
Chapter 5

**Objectives for Attacks of
Follow-On Forces**

CONTENTS

	<i>Page</i>
Strategy	75
“Delay, Disrupt, and Destroy”	76
Targets: Soviet Divisions.	77
Range and Desired Military Effects.. . . .	78
Category 1	78
Category 2	78
Category 3	78
Category 4	79
Category 5	80

Table

<i>Table No.</i>	<i>Page</i>
5-1. Objectives for Attack of Follow-On Forces	78

Objectives for Attacks of Follow-On Forces

STRATEGY

NATO's strategy for attack of follow-on forces is a result of the growth of conventional military power of the Warsaw Pact and of the improved mobility of Warsaw Pact ground forces. At present, one might offer the superficial argument that NATO's forces, though smaller than those of the Warsaw Pact, could probably defend successfully against an attack spread equally across the front. But the implication of this argument is that the Warsaw Pact would attack NATO's strength, when it makes much more military sense to attack NATO where it is weakest. The Warsaw Pact surely would not distribute its attack assets uniformly across the theater. Rather it would use the minimum force sufficient to pin down NATO's defenders, and concentrate its forces to break through NATO's weakest sectors. Once through, the attacking elements and follow-on forces would move rapidly and devastatingly through NATO's rear.¹

NATO is not likely to increase significantly the size of its forces to meet this threat, or to add a reserve which could be used to counter Warsaw Pact breakthrough operations. Equipping and operating this large force, even if it could be manned, would be enormously expensive. Nearly all of the Allies, including the United States,² agree that manpower requirements of even the current forces are considerable. For these and other reasons, the option

¹The Soviet and Warsaw Pact strategy and posture is discussed in greater detail in ch. 4.

²For example, the Federal Republic of Germany foresees a serious problem of manpower shortages:

owing to [numerically] weak age groups coming up for induction, the number of young men liable to military service will drop so drastically in the next decade that, beginning in 1994, there will be a deficit of 100,000 men per annum in the *Bundeswehr's* yearly replenishment requirement of 225,000 conscripts. If no remedial action were taken, the strength of the *Bundeswehr* would decrease [from 495,000] to barely 300,000 by the end of the nineties.

[Source: *White Paper 1985: The Situation and the Development of the Federal Armed Forces*, The Federal Minister of Defence (F'RG), June, 191985]



Photo credit U S Department of Defense

U.S. 3rd Armored Division in Germany,

of increased numbers of ground forces is not politically open to discussion.'

Another logical approach to the situation is to exploit technology. Simpler, more lethal weapons might be enough to blunt a Soviet offensive. Such new technology might be applied to strengthen the close-in defense forces, but increasing the close-combat capability of every division enough to withstand a Warsaw Pact massed assault could be prohibitively expensive.

Thus, there has been great interest in technologies that would improve NATO capability to impede the Warsaw Pact ability to concentrate forces, or to neutralize them if they do concentrate. As stated recently by NATO's Supreme Allied Commander Europe (SACEUR), General Bernard W. Rogers, "Allied Command Europe can prevent the attacker from maintaining the momentum of his assault by tar-

³See also Stanley R. Sloan, *NATO's Future: Towards a New Transatlantic Bargain* (Washington, DC: National Defense University Press, 1985), pp. 139-149 for further discussion of NATO's options.

getting these follow-on forces . . . before they hit our General Defensive Position.”⁴

The term “follow-on force” can cover a great many types of force elements, but interest has

⁴Gen. Bernard W. Rogers, “Follow-On Forces Attack (FOFA): Myths and Realities,” *NATO Review*, No. 6, December 1984, p. 2. See also vol. 2, app. 5-A, note 2.

focused on primary ground combat elements such as tank and motorized rifle⁵ regiments and divisions that are not “engaged,” or in active combat with NATO forces at the battle area.

⁵Motorized rifle units have a mission and composition generally similar to U.S. Army mechanized infantry units.

“DELAY, DISRUPT, AND DESTROY”

The basic concept of FOFA is to delay, disrupt, and destroy the enemy’s follow-on forces before they can be brought to bear effectively against NATO forces.⁶ Precise definitions of “delay, disrupt, and destroy” prove a bit elusive under close scrutiny. None of these three terms is defined in a NATO- or DoD-wide publication. “Delay” and “destroy” are defined respectively in Allied Command Europe publications, in terms of slowing down enemy operations and inflicting sufficient damage to render enemy forces ineffective.⁷ However, no definition of ‘disrupt’ is given. Further, even in the definition of “delay” there is reference to inflicting damage. Proposed doctrine for the deep battle in defense emphasizes denying the enemy the ability to concentrate combat power against forward divisions by disrupting the tempo of follow-on forces.

