctrine; the Soviet ground forces facing NATO; the principles which govern Soviet military planning and strategy; the way a Soviet conventional offensive into Western Europe might be waged; and implications for FOFA.

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[1] General Bernard W. Rogers, "Follow on Forces Attack (FOFA): Myths and Realities, " *Nato Review,* No. 6, December 1984, p. 1.

[2] While the territory of the Warsaw Pact extends thousands of kilometers back into the U. S. S. R., NATO has little depth for defensive purposes: it is less than 500 kilometers from the inter-German border to the English channel; and the importance of Germany as a NATO land power in the Central Region makes it more difficult for NATO to trade space for time than it would be for Warsaw Pact forces to fall back when attacked to reorganize and counterattack. The U.S.S.R. is also better placed than NATO to bring additional forces forward to sustain those at the front line, as a good portion of NATO's reinforcements of men and equipment would have to come across the Atlantic from North America.

## SOVIET MILITARY DOCTRINE

Among Western analysts, one of the most controversial aspects of Soviet military planning is the role of conventional weapons in an offensive. This is due largely to different assessments of Soviet military "doctrine' and military thought.

Soviet military doctrine lies at the heart of the overall Soviet approach to war, which is quite different from that of the West. War, as the Soviets see it, is a science, something governed by certain "laws" and principles reflected in military history, and past and present wars, tests, maneuvers, and the like. Soviet military "doctrine" comprises a set of views defining the goals and nature of a possible war, and how the U.S.S.R. should prepare for and conduct

such a war should it be deemed necessary. It provides a context for deciding the size and composition of the Soviet Armed Forces, and for integrating their organization, tactics, training and equipment into a cohesive fighting force. Although viewed as scientific, military doctrine is not rigid or fixed; instead, it has proven to be quite dynamic but, once decided on, is rarely questioned except at the highest levels.

It is generally accepted among Western observers that a major shift in Soviet doctrine occurred in the mid-1960s, from a near total reliance on nuclear weapons in Soviet military planning, to a more balanced approach to de-

veloping nuclear and conventional forces. From the late 1950s until the mid 1960s, the Soviets believed any potential war would begin with massive nuclear strikes that would totally, and irreparably, destroy the losing side's entire social and political system. With the ouster of Khrushchev, however, and the adoption of a strategy of Flexible Response in the West, the Soviets began to consider the possibility of a war remaining conventional. Although they continued to believe that nuclear weapons would be decisive in any conflict, the Soviet military no longer contended that a conflict would inevitably escalate to all-out nuclear war. Since the mid 1960s, then, the Soviets have emphasized the need to be able to win at all levels of conflict, and have developed the capabilities to fight with or without nuclear weapons.

These developments have led to a good deal of controversy in the West regarding current Soviet doctrine and possible intentions. Some observers contend that the Soviets still place great weight on a "nuclear option" so that, should military conflict start, nuclear weapons would play a role from the beginning of that conflict. According to this view, "the Soviets perceive a totally integrated nuclear-conventional operation, within the framework of which nuclear and conventional weapons supplement and reinforce each other, creating the synergistic effect deemed necessary for the attainment of victory."3

A more common view among Western observers, however, is that should war be precipitated, the Soviets would want to keep the conflict conventional and regard nuclear release only as a last resort. They believe that the Soviets have become increasingly skeptical about the usefulness of nuclear weapons in combat today–

both for ideological reasons, and for operational ones.[4] These observers view the continued Soviet buildup of nuclear capabilities not as meant necessarily to wage a nuclear offensive, but instead: 1) to discourage initial NATO nuclear use; and 2) should NATO call for nuclear release, to be prepared to win at whatever level of nuclear conflict might ensue.[5]

The fact that these differing views are derived from Soviet sources and actions suggests the possibility of some degree of debate among Soviet military planners themselves. For now, the Soviets are apparently keeping their options open, with Soviet doctrine stipulating that any potential wars could begin with *either* conventional or nuclear weapons. If they are initiated with conventional weapons, it stipulates that they may still escalate to a nuclear exchange.[6]

What this means for FOFA, and for NATO as a whole, is that NATO cannot rule out, and thus ought to be prepared for, a conventional phase in any potential Soviet offensive. *What it also suggests is that—whatever strategies the West may adopt, or whatever systems we may buy today--evidence for assessing Soviet concepts is patchy and controversial, and Soviet strategy and tactics may change.* Since this report deals with the conventional defense of Europe, the remainder of this chapter examines how the Soviets might conduct a conventional offensive today should such an action be precipitated.

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[4]Nuclear weapons would lower the Soviet rate of advance and greatly confuse the battlefield, disrupting troop control and fairly precisely defined operational plans. See, for example, Lt. Col. John Hines and PhilLip Petersen, "The Soviet Conventional Offensive in Europe, " *Military* Review, April 1985, p. 3.

[5]See vol. 2, app. 4A, note 1. Volume 2 contains the classified appendices to this report.

[6]See, for example, Capt. 1st Rank A. Belyayev, "Scientific Concepts of Modern Warfare-An Important Element in the Awareness of the Soviet Fighting Man, " *Kommunist Vooruzhennykh Sil*, *No.* 7, 1985, as translated in Joint Publication Research Service, JPRS-UMA-85-050, Aug. 29, 1985, pp. 17-22.

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[3]1. Kass and M. Deane, "The Role of Nuclear Weapons in the Modem Theater Battlefield: The Current Soviet View, " *Comparative* Strategy 4(3):212, 1984.

# WARSAW PACT FORCES IN THE WESTERN THEATER OF MILITARY OPERATIONS

The Soviet threat facing Western Europe is a matter both of the numbers and equipment of Warsaw Pact forces, and of Soviet strategy for employing those forces. The main non-nuclear threat comes from the continental forces of the Warsaw Pact, concentrated in Central Europe along the eastern border of West Germany in what the Warsaw Pact designates as its Western Theater of Military Operations (TVD).[7] This region contains generally-although by no means exclusively–flat terrain (especially northern Germany), well suited to the movement of armored combat units, and the road to the key economic and political centers of Western Europe.

The Warsaw Pact's Western TVD consists of Soviet and non-Soviet Warsaw Pact (NSWP) forces in Poland, East Germany, and Czechoslovakia, and the Baltic, Belorussian and Carpathian military districts of the U.S.S.R. With a standing force of roughly 4 million personnel facing Europe, this area houses the Warsaw Pact largest, most ready, and most modern force, which far outnumbers NATO's in-place forces.[8] The Soviet forces include roughly 19 divisions in the Group of Soviet Forces Germany (GSFG) in East Germany, five divisions in the Central Group of Forces (CGF) in Czechoslovakia, and two divisions in the Northern Group of Forces (NGF) in Poland. NSWP forces include somewhere around 6 East German, 15 Polish, and 10 Czech divisions. Another 38 Soviet divisions lie in the three western military districts of the U. S.S.R.[9]

All of the Soviet Groups of Forces stationed in Eastern Europe are considered "ready" forces, i.e., are highly manned, well-equipped and trained, and are at least minimally prepared for combat with little or no mobilization and preparation. Most of the approximately 38 divisions in the western military districts of the U.S.S.R. are characterized as "not-ready"—i.e., they would require extensive mobilization and are not available for immediate combat operations. '" The Warsaw Pact forces in the Western TVD are equipped with close to 30,000 tanks and 20,000 artillery and mortar pieces. About two-thirds of these tanks and about three-fourths of all artillery is concentrated in the Soviet divisions, with the remainder in the NSWP divisions. [11] By contrast, NATO forces comprise far fewer ready divisions in Central Europe, [12] and roughly half as many tanks, artillery and mortars, armored personnel carriers and attack helicopters. Figure 4-1 presents some rough comparisons of NATO and Warsaw Pact strengths in the Central Region as published by the U.S. Department of Defense. There are disagreements, however, among published estimates due to differences such as state of mobilization, which forces are counted, and age of data.

