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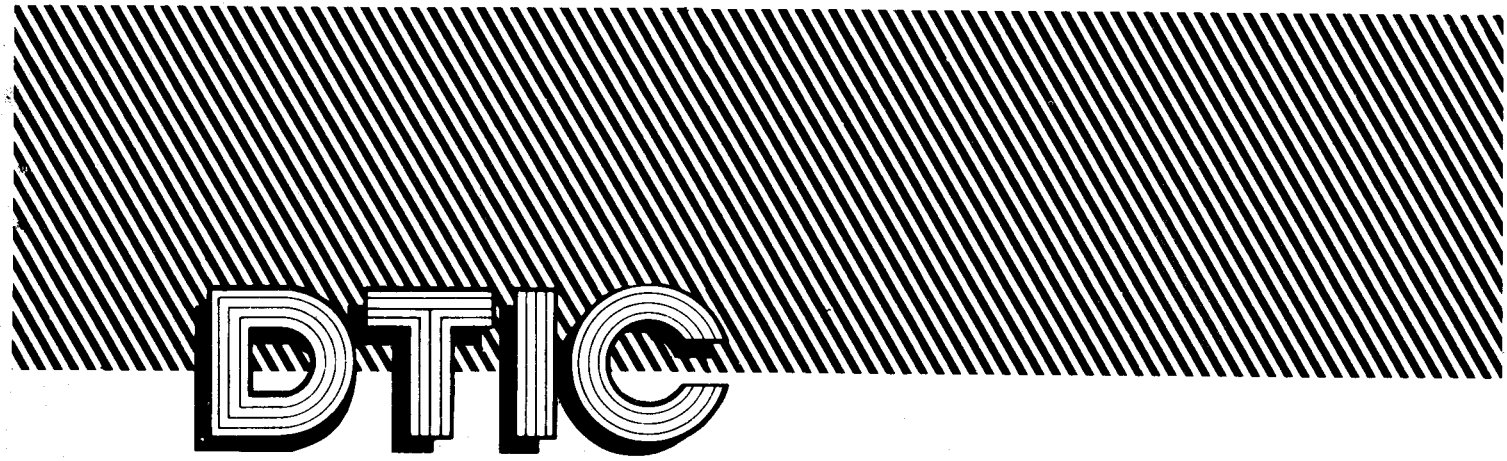

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Technical Report

June 1986

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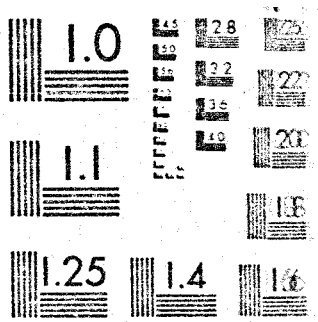

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DNA-TR-81-133

CONCEPT FOR OPERATIONS IN A NUCLEAR ENVIRONMENT

JAYCOR
205 South Whiting Street
Alexandria, Virginia 22304

18 June 1982

Technical Report

CONTRACT No. DNA 001-81-C-0062

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Nuclear Battlefield	Offensive Use of Nuclear Weapons
Nuclear Environment	Defensive Use of Nuclear Weapons
Operational Environment	Survivability
Operational Fundamentals	Functional Areas
Close Combat	Combat Power

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This paper provides a concept for the conduct of military operations by US Army forces in a nuclear environment; sets forth issues impacting the implementation of the US Army's operational concept for the conduct of the Air-Land Battle. It considers warfighting at corps and below in a nuclear environment; influences and constraints external to corps, while recognized, are not explicitly addressed. The concept is equally applicable in an inactive nuclear environment wherein nuclear use has not occurred, but

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20. ABSTRACT (Continued)

Is possible or imminent; it can be expanded to include operations in a combined conventional-nuclear-chemical environment.

There are two basic elements of a nuclear battlefield environment which must be understood and mastered by US forces: the effective employment of nuclear weapons in both offensive and defensive operations; the increased vulnerability of forces and the resultant requirement for implementation of extraordinary survivability and reconstitution measures.

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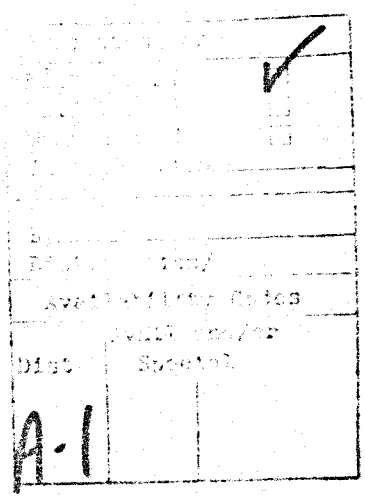


1. PURPOSE

a. To provide a concept for the conduct of military operations by US Army forces in a nuclear environment.

- COUNTER THE THREAT
- INCREASED COMBAT POWER
- WARFIGHTING AT CORPS AND BELOW
- APPLICABLE TO OTHER ENVIRONMENTS

b. The doctrine of likely adversaries emphasizes the use of nuclear weapons when and where needed to assure success. To counter this threat, US Army forces must prepare now with appropriate doctrine, materiel, force structures, tactics and training directed toward a demonstrated capability to conduct successful military operations in a nuclear environment.

c. Nuclear weapons provide the Army a significant force multiplier and increased warfighting capability when their use and effects are properly integrated and synchronized with the maneuver of forces.

d. Accordingly, this concept for operations in a nuclear environment sets forth issues impacting the implementation of the US Army's operational concept for the conduct of the AirLand Battle. Specifically, it considers warfighting at corps and below in a nuclear environment; influences and constraints external to corps, while recognized, are not explicitly addressed.

e. This concept is equally applicable in an inactive nuclear environment wherein nuclear use has not occurred, but is possible or imminent. Further, it can be expanded to include operations in a combined conventional-nuclear-chemical environment.

2. OPERATIONAL ENVIRONMENT

- AREAS OF STRATEGIC CONCERN
- THREAT
  - SOVIET MODEL
  - DOCTRINE
  - NUCLEAR EMPLOYMENT
- US COUNTER TO THE THREAT
  - AIRLAND BATTLE CONCEPT
  - CORPS 86 AND DIVISION 86
  - AIR AND GROUND PARTNERSHIP

a. The areas of greatest strategic concern to the United States are Europe, Southwest Asia and Northeast Asia. The application of this concept requires consideration of the geography, topography and climate in these areas.

b. The operational art, tactics, organizations and equipment of enemy forces to be encountered in the strategic areas of concern are patterned after the forces of the Soviet Union. Soviet doctrine emphasizes the principles of mass and maneuver and seeks victory through the relentless prosecution of offensive operations. Surprise, shock and rapid exploitation of the effects of nuclear weapons are also basic to Soviet doctrine. Soviet declarations indicate that nuclear weapons will be used not only to assure success on the

battlefield, but also to preempt US use. Massive concentration of nuclear and conventional firepower on key military targets is a strong element of Soviet doctrine. High priority targets are nuclear delivery units, command posts, ground combat forces, air bases, support units and military bases. Soviet forces are postured and trained to exploit nuclear attacks by rapid, deep, multiple thrusts to destroy remaining forces and seize territory.

c. The US counter to the threat represented by the Soviet model is embodied in the Army's operational concept for the conduct of the AirLand Battle. Through the 1990s, the Army's portion of the AirLand Battle concept will be executed by formations organized, manned and equipped with systems and materiel resulting from Army 86, Corps 86 and Division 86 studies. The Air Force is an equal partner in the AirLand Battle. This partnership arrangement becomes even more important and demanding in a nuclear environment. Air support of ground forces' operations and thoroughly synchronized air and ground actions throughout the depth of the battlefield are crucial to the success of this concept.