It is worth noting that U.S. Air Force and U.S. Army discussions of disrupting enemy follow-on forces emphasize somewhat different effects. Air interdiction is carried out to disrupt the enemy’s scheme of operation and control of operations, while Army deep attacks aim to disrupt the tempo of commitment of follow-on forces. Although these Air Force and Army concepts are not inherently contradictory, they are different: the emphasis in the first is on disrupting plans; the emphasis in the second is on disrupting timing.

The objectives of “delay,” “disrupt,” and “destroy” are perceived as being progressively harder to achieve for a given force. For exam-

⁶See vol. 2, app. 5-A, note 3 for a more detailed discussion of these terms from a NATO perspective.

⁷See vol. 2, app. 5-A, note 3 for details.

ple, disrupting a division is more difficult than delaying it, and destroying it is harder still. In any case, NATO attacks on Warsaw Pact follow-on forces can only directly cause attrition to elements of a unit or damage to bridges and other such structures or facilities needed by the unit. Whether such damage will cause delay or disruption, or whether such attrition should be considered destruction of the unit as a whole, is open to considerable interpretation.⁸

NATO cannot always guarantee a particular result from its attacks of follow-on forces, even at a given level of damage. “Destruction” is usually defined in terms of the fractions of combat vehicles, personnel, or supplies that must be “killed” in order to render a force element ineffective.⁹ “Delay” can be imposed either through obstacles which take the enemy some time to remove, or by damaging necessary equipment. But the enemy’s response to the creation of obstacles or damage cannot be controlled by NATO, so it may be difficult to ensure a given amount of delay. For example, a minefield may cause a Soviet column to go around or halt until it is cleared, or it may cause the Soviet commander to decide to “bull through” and accept some damage instead of a delay.

⁸For more detail, vol. 2, app. 5-A, note 4.

⁹The concept of “killing” vehicles is commonly analyzed in U.S. military terms of “firepower kill” and “mobility kill.” In the former, a vehicle is damaged so that its weapons cannot be used; in the latter, a vehicle’s propulsion capability is destroyed. Both kills can be further elaborated in terms of the time it would take to repair the damage.

The objective of “disruption” is the most elusive of the triad. Disrupting the enemy’s plans or timing depends on delaying or destroying critical force elements. Usage appears to im-

ply that disruption often involves undermining unit integrity, for example by degrading some critical element (such as a command post or communication system).

TARGETS: SOVIET DIVISIONS

The attack of follow-on forces focuses on ground combat units that are not yet engaged with NATO forces, but are to join the attack at some time in the future. This section describes the targets presented by the basic combat unit or the division, and outlines some of the ways it can be delayed, disrupted, or destroyed.

The structure of the Soviet combat divisions is described in chapter 4. A division on the move (or halted in an assembly area) consists of vehicles, both “armored combat vehicles” (ACVs)¹⁰ and trucks, clustered in some fashion according to their organization for march. In a recent study, the Institute for Defense Analyses (IDA) has analyzed this typical organization, and concludes that a division on the march normally includes about 55 march units with an average of 60 vehicles each (nominally battalion-sized), and about 15 smaller (company-sized) units.¹¹ About 25 of the larger march units along with the smaller units contain nearly all of the division’s ACVs; the other 30 or so march units are nearly all trucks. The units containing ACVs are about 50 percent ACVs and 50 percent trucks; the overall division is about 30 percent ACVs. These march units are the potential targets for attacks on a follow-on division, both while on the march and while in assembly areas (the grouping of vehicles in assembly areas is much the same as for road march).

As the division moves forward toward commitment to battle, its component regiments

go into final assembly areas, or “departure areas.” When the regiments leave these areas on their final move to battle, the combat components go first, and much of the support equipment and personnel stay behind. The division rear elements¹² also stay behind. Therefore, as the unit moves to battle, a much higher fraction of its vehicles are ACVs.

Regiments and divisions can be affected by attacks in many possible ways. Damage to vehicles can be catastrophic or repairable. One way of disrupting a division or regiment is to damage specific “critical” elements, especially the command posts (CPs). Damaging the CP (and possibly killing some of the command staff) may seriously disrupt the functioning of the unit, by degrading the decisionmaking, planning, and coordination of activities. On the other hand, given the level of reliance on drill and routine procedures, the “scientific” planning of operations and doctrine,¹³ and the inherent momentum of attacking rather than defending, the Warsaw Pact forces may be less disrupted by CP attack than, for example, U.S. forces would be.

Another type of attack that can delay (or possibly disrupt) is to create “chokepoints,” which restrict or prevent the forward movement of forces. The most often-discussed chokepoint results from damaging a bridge, preferably just before (or as) a unit starts to use it. Bridges across rivers are seen as particularly important, because the river provides a barrier to further movement. The Soviets have planned for this eventuality by procuring extensive tactical bridging equipment for its ground forces, and by pre-positioning replacement bridges in some areas.