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'For planning purposes, the Soviets have divided the areas contiguous with their borders into five "theaters' of military operations or TVDs--the Northwest, the Western, the Southwestern, the Southern, and the Far Eastern—in which they would expect military action on a strategic scale; the military assets employed in each TVD vary, but the strongest force is considered to be in the Western TVD. The Soviet Union itself is divided into 16 military districts.

The Soviet *term–teatr voennykh deistv*—has been variously translated in Western writings as Theater of Military Operations (TMO), Theater of Strategic Military Actions (TSMA), and Theater of Military Actions (TMA). This report follows DOD's current usage of 'theaters of military operations. and the acronym taken from the Russian, TVD.

"According to a 1984 NATO force comparison, the Warsaw Pact countries have a standing force of about 6 million personnel, of which about 4 million face NATO in Europe. The standing force of the NATO countries comprise about 4.5 million personnel, of which about 2.6 million are stationed in Europe. See *NATO and the Warsaw Pact: Force Comparisons,* NATO Information Service, Brussels, 1984, p. 4.
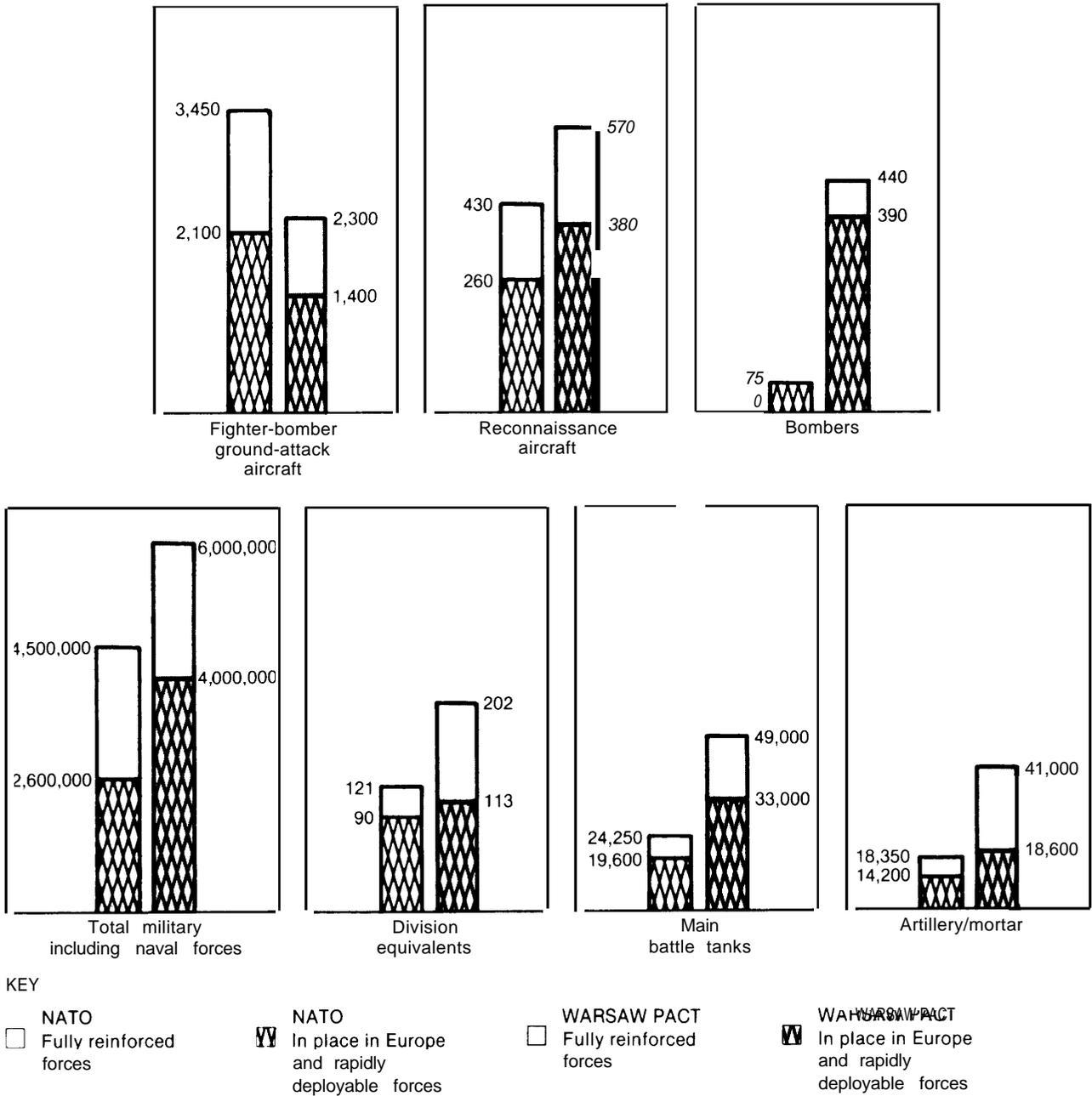
'*See* vol. *2,* app. 4A, note 2. For an unclassified discussion, see Laurence Martin, *NATO and the Defense of the West*, New York: Holt, Rinehart & Winston, 1985, p. 24.

[10]See vol. 2, app. 4A, note 3.

[11]U.S. Department of Defense, *Soviet Military* Power, *1986*, p. 12. See vol. 2, app. 4A, note 4.

"Unclassified estimates vary on the number of NATO and Warsaw Pact divisions in the Central Region, and there are many differences–in personnel and equipment–between NATO and WP divisions. These numbers, therefore, provide the basis for a rough force comparison, but should not be viewed as a comparison of equivalent units. See *Soviet Military Power, 1987,* estimates from the International Institute for Strategic Studies (11SS), London, and L. Martin, *NATO and the Defense of the Wrest,* pp. 24-25.

**Figure 4-1 .—NATO/Warsaw Pact Force Comparisons[a]**



KEY

| NATO | NATO | WARSAW PACT | WARSAW PACT |
|---|---|---|---|
| Fully reinforced forces | In place in Europe and rapidly deployable forces | Fully reinforced forces | In place in Europe and rapidly deployable forces |

[a]Estimates vary in the unclassified literature regarding all of these force comparisons The above should be taken only as a guide as viewed by 'he ''epartment ''
   Defense The chart reflects U.S estimates of 1985 data NATO estimates exclude France and Spain

SOURCE *Soviet Military Power, 7986,* pp 89, 91

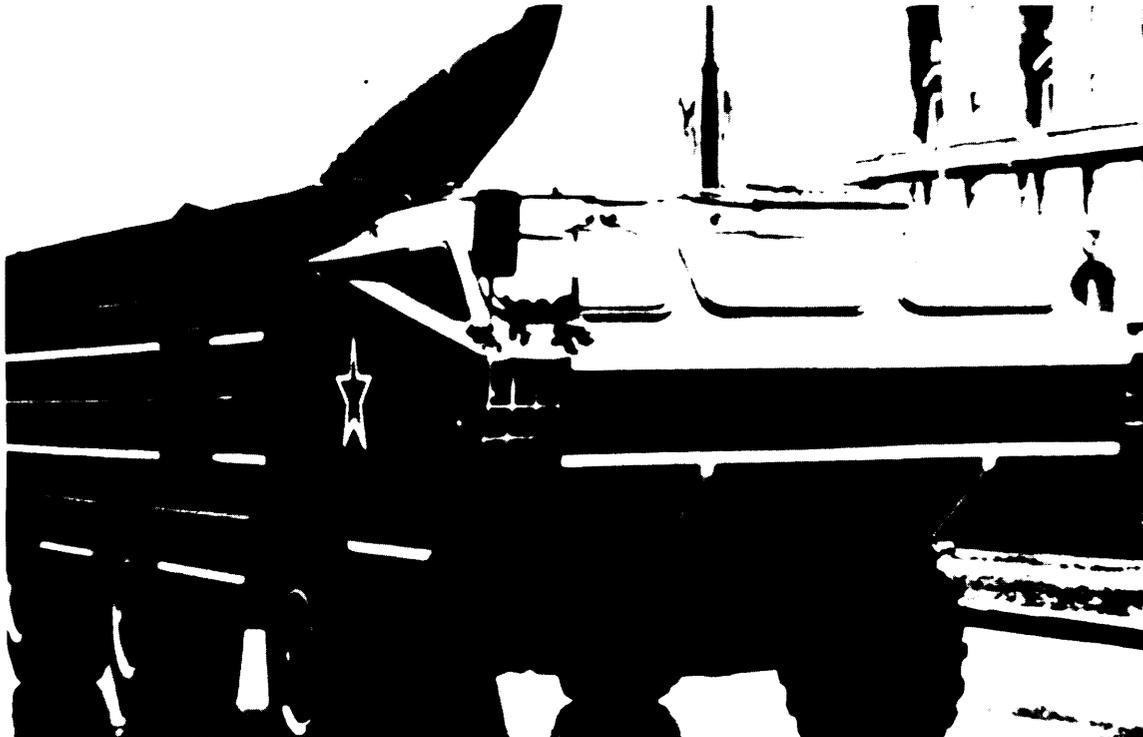*Photo credit: U S Department of Defense*