- NUCLEAR BATTLEFIELD ENVIRONMENT
  - OVERVIEW
  - EFFECTIVE EMPLOYMENT
    - -- OFFENSE
    - -- DEFENSE
- VULNERABILITY
  - PROTECTION
  - RECONSTITUTION

d. Military operations in a nuclear environment are characterized by violence, stress, confusion and austerity. The intensity and violence of combat,

combined with instantaneous mass casualties and large equipment losses, create a psychological effect requiring uncommon discipline and leadership to overcome. The face of the battlefield changes in seconds or minutes as additional obstacles are created and terrain is physically altered. Lines of contact lose continuity, thereby creating a noncontiguous battlefield. Essential supplies are limited and resupply delayed for long periods. Reconstitution is accomplished, at least initially, from residual assets. The situation confronting the commander is further aggravated by the disruption or even the temporary loss of command and control communications at the time when most needed to regroup the force, seize the initiative and continue operations.

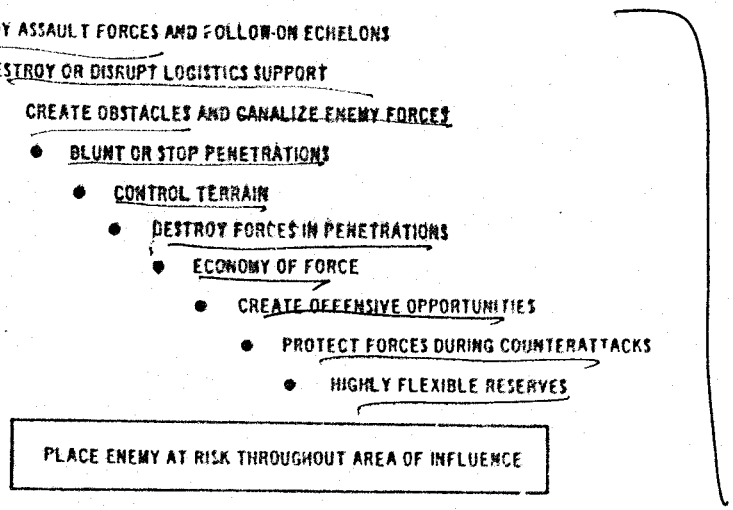
There are two basic elements of this environment which must be understood and mastered by US forces: first, the effective employment of nuclear weapons in both offensive and defensive operations; and second, the increased vulnerability of forces and the resultant requirement for implementation of extraordinary survivability and reconstitution measures.

Nuclear weapons are used several ways in the offense:

- SUBSTITUTE FOR AND COMPLEMENT TO MANEUVER
- CREATE GAPS
- HOLD ENEMY IN PLACE
- CONTROL TERRAIN
- PROTECT FLANKS
- DESTROY ENEMY FORCES
- ECONOMY OF FORCE
- RESERVES
- CREATE EXPLOITATION OPPORTUNITIES

PLACE ENEMY AT RISK THROUGHOUT AREA OF INFLUENCE

Similarly, nuclear weapons are used several ways in the defense:



Nuclear weapons give the commander the ability to hold the enemy at risk throughout his area of influence. Depending on deception, surprise, target acquisition and user boldness, nuclear weapons can change the course of the battle suddenly and decisively in favor of the using force.

Positive measures must be taken to reduce the effects of enemy weapons and to maintain a cohesive fighting force. Pre-strike actions offer the best pay-off; the less vulnerable and more survivable a unit, the less effort required to restore mission capability. Survivability in any battlefield environment is achieved by the combined application of sound protective measures and operational practices that reduces a force's vulnerability to detection, attack if detected and destruction if attacked. Contemporary survivability measures and practices are expanded in a nuclear environment to emphasize greater force dispersion and frequent and rapid movement. Rapid and effective post-strike reconstitution of combat power is essential in both the defense and offense. Commanders must insure that combined arms teams are task organized to facilitate rapid reconstitution of combat power and insure uninterrupted

performance of critical functions and tasks. Those actions taken immediately after enemy use of nuclear weapons are key to preventing his exploitation and additional loss of friendly forces.

In the final analysis, success accrues to the combatant most efficient in the employment of nuclear weapons and most capable of maintaining or reconstituting an effective fighting force to exploit the effects of nuclear use -- not once but time after time.

3. LIMITATIONS

a. This concept is limited to the Army's responsibilities at corps and below for using nuclear weapons to obtain the maximum operational and tactical advantage while limiting the damage the enemy can inflict on friendly forces.

b. While it is recognized that chemical weapons may be used by either side, this concept does not specifically address the offensive and defensive considerations concerning their employment.

4. OPERATIONAL FUNDAMENTALS

- PRINCIPLES OF WAR
- BASIC TENETS
- IMPERATIVES OF MODERN COMBAT

a. General. These fundamentals prescribe the general way in which operations and battles are conducted at corps and below in a nuclear environment.

They are intentionally broad enough to describe operations in most anticipated circumstances and, therefore, allow freedom for operational and tactical variations that are appropriate to specific situations. The principles of war and the application of those principles are the foundation of US Army doctrine.

b. Principles of War. A principle, by definition, is broad and basic. The principles of war are valid for the entire spectrum of combat intensity, to include the nuclear environment. They continue to provide the umbrella under which all echelons of command and military formations must operate if they are to be successful.

- OFFENSIVE
- MANEUVER
- MASS
- OBJECTIVE
- ECONOMY OF FORCE
- UNITY OF COMMAND
- SURPRISE
- SECURITY
- SIMPLICITY

VALID FOR ENTIRE SPECTRUM OF CONFLICT INTENSITY

(1) Only offensive actions achieve decisive results; they permit the commander to exploit the initiative and impose his will on the enemy. The planning and execution of offensive operations are based on the integration of maneuver and firepower; effective battlefield use of nuclear weapons greatly enhances the flexibility of this combination. The destructive power of nuclear weapons permits the rapid alteration of force ratios at critical times and places, thus creating additional opportunities to resume the attack. The

ability of a commander to recognize these opportunities and to capitalize on them is fundamental to this principle.

(2) Maneuver places the enemy in a position of disadvantage through the dynamic application of combat power. The use of nuclear weapons permits the concentration of combat power in a manner to gain the advantages of surprise, posture and momentum necessary to enable small forces to defeat larger ones.

(3) Mass concentrates combat power at the decisive time and place to the maximum permitted by the conflict situation. Nuclear weapons can create the effect of mass rapidly. To achieve the same effect by conventional means would require the concentration of combat power over a much longer period, thus increasing the vulnerability of forces so concentrated.

(4) Every military operation must be directed towards a clearly defined, decisive and attainable objective. The use of nuclear weapons facilitates the attainment of key military objectives, e.g., the control of terrain, the destruction of enemy forces, the denial of enemy objectives and the destruction of his cohesiveness and will to continue to fight.

(5) Economy of force allocates minimum essential combat power to secondary efforts. The use of nuclear weapons permits exploitation by smaller forces and allows secondary efforts to be accomplished more economically.

(6) Unity of command obtains unity of effort by the integrated and synchronized actions of all forces toward a common objective, under one

responsible commander, regardless of the battlefield environment. Subordinate formations conduct operations within the intent of the commander, thus insuring unity of effort even in the absence of C^3.

(7) Surprise is achieved by striking the enemy at a time and place and in a manner for which he is unprepared. The use of nuclear weapons achieves surprise. A rapid tempo of operations -- characterized by speed, momentum and deception -- is required to exploit the advantage of surprise.