¹⁰The term ‘armored combat vehicle’ refers to tanks, armored fighting vehicles (AFVs), armored personnel carriers, armored cavalry vehicles, self-propelled artillery, and surface-to-air missile (SAM) launchers.

¹¹W.J. Schultis, et al., *Follow-On Force Attack (U)* (Alexandria, VA: Institute for Defense Analyses, Report R-302, draft final version, April 1986), vol. II, p. 11-20, table 11-10.

¹²The division rear includes the combat service support units, such as transport, supply, maintenance, and medical services.
¹³As discussed in ch. 4.

RANGE AND DESIRED MILITARY EFFECTS

The concepts of “delay, disrupt, and destroy,” when applied to the echelons of Warsaw Pact forces, can give objectives for FOFA in terms of range of attack and desired military effects.¹⁴ Taking into account SHAPE objectives and the various enemy echelons to be attacked, FOFA objectives can be grouped into five categories, as shown in table 5-1.

The important features of the target categories are the size of the enemy unit (e.g., regiment, division) and its location in the Warsaw Pact rear (e.g., 30 to 80 kilometers east of the Forward Line of Own Troops, or FLOT). The term “second echelon” is shorthand for both the second echelon of the initially deployed Warsaw Pact forces and all follow-on units of the same size as they move into similar positions. For example, “second echelon regiments of engaged divisions” (category 1) includes both the second echelon regiments of the first echelon division at the beginning of the assault, *and* the regiments of all follow-on divisions as they move into the same range band (5 to 30 kilometers east of the FLOT).

Category 1

In this category, follow-on regiments of engaged divisions would be attacked from just beyond the range of direct-fire weapons,¹⁵ or about 5 kilometers from the FLOT, out to about 30 kilometers, the region of the Fire Support Coordination Line (FSCL).¹⁶ The desired effect of the attacks would be to ‘kill’ the regiment, that is, damage enough of the regiment combat assets (vehicle, personnel, essential supplies) to render it ineffective.¹⁷ That is not

¹⁴See vol. 2, app. 5-A, notes 5-7.

¹⁵Direct (or observed) fire weapons include small arms and other infantry weapons, tanks, helicopters, and close air support aircraft under the control of a forward air controller.

¹⁶The FSCL is established by the ground commander to coordinate air- and ground-based fires against targets closer than the line. It usually corresponds roughly with the range of artillery weapons.

¹⁷The precise amount of damage that constitutes a kill cannot be established with certainty, but it is certainly less than 100 percent. It relates to the amount of damage that would render a unit incapable of accomplishing its mission, and requiring reconstitution as a new unit. The U.S. Army view of the relevant level of damage is shown in vol. 2, app. 5-A, table 5-A-1.

Table 5-1.—Objectives of Attack of Follow-On Forces

Category	Desired effect	Target echelon	Approximate range (km) (east of FLOT) ^a
1	Destroy	2d echelon regiments of engaged divisions	5 to 30
2	Destroy	2d Tactical Echelon (2d echelon divisions of 1st echelon armies)	30 to 80
3.	Disrupt	2d Tactical Echelon	80 to 150
4.	Disrupt/delay	2d Operational Echelon (2d echelon armies of 1st echelon fronts)	150 to 350
5.	Delay	2d Strategic Echelon (2d echelon fronts)	350 to 800

^aForward Line of Own Troops

SOURCE: Office of Technology Assessment 1987

to say that delaying the regiment, particularly at some critical time, may not be a useful objective.