Soviet **missile launchers.**

The main elements of the Soviet ground forces are the tank, motorized rifle, and airborne divisions.[13] Each of the tank and motorized rifle divisions contains a similar complement of artillery, anti-aircraft guns and missiles, tactical surface-to-surface missiles, and support units, with the chief difference between them lying in the number of motorized rifle regiments and tank regiments in each: a Soviet tank division (estimated at about 11,000 men) includes three tank regiments and one motorized rifle regiment; the motorized rifle division, slightly larger (an estimated 13,000 men), has three motorized rifle regiments and one tank regiment[14] (table 4-l). An important point to note with regard to FOFA, however, is the overall ratio of armored to non-armored vehicles: in both tank and motorized rifle divisions, there are more than twice as many trucks and other light vehicles as there are armored vehicles[15] (table 4-2). The airborne divisions include three airborne regiments and combat support and service units. In addition to the regular airborne divisions, the Soviets have also formed air assault brigades and battalions.

According to preliminary research from the Royal Military Academy, Sandhurst, the Soviets may now be moving toward a more flexible organization of their forces as well, by turning more toward the corps/brigade structure as a possible alternative to the focus on divisions and regiments. Researchers at Sandhurst believe the reorganization of some Soviet divisions into corps may presage a larger reorganization of the Soviet force structure overall. Such changes would only reinforce the belief of the U.S. DoD that these forces have been

and are being expanded and reorganized to create a larger, more capable and higher-speed fighting force for a conventional or nuclear battlefield.

**Table 4-1 .—Structure of Soviet Motorized Rifle and Tank Divisions**

|  | MR | Tank |
|---|---|---|
| Total personnel | 12,695 | 11,470 |
| Division HQ & HQ company | 245 | 245 |
| Tank regiments | 1 regiment 1,145 personnel | 3 regiments, each w/1 ,575 personnel |
| MR regiments (BMP) | 1 regiment 2.225 personnel | 1 regiment 2,225 personnel |
| MR regiments (BTR) | 2 regiments, each w/2,31 5 personnel |  |
| Artillery regiment. | 1,030 | 1,030 |
| SAM regiment (SA-6) | 480 | 480 |
| FROG battalion | 170 | 170 |
| Multiple rocket launcher battalion | 255 | 255 |
| Antitank battalion | 195 | — |
| Reconnaissance battalion | 340 | 340 |
| Engineer battalion | 395 | 395 |
| Signal battalion | 270 | 270 |
| Motor transport battalion | 370 | 370 |
| Maintenance battalion | 230 | 250 |
| Chemical defense battalion | 225 | 225 |
| Medical battalion | 175 | 175 |
| Artillery command battery | 70 | 70 |
| Mobile field bakery | 45 | 45 |
| Helicopter squadron | 200 | 200 |

SOURCE Defense Intelligence Agency *Soviet Divisional Organization Guide* DDB-1 100333-82 July 1982, reprinted May 1985 pp. 9 80

**Table 4-2.—Vehicles Soviet Tank and Motorized Rifle Divisions**

|  | Motorized Rifle Division | Tank Division |
|---|---|---|
| Total combat vehicles of which | 1,029 | 976 |
| Tanks | 220 | 238 |
| Armored personnel carriers | 649 | 488 |
| Artillery | 108 | 108 |
| Air defense | 52 | 52 |
| Trucks | 2,501 | 2,427 |

SOURCE Defense Intelligence Agency *Soviet Divisional Organization Guide* DDB-1 100-33382 July 1982 reprinted May 1985

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[13] See vol. *2,* app. 4A, note 5.

[14] See Soviet *Military Power 1986,* p. 65, and U.S. Department of the Army, *Soviet Army Operations,* April 1978, IAG-13-U-78, pp. 2-10-2-13.

[15] See vol. 2, app. 3A, footnote 6.

# PRINCIPLES OF SOVIET STRATEGY

*In* assessing Soviet strategy, the extent to which the Warsaw Pact is dominated by the U.S.S.R. means that what the Soviets think and do will generally apply to the entire Warsaw Pact: all Warsaw Pact armies are organized along the same lines, have highly standardized equipment, and have largely the same tactics and doctrine as in the U.S.S.R. During

wartime, the NSWP forces would be completely subordinated to the Soviet Supreme High Command through intermediate-level theater commands.

Soviet writings outline a number of principles which would govern the use of these forces in any Warsaw Pact conventional offensive into Western Europe. The overriding principle would be to adopt a strategy, operational plans and tactics that would allow Soviet forces to penetrate and neutralize NATO's defenses very quickly, while at the same time: 1) minimizing the risk of escalation to a nuclear catastrophe, and 2) keeping the conflict off the territory of the U.S.S.R. The Soviet aim would be to get rapidly into NATO's depths and seize key objectives–NATO's nuclear arsenals, $C^3I$ assets, air force assets, logistic elements, etc.—before NATO would have a chance to fully mobilize, before reinforcements would be able to arrive from the United States, and before NATO could reach a decision to use nuclear weapons.

Of key importance in achieving this principle, the Soviets emphasize, are the two factors of speed and *surprise.* In order to reach their objectives quickly—i.e., before Western countries could prepare their defenses fully or agree to use nuclear weapons—the Soviets believe that a European war must start suddenly, taking NATO by surprise. This does not necessarily mean total surprise, or even military surprise, but political surprise—i.e., an offensive which would catch off guard those NATO leaders who make the political decision to mobilize, prepare defenses, or release nuclear weapons. Although there could never be total surprise, a reasonable degree is regarded as essential, largely as an important force multiplier: a certain degree of surprise would make it possible to reach objectives with fewer forces than would be needed against an enemy prepared for battle.

To achieve this speed and surprise, a Soviet offensive would probably be accompanied by some kind of *deception* scheme to make troop movements and mobilizations appear to be occurring for reasons other than planned aggression. Many believe that NATO would be far less likely to react if any Soviet preparations for war were ambiguous. And once an offensive is initiated, the Soviets emphasize the importance of speed—i.e., of *seizing and holding the initiative,* retaining the *offensive,* and *maintaining a high rate of advance.* The Soviets place overriding stress on the offensive as the only "decisive" and therefore the only possible form of war.

In an initial offensive, the Soviets would likely *concentrate their efforts* along certain fronts, attempting deep, heavy thrusts along narrow sectors, and would look to *exploit the enemy weaknesses.* The purpose would be to confront NATO with an overwhelming attack on a few small areas which NATO would not be able to match. With the different NATO corps at different states of readiness, the Soviets are expected to exploit the gaps in NATO's defense, and to place the main weight of attack on the more vulnerable areas-i. e., on the U. K., Belgian, Dutch and Danish contingents. (The U.S. and German corps are considered to be the most formidable forces in NATO, so it is considered unlikely that the Soviets would attack them head-on. ) This concentration of power in narrow sectors would be conducted as part of an overall plan that would be designed to lead to a rapid penetration of NATO defenses and NATO's collapse.