(8) Security denies the enemy the opportunity to acquire an unexpected advantage and preserves the fighting strength of the force. Aggressive intelligence gathering keeps the commander informed of the enemy, permits timely and effective countermeasures and prevents premature concentration of forces. It is particularly important to orient the intelligence collection system toward identifying weaknesses in the enemy's stockpile-to-target sequence, e.g., nuclear decision process, nuclear release procedures and storage and assembly operations. Protection in a nuclear environment is further enhanced by dispersion, mobility and maneuver. Maximum use is made of cover, concealment, rapid and frequent movement and suppression to minimize the effectiveness of enemy target acquisition. In particular, operations security must prevent disclosure of planned nuclear use to preclude preemption. At times, less than optimal force security and protection may be necessary due to calculated risks inherent in bold and decisive military operations.

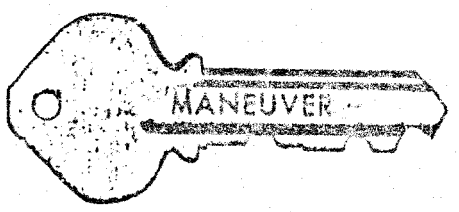
(9) Simplicity implies preparation of uncomplicated and easily understood plans and issuance of clear and concise orders to insure prompt execution in accordance with the intent of the commander. In a nuclear

environment, it also applies to organizations, methods and means to assist subordinate leaders in the execution of unit missions.

The principles of war continue to provide the umbrella under which all echelons of command and military organizations -- from teams and squads to echelons above corps -- must operate if they are to be successful on the modern battlefield.

c. Basic Tenets. At both the operational and tactical levels, the generation of combat power requires the conversion of the potential capability represented by trained forces, resources and opportunity into reality through purposeful and coordinated combat actions. Superior combat power is generated through a commander's skillful integration of the elements of maneuver, firepower, protection and intelligent leadership. The use of nuclear weapons may, on occasion, be the predominant expression of combat power. However, effective maneuver is still vital for achieving local combat superiority. The side possessing materiel superiority overall may choose freely between attrition and maneuver, but the side whose resources are inferior overall can only prevail by successful maneuver. Combat by maneuver must be fought in accordance with the basic tenets of the AirLand Battle, summarized by four words --

- INITIATIVE
- DEPTH
- AGILITY
- SYNCHRONIZATION



(1) Initiative. Modern warfare demands decentralization, prompt action and a high degree of individual initiative. Commanders engender initiative in subordinates by avoiding oversupervision, by establishing policies within which staffs can take action during their absence, and by instilling self-confidence in subordinate commanders by permitting them appropriate latitude within the scope of their responsibilities. In a nuclear environment, semi-independent operations by close combat forces, under mission-type orders, are the rule rather than the exception. Further, it will frequently be necessary to decentralize the control of fire support, combat support and combat service support units by attaching them to close combat elements. The loss of command and control communications may preclude transmission and receipt of specific orders or direction. In such an event -- the risk of which is more likely in a nuclear environment -- the commander deduces the action required, based on his knowledge of the situation and the intent of his commander, and acts on his own initiative. Even when the command and control systems permit the interchange of essential orders and information, commanders must place greater reliance upon the initiative, integrity, courage and professional ability of their subordinates if operations and battles are to be waged successfully.

(2) Depth. Battles are fought throughout the depth of the battlefield. The concept of fighting in depth - distance - must be so ingrained that its application is automatic. It is crucial that forces are dispersed to minimize the presentation of remunerative targets susceptible to attack by nuclear weapons of the enemy; this creates the requirement for the assignment of larger geographical areas of responsibility. The increased potency of combat power, the corresponding vulnerability of the enemy, redundant and

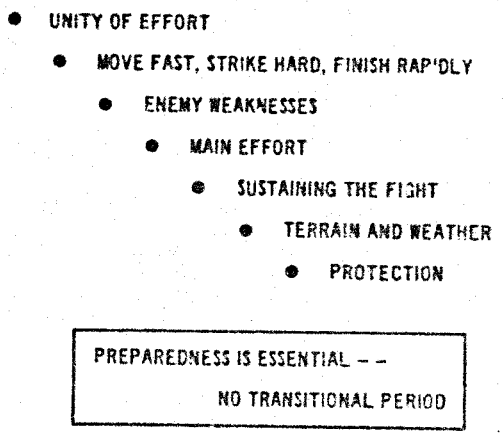
simplified control measures and enhanced mobility (horizontally and vertically) permit close combat forces to operate effectively in these larger areas and provide frequent opportunities for exploiting maneuver.

(3) Agility. Superior combat power is significant only when generated against opposing forces at a critical time and place. The generation of superior combat power through maneuver requires the avoidance of enemy strength and the attack of his vulnerabilities. The degree of combat power attained reflects the commander's imaginative planning, leadership and ability to stay abreast of critical events as they occur and his ability to take necessary action faster than the enemy. This must be done repeatedly so that every time the enemy begins to counter one action another upsets his plans. This will lead to ineffective, uncoordinated and piecemeal enemy responses and eventually to his defeat. The agility to generate decisive combat power -- repetitively -- also requires flexibility in effecting task organizations for close combat, fire support, combat support and combat service support. It is axiomatic that the factors of mission, enemy, terrain (and weather effects on terrain), available resources and time drive task organization and reorganization. In a nuclear environment, it is also axiomatic that forces must be composed to accomplish a variety of combat tasks -- without major changes in task organization.

(4) Synchronization. The effective application of combat power requires harmonious unity of effort throughout all echelons and within each echelon of the force. This synchronization is a basic function of command,

and is particularly significant in deriving full advantage from maneuver and firepower in a nuclear environment. Repetitive generation of superior combat power to capitalize unhestitatingly on battlefield opportunities requires the skillful integration and coordination of air and land forces throughout the depth of the battlefield -- toward a common goal.

d. Imperatives of Modern Combat. Understanding and application of the imperatives of modern combat take on added dimensions in a nuclear environment. Preparedness is fundamental to realization of the imperatives of modern combat. Preparedness permits survival and permits exploitation of opportunities created by the employment of nuclear weapons. Such preparedness is essential as there will be no transitional period to allow for additional preparations.



(1) Victory in modern warfare is made possible through the complete unity of effort provided by thoroughly coordinated and synchronized actions by ground and air forces, bringing to bear and keeping in operation every element capable of sustaining and contributing to the projection of superior combat

power. Individual and collective unity of effort requires mutual trust, confidence, loyalty, pride, motivation, esprit, discipline and a common understanding of unit missions and capabilities. These human factors must be developed through leadership and training so that individuals and units are technically and psychologically prepared for the nuclear environment. Well trained and well led units maintain their orientation and momentum. They operate efficiently in limited visibility conditions, as well as daylight, in an intense nuclear, chemical or electronic warfare environment, in all types of weather and over prolonged periods of time.

(2) Contemporary operations and battles envisioned by the AirLand Battle Concept extend over greater distances and for longer periods of continuous combat than military operations of the past. In a nuclear environment, however, "long periods of continuous combat" are actually sustained series of short and violent engagements by close combat forces manned and equipped to move fast, strike hard and finish rapidly against enemy weaknesses -- time and time again.

(3) Nuclear weapons must be viewed as an extension of maneuver, not just as an element of fire support. In many instances, enemy weaknesses will either not be apparent or will be too distant to be successfully exploited by available maneuver forces. In such cases, "weaknesses" are created by nuclear fires which can be then exploited by available maneuver forces and additional fire support. After all, places of strength in the enemy's array of forces remain such only until nuclear strikes are delivered against them. Identified, distant enemy weaknesses or vulnerabilities are exploited by ground and air delivered fires -- nuclear, nomuclear or combinations thereof

-- to the extent permitted by available resources and to the degree sought by the objectives of delay, denial, disruption or destruction. These interrelated actions are synchronized to support attainment of a common military objective.