Category 2

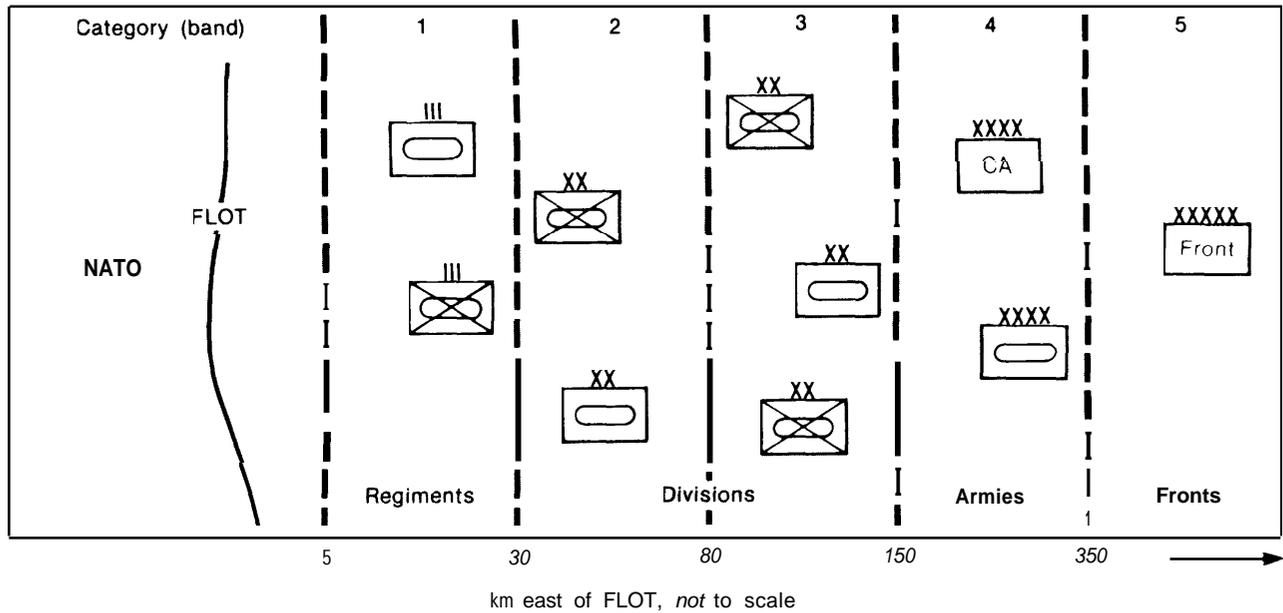
In this category, follow-on divisions of first-echelon armies would be attacked and destroyed while they move on roads from their concentration areas* (divisional assembly areas) forward and into departure areas (regimental assembly areas). The range of such attacks would begin at the region of the FSCL, about 30 kilometers, and go out to about 80 kilometers, stopping short of the concentration areas. This region would include the departure areas. The objective in this category, like the previous one, is destruction of the enemy force, only here the attack is directed against divisions rather than regiments. These attacks would be well within the area of responsibility of the NATO corps.

Category 3

In this category, follow-on divisions would also be attacked, here with the objective of disrupting or delaying their movements and disrupting the operations of the first echelon armies. The range of such attacks would begin

*Contrary to the appearance of this term, enemy vehicles are likely to be more dispersed in “concentration areas” than when on the road. The term derives from the process of bringing the whole division together in one area at one time, not from any process of increasing the density of vehicles within the area.

Categories of Objectives for FOFA Operations



LEGEND

- XXXXX Front
- XXXX Army
- XX Division
- III Regiment
- Motorized rifle unit
- CA Combined arms unit
- Tank unit

SOURCE Off Ice, of Technology Assessment 1987

approximately 80 kilometers from the FLOT, and go out to approximately 150 kilometers from the FLOT, the limit of the NATO corps' area of responsibility. This region would include the concentration areas (division assembly areas), which would probably be the farthest forward that Warsaw Pact armored forces would be transported on vehicle carriers. The creation and maintenance of such a barrier could delay the division and perhaps disrupt the division's movements, and disrupt the operations of the army to which the division belongs, by making the division unavailable for its designated mission. Also in this area would be the divisional and army command posts, the attack of which might also disrupt operations.

In considering the desired effect of disruption, it may be that enough delay would accomplish the purpose. The amount of delay sufficient to do so might be the difference between the expected time of arrival of a unit

and the expected time of arrival of the next highest echelon, because imposing such a delay would prevent the division from being employed in its usual echelon as planned.¹⁹

Category 4

In this category, follow-on armies would be attacked in order to disrupt or delay their movement forward. The range of such attacks would begin at about 150 kilometers from the FLOT, beyond the area of responsibility of the corps, and would go back to about 17° east longitude, 300 to 400 kilometers east of the IGB and extending through central Poland. This region would include the Oder and Neisse rivers (at the border between the German Democratic Republic and Poland), which could also be used to create a barrier by attacking the bridges. Units would move into this region

¹⁹This criterion results in a certain number of days of delay constituting disruption, as discussed in vol. 2, app. 5-A, note 8.

from the east generally by train and off-load onto roads, on which they would travel either on transporters or under their own power.

Category 5

In this category, elements of follow-on *fronts* would be attacked in order to delay their arrival at the main battle. The area of these attacks would range from about 170 east longi-

tude to and perhaps across the Soviet border, which is 600 to 850 kilometers east of the IGB. This region contains the Vistula and Dunajec rivers and the rail transloading areas at the Polish/Soviet border where the rail gauge changes. Movement of forces through this area would be primarily by rail. The amount of delay necessary is not established, but it appears reasonable that a delay similar to that for category 4 attacks would be operationally significant.