The Soviets would divide their forces into theater level forces—consisting of *fronts* and armies-and tactical units, consisting of divisions, regiments, battalions, and smaller. In other words, fronts would be comprised of armies; armies are comprised of divisions; divisions, of regiments; regiments, of battalions; and battalions, of companies and platoons. Fronts have no fixed organization. Anywhere from one to six fronts might be put together to participate in a specific strategic operation in a TVD (Soviet military theater).[16] Armies consist of two main types: the Tank Army, (comprised of mainly tank divisions), and the

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"For a fuller description, see Soviet *Army Operations,* Department of the Army, U.S. Army Intelligence and Security Command, and U.S. Army Intelligence and Threat Analysis Center, IAG-13-u-78, April 1978.

Combined Arms Army, (with more motorized rifle divisions). When tailored for combat operations, either type of Army would normally include: three to seven divisions; SSM brigade; several artillery brigades; antitank units; AAA units; SAM regiments; signal regiment; combat engineer units; pontoon units; assault crossing units; transport units; supply facilities; evacuation and repair units; medical units and facilities.[17] Soviet forces are also divided into corps and brigades; corps are generally comprised of two or three divisions, for operations which would not require a full army.

In order to threaten a quick breakthrough and a rapid, continuous penetration deep into NATO territory, these forces have been organized into successive waves, or echelons, dispersed in great depth. The purpose is to be able to bring fresh forces against the adversary at the right times to buildup pressure and force and sustain a breakthrough. Thus, Soviet forces throughout the entire force structure down to the battalion level are divided into "echelons"-- first, second, and perhaps even third-and reserves. Each regiment contains first and second echelon battalions; each division, first and second echelon regiments; each army, first and second echelon divisions; each front, first and second echelon armies; and the entire theater of operations would likely have first and second echelon fronts. As figure 4-2 illustrates, NATO Central Region ground forces in their main defensive positions would likely have to contend with three different "second echelons, " or waves of enemy forces following the lead divisions of the assault armies: the Second Tactical Echelon, or the follow-on divisions of the assault armies; the Second Operational Echelon, or the follow-on armies deploying from Poland, Czechoslovakia and Western Military Districts; and the Second Strategic Echelon, or Second Echelon Front, consisting of the follow-on armies from the western military districts (WMD). As illustrated below, however, the Soviets have demonstrated a good deal of flexibility in how echelonment may be carried out, and these "waves" would not necessarily be of equal weight or significance.

Each Warsaw Pact unit would probably be assigned a sector to attack and, if of division size or larger, a main and secondary axis of advance within that sector. In addition, all units of brigade size or larger would be assigned a depth of attack which contains an immediate and subsequent objective or mission. In this sense, therefore, second echelons would not be reserves in the usual sense, but rather would act *as precomm*itted reserves that would have been assigned their pre-planned missions before the offensive begins. The reserves, a small proportion of Warsaw Pact forces,[18] would be contingency forces to use against unanticipated threats and to take advantage of unexpected opportunities.
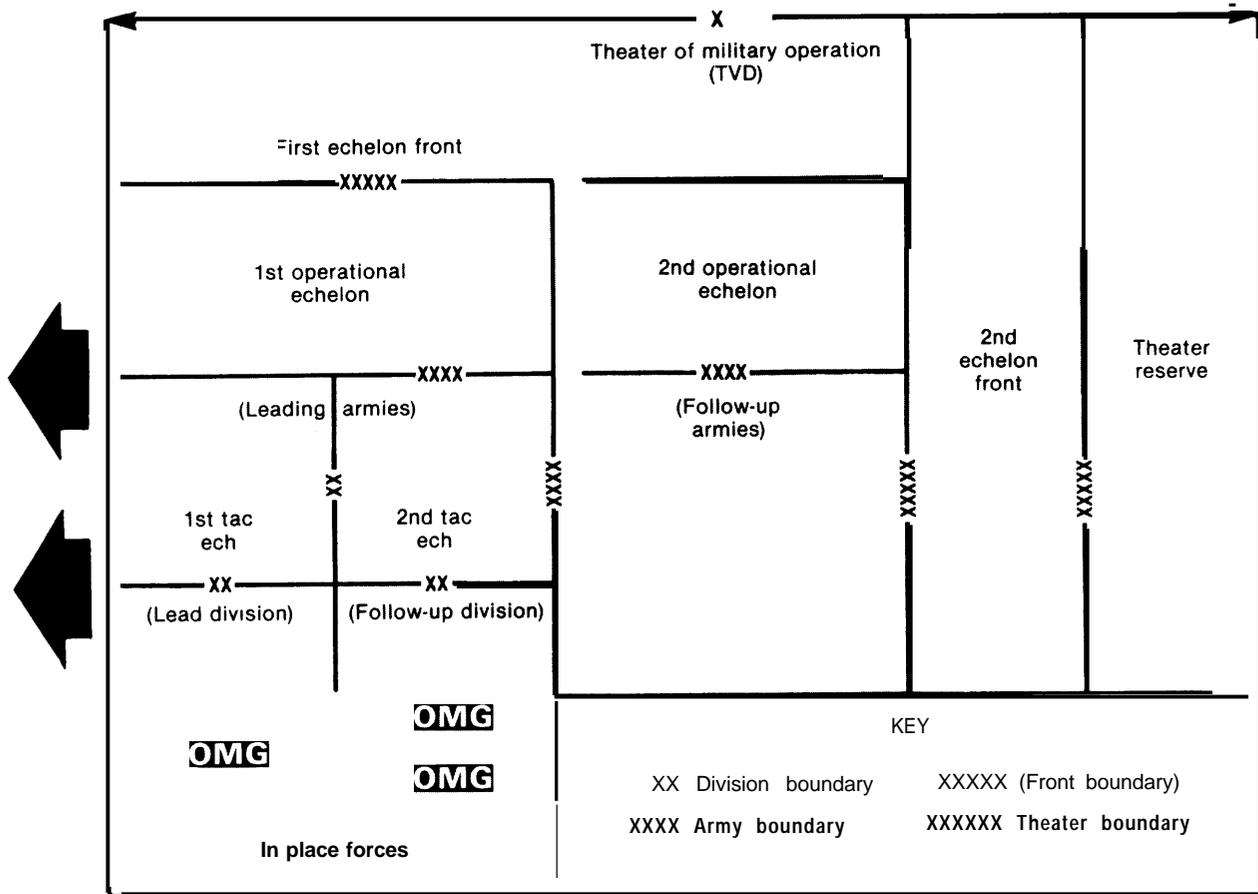
To exploit these breakthroughs, the Soviets have revived the World War II concept of mobile groups, which would take advantage of any breakthrough to move into NATO's rear. It is believed that these independent divisions, armies, or regiments-with their new capabilities, now commonly called *Operational Maneuver Groups* (OMGs)—would be assigned to operate on their own to capture key objectives in the NATO rear that would both pave the way for the follow-on forces and neutralize NATO's theater nuclear threat. In this way, their task would be to create the conditions for turning a tactical success–i.e., an initial breakthrough of NATO defenses–into an operational success, by paving the way for the second echelons of the army or front of which they are a part to achieve their preassigned objectives.

The Soviets expect a battlefield that would be very confused. There would be no clearly discernible front line, forces would mingle in depth and would engage primarily in battles of encounter (i.e., when both sides engage while on the move).[19] The Soviets plan to win a decision quickly, but are prepared to fight a long war if they have to.

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[17]Ibid, pp. 2.7-2.10.

[18]**See** vol. **2,** app. 4A, note 7.
[19]See Christopher N. Donnelly, "The Warsaw Pact View of the Future Battlefield, *120A National Security Report* (Royal Military Academy, Sandhurst, A68), pp. 11-14.