(4) The principles of mass and economy of force demand designating and sustaining a main effort. In a nuclear environment, sustaining the main effort involves the continuing application of combat power to exploit opportunities in any area of the battlefield. Nuclear weapons not only weight the main effort but also create opportunities for success in other areas. When such opportunities develop, they are exploited immediately by redirecting forces, fires and logistics. The violence, stress and confusion characteristic of a nuclear environment serve to divert attention from sustaining the momentum of the battle. Extraordinary discipline and leadership are required to overcome these distractions and to maintain the focus on the mission at hand. Commanders must continually assess human abilities and limitations as they plan and fight successive battles.

(5) The effects of terrain and weather are important in the application of the elements of combat power. In a nuclear environment, both affect the efficient and effective employment of nuclear weapons and may have a greater influence on maneuver actions.

(6) Protection involves preservation of the fighting strength of the force until optimal combat power can be applied at the right time and place. This is accomplished by assuring security and survivability, keeping troops healthy and equipment ready, and sustaining discipline and morale.

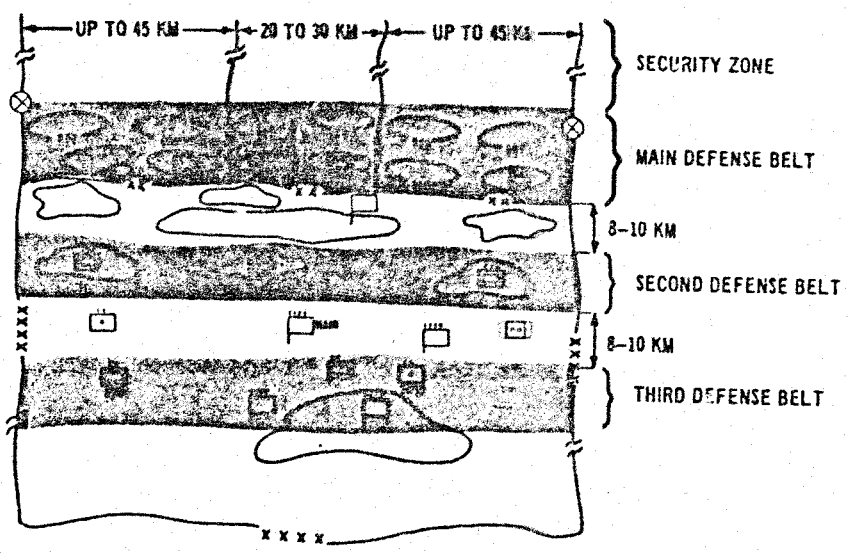
5. OPERATIONAL CONCEPT

a. Offense. The offensive is the decisive form of war, the commander's only means of attaining a positive goal and of defeating an enemy. Decisive offensive actions win battles and are characterized by initiative, improvisation and aggressiveness; deep, bold attacks throughout the depth of the battlefield; agility, as expressed in the flexible application of combat power to avoid enemy strengths and to unhesitatingly exploit his weaknesses; and synchronization of all resources in simultaneous and sequential battles designed to totally disrupt and dislocate the enemy's system for combat. The basic tenets and the imperatives of modern warfare take on added importance in a nuclear environment wherein nuclear weapons are used to assure success in offensive operations. However, it must be recognized that a nuclear environment increases the risks of attacking forces and requires continuous application of superior security and survivability means.

- THREAT
  - ATTRIBUTES
    - PREPARATION
      - BASIC FORMS

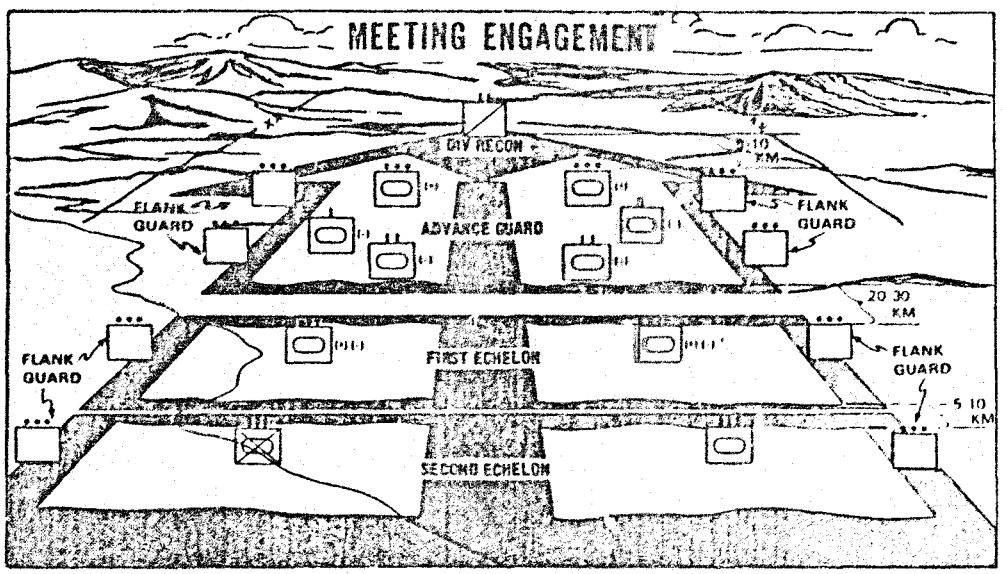
(1) Soviet style operations are characterized by the relentless and violent prosecution of offensive actions; defense is an anathema to Soviet military strategy. However, Soviet doctrine recognizes that temporary defensive operations may be required in those sectors of the battlefield where offensive actions are initially unsuccessful. In such cases, Soviet doctrine for defensive operations features the employment of security forces, main

defensive forces and reserve forces. Security forces occupy an area forward of the main defenses and seek to engage the enemy at the longest possible range, causing premature deployment of assault forces. Conventional, nuclear and chemical fires are concentrated in sudden and devastating barrages to destroy attacking forces. Mines and barriers are used in conjunction with



maneuver forces to canalize attacking forces into killing zones. Main defensive forces are deployed in depth, normally in belts of mutually supporting strongpoints. Combat power is focused on attriting and destroying the attacker well forward and canalizing him into areas where he is vulnerable to destruction by counterattack. Massed artillery, airpower, mines and barriers, and maneuver forces are used to support main defense forces. Reserves are positioned to block, counterattack or reinforce main defense forces. Strong antitank reserves are committed to destroy armored formations and to support tank heavy counterattack forces.

Defensive doctrine notwithstanding, the Soviets consider a meeting engagement as the more likely event in a nuclear environment. The Soviet Dictionary of Basic Military Terms defines meeting engagement as "A clash between opposing sides when they are simultaneously striving to fulfill assigned missions by means of offensive actions . . .. A meeting engagement is characterized by obscurity of the situation and by abrupt changes in it . . . by rapid changes in march, approach march and combat formations." The Soviets recognize and attempt to exploit (as must US forces) certain characteristics of a meeting



engagement: lack of detailed intelligence, rapid situational changes, development of actions on a wide front and probable exposed flanks of each opponent. Successful operations require speedy extemporaneous planning due to limited time, continuous effort to seize and retain the initiative, deployment into combat from the march column at high speed, and redirection of combat effort as required.

(2) Soviet operational art and tactics present ample opportunities to seize the initiative and destroy enemy forces -- the primary reasons for conducting offensive operations. Offensive operations may also be conducted to control terrain, gain information, deceive or divert the enemy or both, deprive the enemy of critical resources, and fix or contain the enemy in a specific location. Therefore, it is important to understand offensive operations in a nuclear environment -- specifically, the use of nuclear weapons to enhance the ability to gain and retain the initiative in the pursuit of these missions and to survive while doing so.