**Figure 4-2.— Warsaw Pact Concept of Employment**



X

Theater of military operation
(TVD)

First echelon front

XXXXX

1st operational
echelon

2nd operational
echelon

2nd
echelon
front

Theater
reserve

XXXX

XXXX

(Leading armies)

(Follow-up
armies)

1st tac
ech

2nd tac
ech

XX

XX

(Lead division)

(Follow-up division)

OMG

OMG

OMG

KEY

In place forces

XX Division boundary

XXXX Army boundary

XXXXX (Front boundary)

XXXXXX Theater boundary

NOTE It is Important to keep in mind that this diagram is highly schematic, fOr illustrative PurPoses only The Warsaw Pact forces have demonstrated flexibility in echeloning forces First and second echelons— whether tactical, Operational. or strategic — would likely not be of equal weight or significance *(See text)*
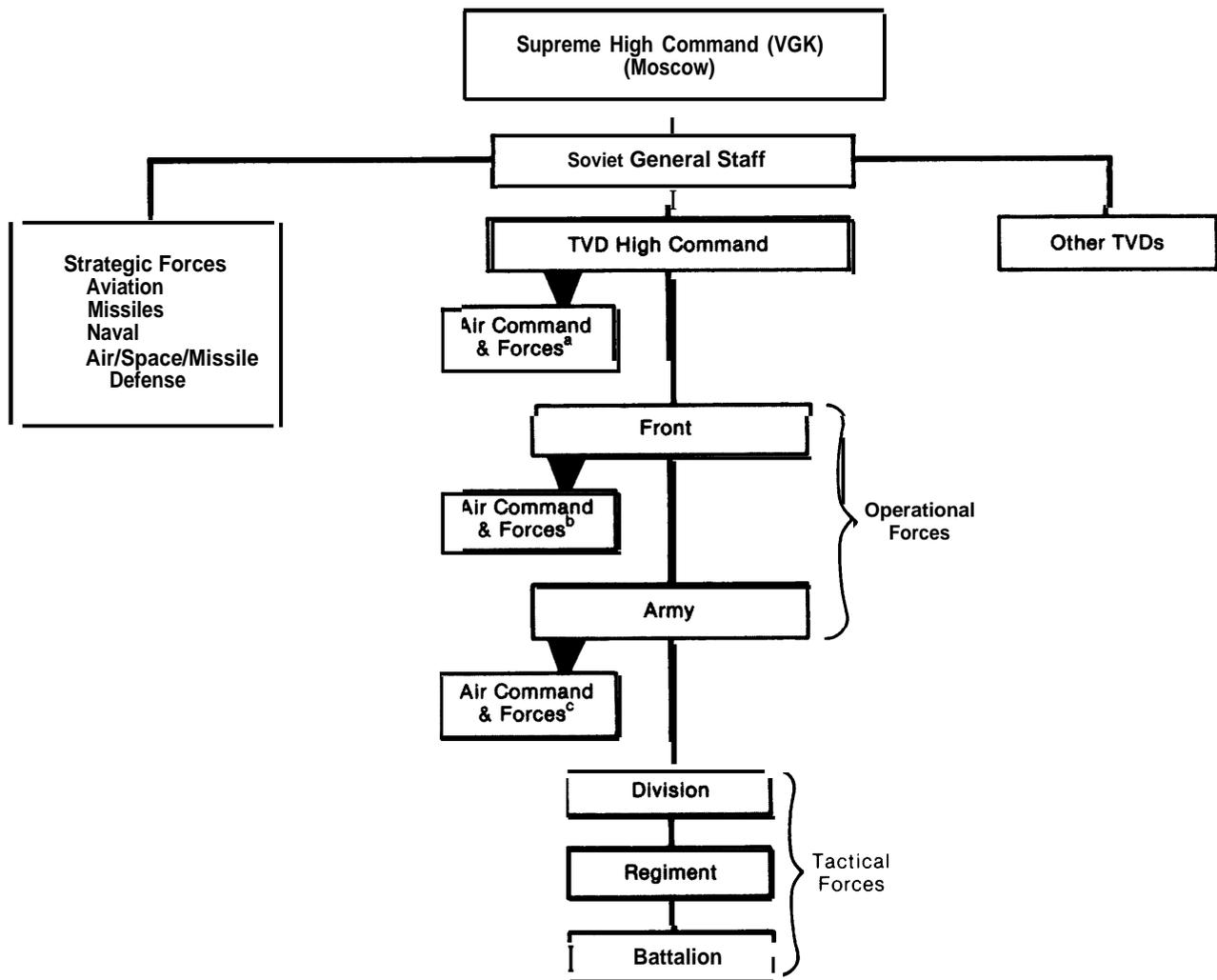
SOURCE General Bernard W Rogers, Follow-On Forces Attack (FOFA) Myth and Realities,' *NATO Review*, No 6. December 1984 p 2

Soviet planners believe that their system of command and control, or 'troop control, has been structured in the best way to meet the demands of such an offensive. The Soviet theater command structure is highly centralized, with all Warsaw Pact forces under a single, centralized military command authority, the Soviet Supreme High Command (VGK) and the Soviet General Staff.[20] The Soviets empha-

size a "top down" command and control system, with commanders at the TVD establishing concrete strategic goals, and then moving particular missions and requirements down the hierarchy, to the front, the army, division, and so on (figure 4-3). The Soviets also engage in a good deal of "pre-planning" of operations, i.e., anticipating what future operations might look like, and providing specific "norms" by which commanders would make decisions. Thus, less initiative would be expected of Warsaw Pact commanders at the tactical levels than in the West.

[20] For a comparison of the Warsaw Pact and NATO command and control systems, see John Hines and Phil Petersen, " Is NATO Thinking Too Small? A Comparison of Command Structures," *International Defense Review, No. 5, 1986,* pp. 563-572.

**Figure 4-3.—Soviet/Warsaw Pact Wartime Command Organization**



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                    Supreme High Command (VGK)
                          (Moscow)

                      Soviet General Staff

  Strategic Forces          TVD High Command              Other TVDs
     Aviation
     Missiles          Air Command
     Naval             & Forcesᵃ
     Air/Space/Missile
       Defense
                           Front            ⎫
                                            ⎬  Operational
                      Air Command           ⎪    Forces
                      & Forcesᵇ             ⎪

                           Army             ⎭

                      Air Command
                      & Forcesᶜ

                          Division          ⎫
                                            ⎬  Tactical
                          Regiment          ⎪   Forces