ATTRIBUTES OF OFFENSIVE OPERATIONS

- INITIATIVE AND DECENTRALIZATION
- INTEGRATION OF MANEUVER AND FIREPOWER
- ATTACK WEAKNESS AND EXPLOIT SUCCESS
- MULTIPLE ATTACKS
- ATTACK DEEP
- IMPROMPTU PLANNING

WITHIN THE ENEMY'S DECISION CYCLE

(a) The attacker has freedom of action; he determines the objective, direction and time of attack. US Army forces' advantage, as compared to the enemy, accrues from greater unit initiative and decentralization of mission execution. It is particularly essential to operate well inside the enemy's decision making process; i.e., make decisions and act more quickly than the enemy. This capability is enhanced by the proper application of nuclear weapons in space and time. Surprise, deception, flexibility, creation and exploitation of enemy weaknesses and superiority in combat readiness generate local superiority. The success of the attack ultimately depends on

the speed of maneuver and the application of firepower. Rapid maneuver and coordinated application of firepower at the decisive place and time disrupt the enemy's plans and decrease the effectiveness of his countermeasures. If an opportunity for success develops in an area other than originally planned, it is exploited immediately; fires are shifted and maneuver forces are oriented to take advantage of the new opportunity. The development of new opportunities for success in more than one area is accomplished by attacking the enemy at several points simultaneously. Such opportunities are further enhanced by conducting these attacks against enemy weaknesses at gaps, flanks and boundaries. Limited close combat forces are compensated by the use of nuclear weapons. The combination of multiple attacks and rapidly changing the weight provided to the attacks confuses and deceives the enemy as to the main effort and causes him to conduct ineffective counteractions. Proper employment of nuclear weapons to create gaps rapidly, to disrupt or destroy reserves and to disrupt key C^3 resources generates opportunities for exploitation by newly designated main attacks. Intensive EW will be employed to further disrupt C^3 systems, thus delaying the enemy commander's assessment of the situation and his reconstitution measures.

PREPARATION FOR OFFENSIVE OPERATIONS

- TIMING
- OBJECTIVES
- INTELLIGENCE
- SCHEME OF MANEUVER
- RESOURCE ALLOCATION
- CONTROL MEASURES

CONCEALMENT AND DECEPTION

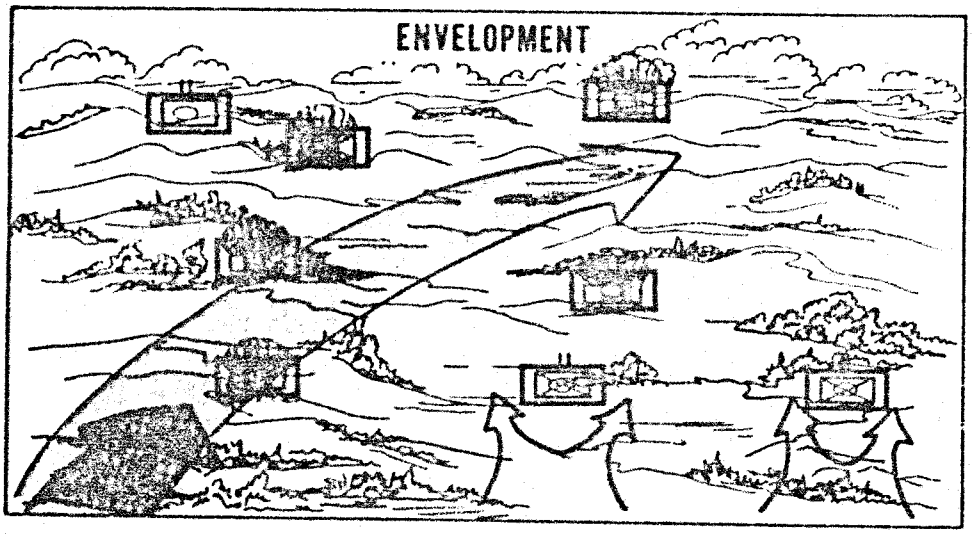
(b) The attacking commander may be able to select either a hasty or deliberate attack. If the enemy can be surprised, an attack is launched without delay and without extensive preparation; surprise is used to offset the less than optimal employment of combat power. If the enemy has equal or greater combat power, the attack preparation must be more extensive so optimal combat power can be applied from the onset. Either type of attack requires a clearly defined objective and timely intelligence, both on the enemy and friendly forces. After the mission, objectives and scheme of maneuver have been selected, available maneuver forces, fire support, intelligence means and combat support and combat service support are allocated to be responsive to the level of the forces conducting the attack. A main attack and one or more supporting attacks are designated. Nuclear weapons are used as an economy of force measure, allowing additional maneuver forces to participate in the main effort. They are also used to control terrain when physical occupation is not desirable. Reserves, inversely proportional in size to the knowledge of the enemy, (extensive knowledge, small reserve; little knowledge, large reserve), nuclear weapons and other fire support are the commander's means of influencing actions during the attack. Airmobile forces can be maneuvered quickly throughout the depth of the battlefield. Nuclear weapons and attack helicopters are especially effective against enemy counterattacks. Air force resources are used to gain local air superiority, provide intelligence information, attack targets in depth, provide support against counterattacks and to exploit further the use of nuclear weapons. All preparation for attack must be concealed. Visual and electronic concealment are required. A sudden flurry of activity or a significant increase in the number or tempo of messages would tip off the enemy.

(3) Offensive operations are designed to destroy the cohesiveness of the enemy's system of war and his will to continue the fight. The depth of attacks is limited only by resources available and the capability to support, reinforce or link up with the attacking force. While limited objective attacks may be required at times, commanders must recognize or create opportunities for bold, deep thrusts well behind the enemy's forward elements. Ideally, brigades orient on second echelon regiments, divisions on second echelon divisions and corps on follow-on armies. Nuclear weapons are used to create opportunities for these deep attacks, as an economy of force to hold flank forces in place, to protect exposed flanks, to destroy enemy strongpoints and pockets of bypassed formations and to destroy, disrupt and delay follow-on forces. They are used to weight the main effort, to sustain the fight and as highly flexible reserves. Vulnerability is reduced by speed of action, widening initial gaps and rolling up the flanks, rapid exploitation and orientation on follow-on forces. Attacking forces mass rapidly for the attack, move fast and strike hard and redisperse to preclude presentation of remunerative targets -- time and time again.

The basic forms of maneuver are the envelopment (includes double envelopment and turning movement), the frontal attack and penetration. Regardless of the basic form employed in the nuclear environment, maneuver advantages are achieved and maintained only by repeated impromptu planning and execution in the briefest of periods. Impromptu planning is necessitated by the rapidity with which opportunities for exploitation can be generated, the rapidity with which exploitation of opportunities must be executed by close combat forces, and the rapidity with which the attacking forces must redisperse -- all driven by the need to operate within the enemy's decision cycle.

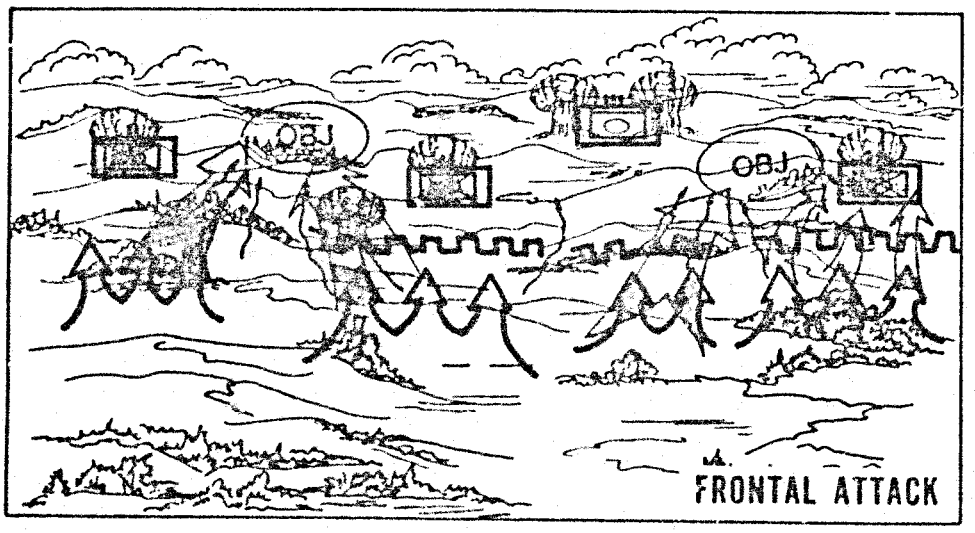
The organization for combat depends on the mission, enemy situation, terrain, visibility and distance to the objective. Semi-independent task forces advancing on multiple avenues of approach, with a clear understanding of the commander's intent, are the best organizations for combat on the nuclear battlefield. Advancing with greater width than depth allows dispersal between units and enables closing and interlocking more quickly with the enemy. These forces mass rapidly to close with the enemy where they are less vulnerable to nuclear attack, attack aggressively and then redisperse on multiple routes to continue the exploitation. The forces advancing on multiple axes need freedom of movement in width so they can bypass natural and manmade obstacles and pockets of resistance, e.g., a maneuver brigade might need a 15-20 kilometer width. CSS assets are dispersed and essential commodities are positioned well forward. Attacking forces and supporting artillery are provided increased loads of ammunition and POL. In the attack, the emphasis on combat engineer support is the mobility mission; therefore, combat engineers are located with the forward elements of the attacking forces. The loss of communications during an attack is a very real possibility and, if not overcome, could result in failure to achieve desired objectives. Accordingly, alternative means of maintaining synchronization must be developed and implemented when required. These control measures must permit the maintenance of attack momentum and provide for the attacking commander's positive control of nuclear fires.

(a) The envelopment strikes the enemy on an exposed flank or at another point of weakness in his forward defense, avoids his main strength and attacks toward an objective in the rear. A secondary attack fixes the enemy in place while the main attack cuts across his routes of escape. The enemy is thus forced to fight on two fronts and is subject to destruction in place.

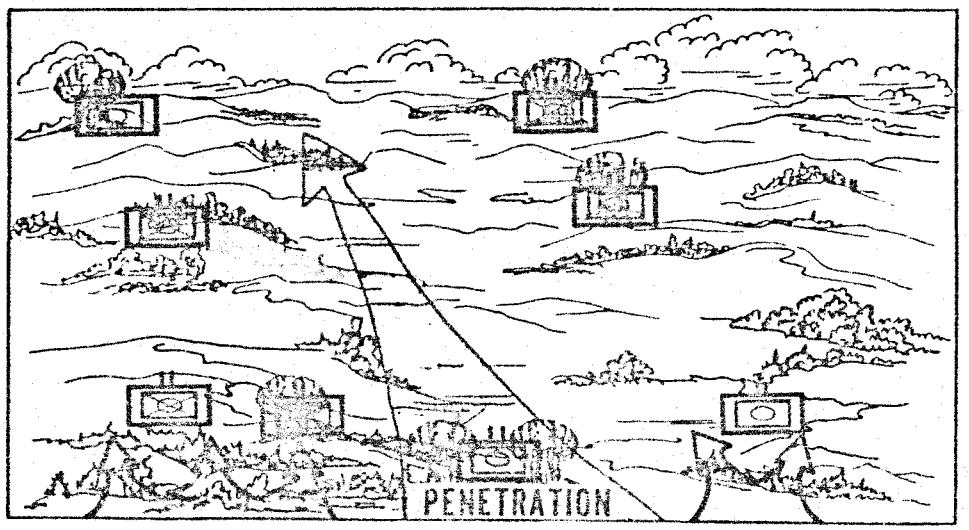


Nuclear weapons are used to create opportunities for an envelopment, to destroy the isolated enemy forces and to prevent counterattacks against the vulnerable flanks of the enveloping force. The use of nuclear weapons also increases the element of surprise and can deceive the enemy into thinking the secondary fixing attack is actually the main attack.

(b) The frontal attack strikes the enemy all along the front. It is used as a main attack against a widely deployed threat or as a secondary attack. Nuclear weapons are used on the enemy's main forces to create gaps for rapid exploitation and against reserve or follow-on forces to preclude enemy counterattack. Infiltration on the nuclear battlefield is especially effective due to the island-like nature of the battlefield. Small groups move through the gaps between enemy forces and assemble in the enemy's rear. Such a technique enhances surprise and decreases nuclear vulnerability; it requires boldness and initiative.



(c) In the penetration, the main attack passes rapidly through the principal defensive forces of the enemy. The goal is to destroy the continuity of the force, divide it and defeat it in detail. Its success requires superior combat power at the point of penetration. Nuclear weapons are used to reduce the effective enemy strength at the planned breaching



point, against enemy flank forces to insure they do not move to block the gap or attack the flanks of the penetration, and against the reserves or other forces in the enemy's rear area which must be precluded from counterattacking. Follow-on forces widen the gap, roll up the flanks of the main effort and exploit opportunities created by the penetration.

In summary, nuclear weapons are used in the offense as a substitute for and a complement to maneuver forces: to create gaps in hard defenses; to hold enemy forces in place, to control terrain, to protect exposed flanks by destruction of forces and creation of obstacles, to destroy bypassed enemy forces, as an economy of force, as reserves, and to create opportunities for exploitation by relatively smaller close combat forces.

b. Defense. There are inherent weaknesses associated with Soviet style offensive operations which provide numerous opportunities for exploitation by aggressive offensive actions, e.g., centralized control of operations (especially nuclear operations), adherence to established timetables, echelonment of forces and the requirement to concentrate and mass forces. However, even in light of these weaknesses, it will be necessary for US forces to conduct defensive operations for limited periods to prepare for deliberate offensive operations, permit concentration of forces in other areas of the battlefield, gain time, control terrain, deny enemy deep objectives, or permit consolidation and reorganization of forces.

(1) Defensive operations, in general terms, retain or control terrain, deny the enemy access to an area and attrite attacking forces. However,

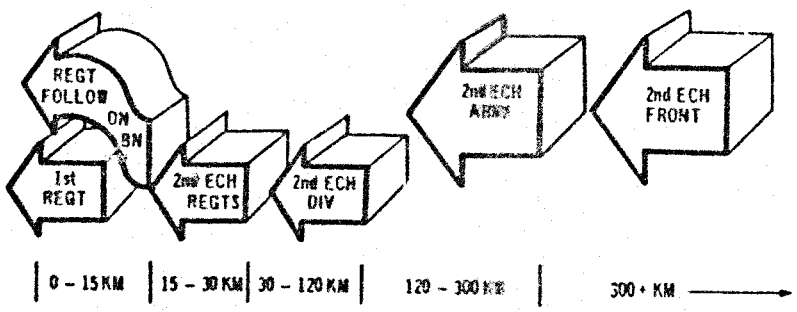
defensive operations do not win campaigns and battles; the defense, therefore, is a temporary expedient. Such operations are characterized by delaying and disrupting the enemy throughout the depth of the battlefield, seizing the initiative and exploiting opportunities for offensive actions, flexibility in planning and use of maneuver and firepower, and coordination and synchronization of all combat power in violent and aggressive exploitation of enemy vulnerabilities. Nuclear weapons are significant force multipliers and, as such, assist in both the creation of opportunities for offensive actions and the subsequent successful conduct of those actions.