                          Battalion         ⎭
```

In **time of war, the NSWP forces would be brought under direct Soviet command and integrated with the various Soviet fronts.**

ᵃCounter air and deep interdiction
ᵇCounter air and deep interdiction and air support for *front*
ᶜAir support for army

SOURCES Adapted from Phil Petersen and John Hines, "Changing the Soviet System of Control," *International Defense Review, No 3, 1966,* and Science Applications, Inc., *Soviet/Warsaw Pact Battlefield Planning Procedures,* Draft, SAIC-86/6064—FSRC, May 26, 1966.

# SOVIET/WARSAW PACT GROUND OFFENSIVE INTO EUROPE: A NOTIONAL SCENARIO

Although there is a good deal of uncertainty about how the Soviets might put these principles into practice should war in Europe occur, the following notional scenario suggests what a Soviet offensive into Europe might entail.

Should hostilities be initiated, the organization of forces in the Soviet Western TVD would probably include three first echelon fronts: a Northern *Front,* comprised mainly of Polish forces, with its headquarters drawn from the Polish Ministry of Defense; a *Central Front,* formed from the GSFG, NGF, and East German forces, with its headquarters staff drawn from the staff of the GSFG headquarters; and a Czech *Front,* consisting of Czech forces and the Soviet CGF, with its headquarters drawn from the Czechoslovak Western Military District headquarters.[21] During wartime, the Northern Front would likely be deployed to the northern GDR, tasked to attack northern West Germany, the Netherlands, and Denmark and, along with airborne and amphibious operations, to take the Danish straits. The Central Front would conduct the main theater attack across West Germany and into Belgium, the southern Netherlands and Luxembourg. The Czech Front's mission would likely be to attack from Czechoslovakia into the southern FRG to the FRG-Swiss-Austrian border. In addition, a Danube Front, formed from the Soviet Southern Group of Forces (SGF) in Hungary and from the Hungarian Army, might be tasked to attack through Austria into the Southern FRG. Soviet forces in the Belorussian and Carpathian Military Districts might comprise two second echelon fronts, with the Baltic Military District providing theater reserves.

As discussed above, the Warsaw Pact ground forces vary widely in their peacetime levels of readiness, with a good number of divisions manned at levels well below their wartime authorizations; these forces would require extensive preparation for war. The preparation would include mobilizing personnel, training and preparing them to conduct combat operations, moving units from their dispersal locations, making final preparations, and, finally, deploying units to combat.[22]

Because the Soviets would likely want some of their follow-on forces to be prepared to exploit any successes at the FLOT, it is expected that they would mobilize partially and begin deployment before they would attack NATO. Most of the Warsaw Pact's first and second operational echelons are at high states of readiness in peacetime. Accordingly, these units can be rapidly deployed from their peacetime locations into assembly areas. For many of those forces in the rear, however, it would take a good deal longer, depending on what level of proficiency the Soviets would want them to reach before hostilities begin. Because of the Soviet emphasis on surprise, and on depriving NATO of any unambiguous warning of an attack, NATO planners believe that the bulk of Soviet forces would be well back from the border between NATO and the Warsaw Pact before hostilities would start. According to one source, NATO's strategy for meeting a Soviet conventional attack is based on the assumption of at least some *96* hours warning time, " although some believe it might well be shorter."

Soviet doctrine for deploying these forces would pose some demanding requirements on the timing of movement of the second echelon divisions, armies and fronts. These would be deployed according to a carefully coordinated plan, where each succeeding echelon would be committed at the time and place considered most effective for exploiting the success of its predecessor and advancing deeper into NATO territory. Thus, second echelon divisions of the first echelon armies would start at a particu-

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[21] However, estimates vary on the number and composition of fronts, and how they would likely be deployed during war.

[22] *See* vol. *2,* app. 4A, note 8.
[23] Laurence Martin, op. cit., p. 50.
[24] See vol. 2, app. 4A, note 9

lar distance behind the forces at the FLOT, to be committed to battle to achieve objectives a certain distance beyond the FLOT according to schedule. Second echelon armies would be scheduled to arrive a few days later, having started some distance behind in Warsaw Pact territory and with an objective deeper into NATO territory. Second echelon fronts would likewise start even farther back, with a schedule for attaining objectives even farther into NATO's depths. OMGs—parts of armies or fronts designed to carry out deep penetrations and raids as the opportunities arise on the main axes of the attack—would be committed early and would operate well into NATO's rear areas on their own, without the support of the usual supply lines.[25]

Thus, depending on levels of readiness and how they fit into the overall Soviet offensive plan, the follow-on forces would start anywhere from just behind the initial attack forces, to farther back in East Germany, Poland, Czechoslovakia, and then the U.S.S.R. itself. Those farthest back would be transported across a relatively sparse highway and rail network in eastern Poland. According to one set of calculations, the Soviets might bring forward an average of two divisions per day by rail,[26] and up to one division per day by road.[27] It is estimated that at least 140 trains would be needed per day to transport forces across the seven

East-West rail lines in Poland. According to these calculations, this would suggest about 20 trains departing along each rail line per day, departing just about every hour with an average maximum spacing of about 35 kilometers between trains.[28] After crossing most of Poland, units would proceed to Forward Assembly Areas.

Closer in, the follow-on forces would group into combat units and continue under their own power toward the battle. Tanks and other armored vehicles would first be loaded onto tractor-trailer transporters before being unloaded to move under their own power. An armored combat division would, if possible, move on two, three, or four parallel routes; thus, any one division moving over roads could stretch well over 40 kilometers.[29]

A division on the move would stop from time to time in assembly areas: to reorganize, maintain vehicles, and rest. Soviet doctrine calls for short or long stops, depending on the reasons, the distance from the FLOT, and the division's schedule. Upon arrival in the immediate battle area, a division would assemble in "final assembly areas, " or "departure areas" before forming into a tactical march formation to be committed to battle. At this point, the majority of support vehicles would move away to their own assembly areas, so that columns moving forward from this point on would consist mainly of armored vehicles. Having been committed, a division's regiments would again stop closer in—somewhere in the range of 5 to 30 kilometers from the FLOT—in regiment assembly areas for their final move forward into battle.[30]

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[25] See vol. *2,* app. 4A, note 10.

*'The actual number may well be higher.

"Those forces being transported by train would arrive at transloading complexes near the Russian/Polish border, where they would change from broad gauge to narrow gauge before starting across most of Poland. There are about eight complexes along the Russian/Polish border where equipment is off-loaded from Russian broad gauge to East European narrow-gauge; time for transloading is estimated at about 4 hours per train.

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*See vol. *2,* app. 4A, note 11.

*'See vol. 2, app. 4A, note 12.

[30] See vol. 2, app. 4A, note 13.

# SOVIET AND WARSAW PACT VULNERABILITIES

The above scenario implies some potentially serious vulnerabilities in the Warsaw Pact system—such as rigidity in Soviet planning,

their C3 system, the vulnerability of large columns of Warsaw Pact troops on the march, and the fact that Warsaw Pact troops will have

to move through critical "chokepoints"--which could suggest important targets for FOFA.