- THREAT
- OVERVIEW
- DEEP BATTLE AREA
- COVERING FORCE AREA
- MAIN BATTLE AREA
- REAR AREA

(2) Offensive actions must prevail -- even during the defense -- to overcome Soviet style offensive operations, characterized by numerical superiority, mobility and firepower to achieve and maintain momentum, through the conduct of meeting engagements, attacks against defending forces and pursuit operations.

Meeting engagements with the enemy may occur under widely differing circumstances and environments: at the beginning of a war, at the outset of any attack when opposing forces are not in initial contact, after penetration of enemy's defensive lines in expectation of meeting reserve elements, during pursuit operations, and during counterattacks.

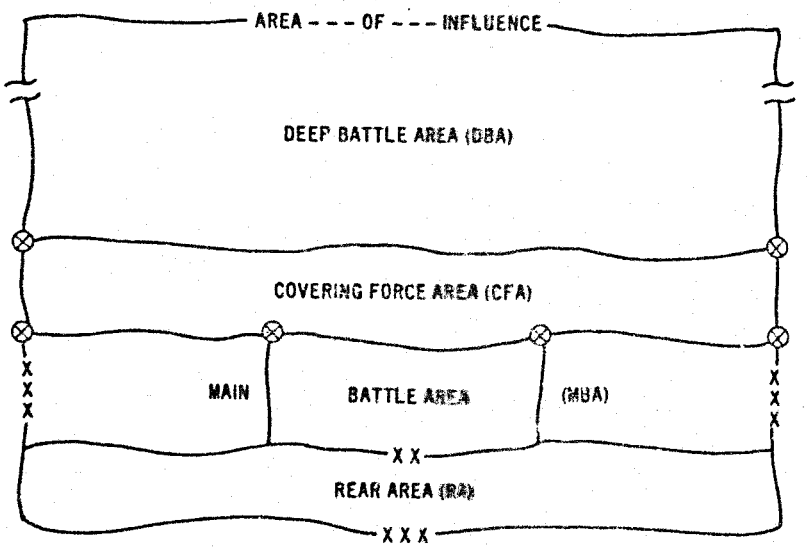
The essential aims of Soviet offensive operations are to destroy enemy forces and seize important terrain. Also basic to the attack of a defending force is the rapid buildup of required forces, the echelonment of forces, the massing



of forces and fires, the use of nuclear and chemical weapons and continuous attack under all conditions of weather and visibility. Assault echelons attack both to destroy the opposing enemy forces that survived initial fires and to create favorable conditions for follow-on forces (e.g., operational maneuver groups or second echelon formations) to exploit.

Pursuit operations feature swift and deep movement, with short lateral deployment of small forces to strike the enemy's most vulnerable areas. Pursuit is characterized by a high rate of advance, maintenance of the momentum and the intense and relentless application of combat actions.

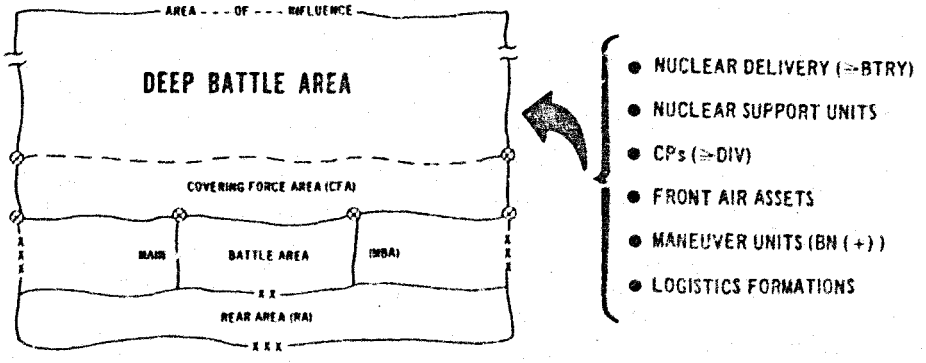
(3) Defensive operations are conducted throughout the depth of the battlefield, using all available combat power. AirLand forces fight a unified and synchronized battle in four areas of the battlefield: the deep battle



area - that area beyond the covering force extending to the forward extent of the area of influence, the covering force area, the main battle area, and the rear area. While combat actions may be underway in two or more of these areas at the same time, they are always conducted as one integrated and coordinated battle.

(4) Combat actions in the deep battle area (DBA) are designed to support the commander's overall scheme of maneuver by destruction, disruption and delay of enemy forces. Their goal is to prevent the enemy from concentrating overwhelming combat power at the point and time of his choice by severely delaying and disrupting planned closure times of follow-on elements, thereby creating opportunities for successful maneuver action against assault echelons.

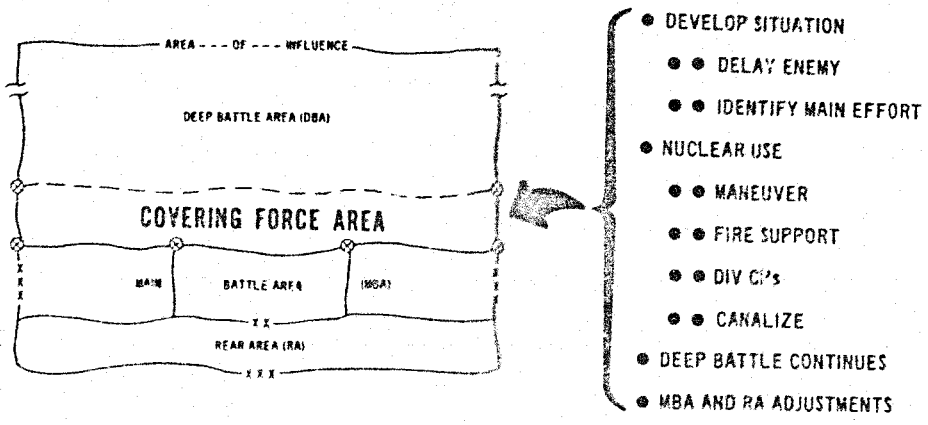
There are several categories of high priority targets in the deep battle area, the destruction of which substantially reduces the enemy's capability to mass



overwhelming combat power. The use of nuclear weapons to destroy nuclear delivery units of battery size and larger and associated support elements pays high dividends. Single launchers are of interest and warrant high priority attack by conventional means when located. The enemy's propensity for centralized control dictates that division and higher command and control facilities receive priority for attack. The commander must also be concerned about the enemy's ability to attack from the air, either with fixed or rotary wing aircraft; therefore, front air assets are essential targets for both the air and ground components. There are a number of natural choke points at which queues of forces will be formed, presenting excellent opportunities for destruction of relatively large formations; nuclear weapons are an excellent means of creating queues in other selected locations. Maneuver units are always lucrative targets; their attack by nuclear weapons in the DBA is generally restricted to battalions and larger units. Additionally, the enemy support formations offer an array of soft targets, the destruction of which disrupts established timetables and the ability to mass combat power. These categories of targets are always high priority, to be attacked by any available resource; the probability of their destruction is significantly increased when attacked by nuclear weapons.

The means available to conduct combat operations in the DBA are limited, requiring a joint effort by both air and land forces. Tactical air reconnaissance and other intelligence collection means focus on high priority areas and units in the DBA while also maintaining a current intelligence picture of enemy forces throughout the area of interest. Most attacks in the DBA are made by tactical air and ground launched systems. Battlefield air interdiction plays a major role in the delivery of both conventional and nuclear munitions in the DBA, but it must be carefully orchestrated to assure unity of effort with the commander's overall scheme of maneuver for the defense. Accordingly, combat actions in the deep battle area are planned and coordinated by the battle coordination team at corps.