For example, some argue that the large number of Warsaw Pact follow-on forces, and the precise timing with which they would move forward, would leave little room for flexibility in a Soviet offensive; if this is true, a changing situation in the movement of follow-on forces, such as might be caused by FOFA, could significantly disrupt the Warsaw Pact timetable for war.[31] Likewise, they contend, a highly structured plan could strain Soviet command and control, whose disruption would also cause Warsaw Pact planners serious problems. The size of the Warsaw Pact columns could comprise another major weakness, leaving Warsaw Pact forces vulnerable to air attack.

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"See vol. 2, app. 4A, note 14.

And potential chokepoints, such as at bridges over the Oder and Elbe Rivers, would also be potentially major vulnerabilities; creation of these chokepoints would delay and disrupt Warsaw Pact follow-on forces, and as the delayed forces bunch up, would offer good targets for follow-up attacks." As Soviet rear services centrally control all logistic support activities and supplies, disrupting ammunition resupply and delaying the arrival of the second echelon could also disrupt Soviet operations.

Thus, within the framework of this general scenario, key targets for FOFA might include not only fixed targets-such as bridges across the Oder and Elbe/Vltava rivers, railyards, depots, etc.–but the Warsaw Pact forces themselves, including columns of second-echelon ar-

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"See vol. 2, app. 4A, note 15.



*Photo credit U S* Department of *Defense*

Soviet tanks.

mored and support vehicles (moving both by rail and by road), units in assembly areas, chokepoints, and Warsaw Pact headquarters and command posts. Identifying OMGs prior to their commitment to battle is also sometimes considered a major task for FOFA. At-tacking these targets would likely delay the enemy reinforcement and resupply at the FLOT, and might so erode morale in the rear, that the Soviet offensive would be degraded and made more manageable for NATO forces at the front.

# AREAS OF CONTROVERSY AND UNCERTAINTY

This overall scenario, however, has raised a number of serious questions among Western observers. In general, these questions concern how flexible the Soviets might be in implementing this overall plan, and thus what it would take to delay or disrupt Warsaw Pact follow-on forces enough to have a significant effect on the overall war. In the above scenario, the value of FOFA would depend on two important conditions:

1. that there will be follow-on forces, and that these follow-on forces will be important to Warsaw Pact strategy; and
2. that NATO's attack on the follow-on forces can have a significant effect on their utility —i.e., enough losses can be inflicted to matter; delays cannot be sufficiently compensated for; Warsaw Pact C2 can be degraded enough to make a difference; morale can be eroded enough to significantly affect the cohesion of Warsaw Pact troops.

Each of these conditions, however, is controversial.

With regard to the first, although Soviet doctrine may call for the echelonment of forces, there is not necessarily a prescribed formula or particular mix of forces necessary for this, and the Soviets have demonstrated a good deal of flexibility in how echelonment may be carried out. In an offensive into Western Europe, the Soviets may well "frontload" their forces in the first echelon, and Soviet field commanders may well echelon their forces differently from each other. These decisions would probably depend on: 1) how ready the NATO forces are facing them, and how much surprise they could expect; and 2) over what kind of terrain they would have to deploy. Especially given long mobilization times, the Soviets could "front load" their forces, enhancing the threat at the FLOT and reducing the importance of the follow-on forces[33] (figure 4-4).

The question is how much the Warsaw Pact might "front load" its forces, and what this would mean for the value of the follow-on forces. However flexible Soviet planning may be, it still makes sense that any "front loading" of forces would be limited by certain physical and doctrinal constraints. Terrain is limited; and placing a good deal more forces up front would complicate logistics problems, reduce the amount of surprise, and would make Warsaw Pact forces more vulnerable to NATO's nuclear or high-accuracy conventional weapons. Thus, it is expected that there will always be a certain number of follow-on forces coming up behind. As stated by General Rogers:

> . , . critics . . . err in assuming that we are unaware that under certain circumstances the Soviets might press their second echelon forces up against, or among, those forces of the first echelon. Not only are we aware of this possibility, we also take account of the fact that terrain can only accommodate a finite number of Warsaw Pact battalions abreast, thus causing the rest to be out of contact, i.e., to be follow-on forces.[34]

Indeed, some contend that the Soviets would find it difficult to significantly front load their forces beyond those already in place without exceedingly long mobilization times.[35] It is likely that if the Soviets were preparing to initiate an offensive, they would provide a good
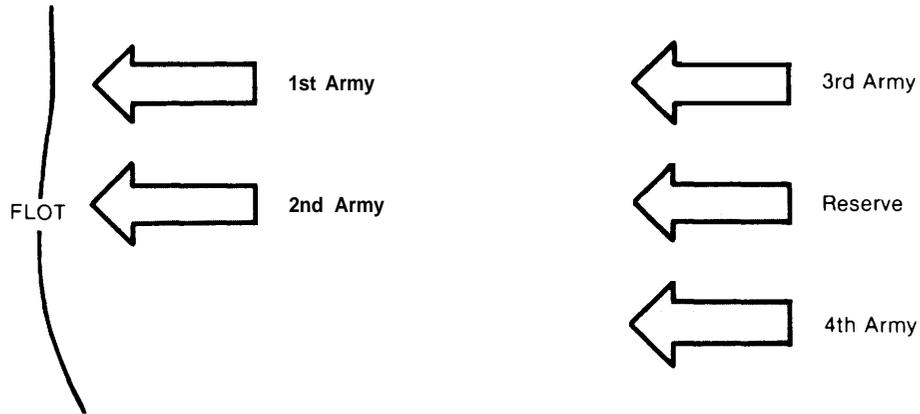
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[33] See vol. 2, app. 4A, note 16.
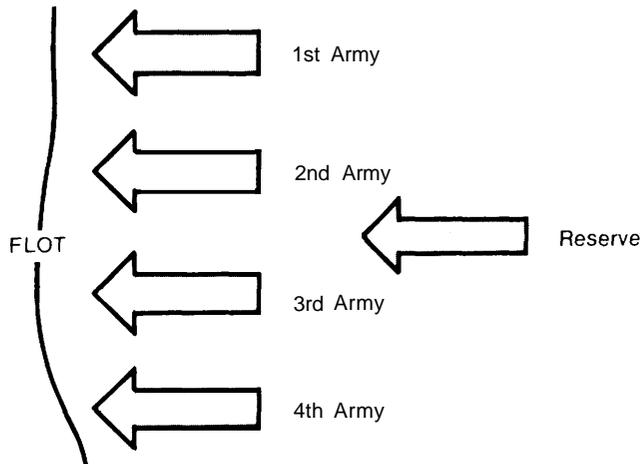"General Bernard W. Rogers, op. cit., p. 4.
[35] See vol. 2, app. 4A, note 17.

**Figure 4-4.— Example of Soviet "Front-Loading" of Forces**

**Structure in anticipation of no surprise**



Structure in anticipation of surprise: "Front-Loading"



SOURCE' Soviet Studies Research Center, Royal Military Academy, Sandhurst, UK

deal of training for newly mobilized, "not ready" units, and conduct relatively comprehensive preparations before bringing them up to the FLOT. But doing so would take a good deal of time.

Physical constraints, however, would still allow the Soviets to place many more forces forward than are now estimated to be there,[36] and

many Western observers contend that doing so might well lower the target value of the follow-on forces for the overall offensive–not just quantitatively, but qualitatively. This was reflected by U.S. Air Force's Headquarters in Europe, in a briefing which spelled out the following concern with FOFA (as distinct from interdiction):

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[b]According to one observer, current Warsaw Pact organization and operational doctrine suggests that there would likely be around 20 to 25 divisions in the first echelon of an attack against NATO's Central Region. Analysis of the terrain in Western Europe, however, suggests that this region could support well over 30 divisions in the first echelon. In order to increase

the combat power of the first echelon by at least 20 percent, therefore, this observer suggests that the Warsaw Pact need do little more than make changes in operational plans—''a relatively 'quick fix' option. '' See Boyd D. Sutton, et al., "Deep Attack Concepts and the Defence of Central Europe, " Survival, March/April *1984,* pp. *64-65.*
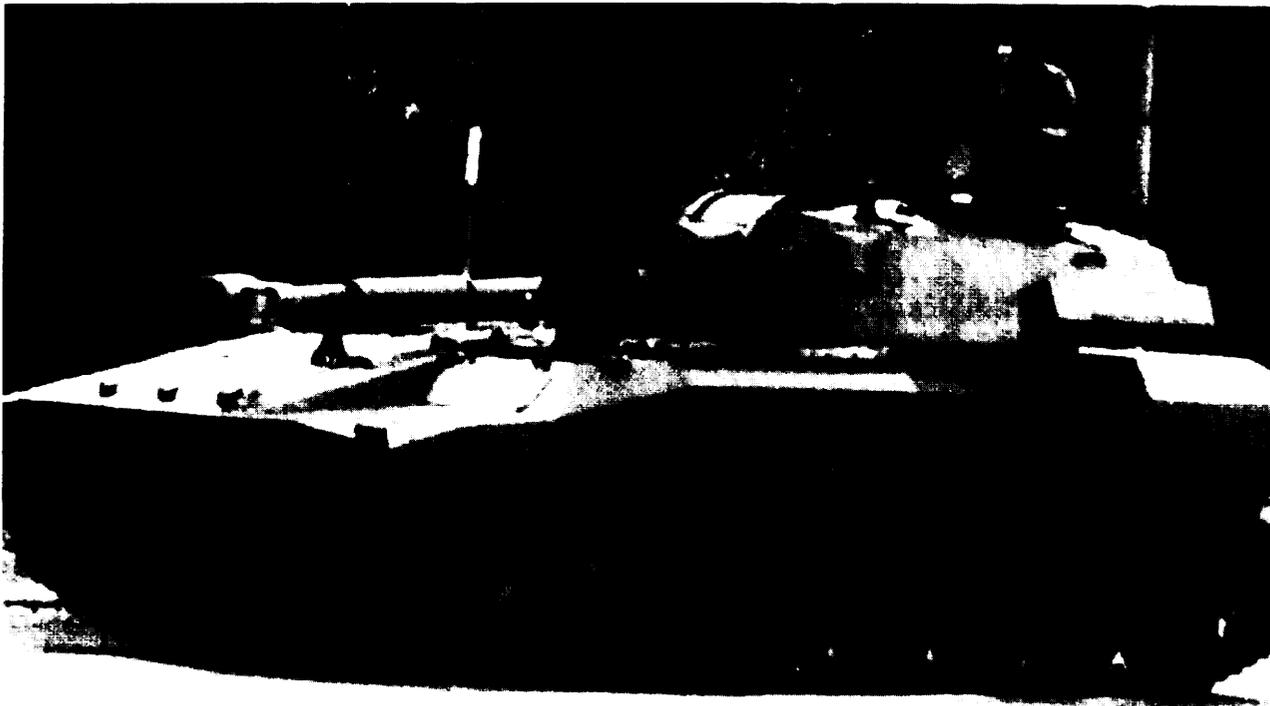
Soviet self-propelled artillery.

Soviet doctrine calls for the wave, or echelon, attack arrangement. We here at USAFE do not believe this is the only possible scenario. A minor shift in Soviet employment concept and/or change in their reinforcement plan may leave us with attack capabilities for which there are few targets. Few targets, that is, that will produce tangible returns in a limited span of time.[37]

Others have pointed out similar concerns. For example, some point out that a concept that considers attacking forces in transit across Poland tacitly assumes that those forces would be mobilized and moved after D-Day. Should these forces be mobilized earlier, however, and thus be in East Germany when the war starts, interdiction in Poland would be futile. Even if follow-on forces are present, many believe their value would be limited in terms of affecting the overall war. "It is the extended first echelon that is now critical . . . The reinforcing formations from the Western military districts . . . serve a vital function, but they are redundant in numbers and they are mostly *not* first-line combat units . . . It is the GSFG itself that must be destroyed . . . If these are not contained, they will collapse NATO's ability (and will) to defend."[38]

These questions are complicated by uncertainties over what it would take for attacks on individual follow-on forces to have a significant impact on their effectiveness. How precisely timed would a Soviet offensive be? If a Soviet second-echelon division is delayed a certain number of hours, would its mission have been obviated? Or might it make up that time elsewhere, for example, by staying for shorter times in assembly areas? At what level

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[37]*FOFA: USAFE View,* Briefing to OTA staff, HQ USAFE, Apr. 16, 1986.

[38]See Steven L. Canby, "The New Technologies, " November, 1983, p. 25. These sentiments were repeated to OTA staff by West Europeans in the FRG and Belgium, April 1986.

of damage would the performance of a Soviet unit-at any level—be degraded enough to significantly affect the overall war? And what would it take to target OMGs or command posts?

As mentioned, some suggest that Warsaw Pact operations are so precisely timed that disruption of that plan could throw their entire operation off course.[39] But Soviet writings suggest that the Soviets may build a good deal of slack time into operational plans—for example, into waiting times in assembly areas—to compensate for delays. Similarly, it is uncertain how critical delay of logistics support might be, given that the Soviets keep a good amount of their stocks already forward.[40] While delaying the follow-on forces would clearly have an effect, therefore, there is a good deal of debate concerning how high a level of damage there would have to be for delaying these forces to have a significant effect on the overall war.

A similar debate surrounds the relevance of the OMG to a follow-on forces attack concept. The OMG has commonly been viewed as comprising a specialized formation, specific in its structure and mission, so that an OMG might well be an identifiable target in the enemy's rear.[41] According to General Rogers:

> We consider the OMG to be a high priority target for FOFA . . . Much of the new target detection and sensing capability we seek to acquire is necessary for us to identify which follow-on forces are organized as OMGs so they can be attacked early on.[42]

But others emphasize that the OMG may also be considered as a task, a *concept* of operations, without necessarily any definite structure. In this sense, the OMG would not comprise something that could be targeted in depth, but rather something that would not be identifiable until deployed–i.e., until relatively near the FLOT. Viewed this way, individual divisions or armies would not necessarily be structured in advance to work as an OMG, but rather resources would be allocated as necessary to exploit breakthroughs and get into NATO's rear. The Soviets may be providing capabilities in such a way that perhaps any group of regiments, combining fire power, air assets, and mobile forces, could be put together as an exploitation force, or "OMG," as deemed necessary.

There is also debate over the degree to which disruption of Warsaw Pact $C^3I$ in the rear might disrupt Soviet forces as a whole. The inherent difficulties in detecting and targeting Warsaw Pact command posts are many: 1) Soviet command posts are well defended and camouflaged; 2) they are dispersed widely; 3) there is a good deal of redundancy in command posts and in various communications modes; 4) command posts at the front and army level are largely prepared in advance and therefore are bunkered or hardened; and *5)* because transmitter antennas are generally several kilometers from command posts, it would be difficult to determine the precise locations of command posts.[43]

Aside from these difficulties, there is difference of opinion over how much damage could be done should certain units be "decapitated," and how much flexibility may be worked into the Soviet decisionmaking process. Some argue that because the Soviet command and control system is so highly centralized—where commands pass down a strictly hierarchical system and where, at the tactical level, information is limited and initiative discouraged—disrupting command and control would be the most effective way to stop a Warsaw Pact offensive. But Soviet writings also reflect a good deal of effort to introduce more flexibility into their decisionmaking process to take any potential disruptions into account.[44] It is unclear how flexible Soviet troop control would prove to be in combat.

A final area of contention concerns the effect of FOFA on the cohesion among Soviet and Warsaw Pact forces—i.e., the effect of

[39] See vol. 2, app. 4A, note 18
[40] See vol. 2, app. 4A, note 19
[41] See vol. 2, app. 4A, note 20
[42] General Bernard Rogers, op. cit., p. 4

[43] *See* vol. 2, app. 4A, note 21
[44] See vol. 2, app. 4A, note 22

FOFA operations on Soviet and Warsaw Pact morale, and how that might affect the capabilities of their troops for implementing Soviet operational plans. FOFA could well have a profound psychological effect on the enemy's forces, by extending the battlefield into the enemy's depths. According to one military historian, "hitting units while they are still on the line of march, and do not expect it, will have a far more serious effect than hitting them harder later, when they are deployed and expecting casualties."[45] Most people, this historian suggests, can face terrors, such as going into battle, on a predictable basis; they become psychologically prepared. But FOFA would make the line of battle unpredictable. And with a military doctrine that emphasizes the importance of taking the offensive from the first shot, Soviet troops might quickly acquire a profound loss of confidence or sense of defeat. "It is by using indirect fire to breed this fear, it is by killing the morale of 90 percent of the enemy in addition to killing the bodies of 10 percent of his soldiers, that we can make our most effective contribution to the defence of the Central Front."[46]

Many believe that these psychological effects might only be compounded in the Warsaw Pact, given the already questionable loyalty among many Soviets and East Europeans toward Moscow. Questions have been raised as to whose side the East Europeans would fight on should hostilities begin, and whether FOFA would further erode the cohesion of an already tenuous alliance. Likewise, demographic change in the U. S. S. R., and the growth in the number and proportion of non-Russians in the Soviet armed forces, has raised important questions about loyalty and performance in the USSR's own forces. For example, the fact that an estimated one-fourth to one-third of all Soviet conscripts are projected to be of Muslim descent within the next 10 to 15 years-with lower educational and technical training, often severe lack of Russian language skills, and questionable loyalty-has raised serious questions about the potential performance of the non-Russian nationalities in combat. Evidence of recent "riots" among Soviet conscripts who refused to go to Afghanistan, and defections of Central Asians and Russians within Afghanistan itself, have only highlighted these concerns.

But the Soviets are also aware of these problems, and have taken steps to deal with them. Moscow has tightened institutional controls over its Warsaw Pact allies-e. g., by creating peacetime TVD High Commands in the late 1970s, which creates a clearly defined, pre-planned wartime command structure in which Eastern Europe is clearly subordinate to Moscow; and by assuring that procedures, C2 systems and equipment are all standardized, and that Russian is the language of command. At home, Soviet discussions focus on the need to train all of their nationality groups to be better soldiers—e.g., through increased Russian language training, better technical training, and retaining mixed nationality units for better control—and for restructuring their own forces to take account of the changing composition of the conscript pool. On the evidence available, it would be impossible to gauge their level of success on either count.

All of these questions remain complex and controversial. Several efforts are now underway to attempt to resolve them, or at least to narrow the margin of uncertainty, but many of the answers cannot be known. At present, these questions remain at the heart of the debate over how much emphasis should be placed on FOFA in the West, and how it should be implemented.

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"Richard Holmes, "The Psychological Effects of Artillery Fire, " lecture presented to a DRA (Director Royal Artillery) tactical seminar, June 1983. Quoted with permission of the author.
46Ibid.