(5) Combat operations in the covering force area (CFA) are designed to gain and maintain contact with attacking enemy forces, to develop the battlefield situation and to defeat or delay the enemy's assault echelons. While major battles may be fought in the CFA, the primary goal of covering forces is to cause the enemy to prematurely disclose his main effort. Such premature concentration of forces provides excellent targets for attack by ground and air delivered nuclear weapons immediately responsive to the commander. Within

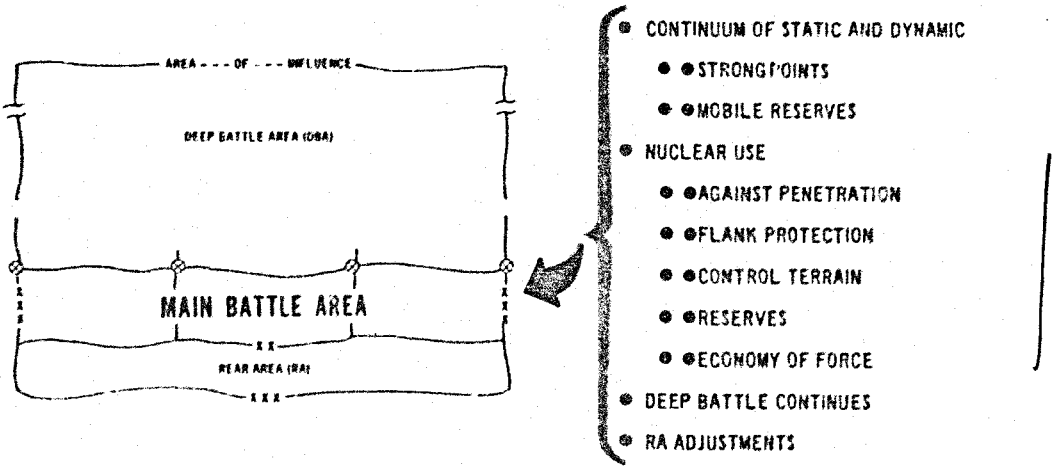


the covering force area, nuclear targets are generally limited to maneuver forces, fire support means and divisional command and control facilities. Other potential uses of nuclear weapons in the CFA include creation of obstacles to canalize enemy forces into preferred areas and to allow disengagement of elements of the covering force. Generally speaking, however, the nature of covering force operations offers few other opportunities for the effective employment of nuclear weapons.

While the covering force is fighting the enemy's assault echelons, combat operations against follow-on and support forces continue in the deep battle area. Positioning of forces in the main battle and rear areas is adjusted to accommodate developments in the covering force battle.

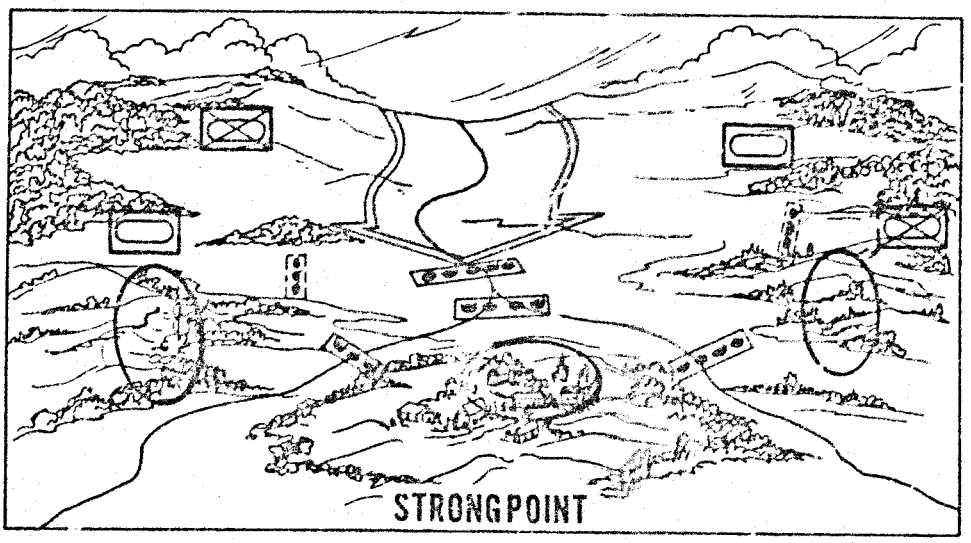
(6) Combat operations are conducted in the main battle area (MBA) to control or repel enemy penetrations, to destroy enemy forces and to create opportunities to regain the initiative and attack. Soviet doctrine for attack of defending forces entails the concentration and massing of relatively large formations in a small geographic area, thereby subjecting these forces to destruction by maneuver and firepower. There is an abundance of targets in the MBA suitable for attack by nuclear weapons; those of primary interest are maneuver units of company size and larger, concentrated fire support means and regimental and higher command and control facilities. enlightened into.

The range of defensive options available in the MBA falls within a continuum bounded by static and dynamic actions. The static end of the continuum is more oriented toward control of terrain and relies heavily on firepower. The



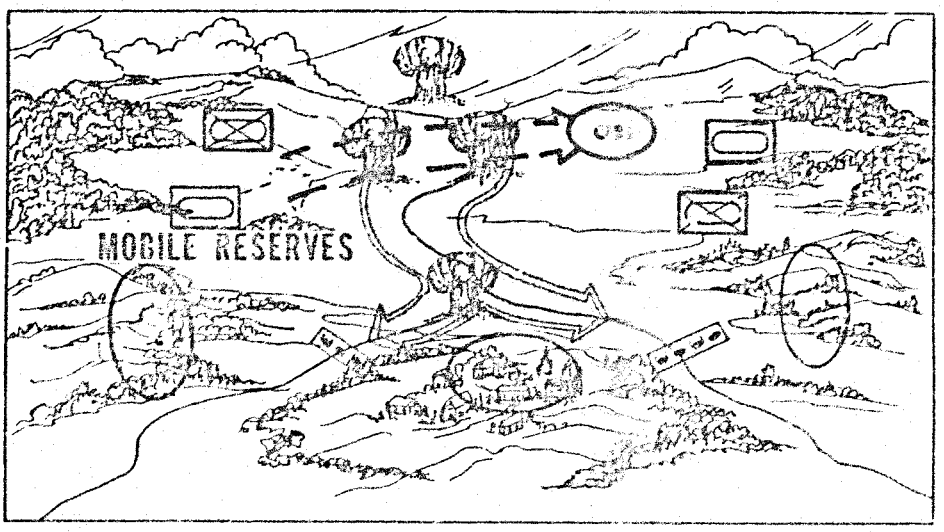
dynamic focuses more on the enemy and depends on both maneuver and firepower to destroy enemy forces. Optimum operational art applies the actions of the continuum as appropriate to decisively defeat large formations.

Defenses are generally characterized by a combination of terrain oriented strongpoints and highly mobile reserves. Air and ground delivered fire support -- conventional, nuclear and chemical -- is used as the decisive means to destroy enemy forces before they reach the main battle area. Enemy artillery units concentrate in the main effort, assault echelons mass to conduct breakthrough operations and regimental and division command posts locate well forward to orchestrate the attack. These are lucrative targets for attack by any means, but present excellent opportunities for the decisive employment of nuclear weapons. Strongpoints are the most static elements of the defense. Strongpoints are organized throughout the depth of the MBA. Their size and disposition are highly dependent on the nature of the terrain and topography, opposing forces and their individual mission or purpose. They are organized, with minimum essential forces, to be mutually supporting and reinforced by fire support means. Protection and surprise are enhanced by concealment,



physical preparation and timely occupation. Strongpoints are used to delay the enemy, to control and canalize him into area where he may be neutralized or destroyed ~~and to create~~ opportunities for aggessive counterattacks.

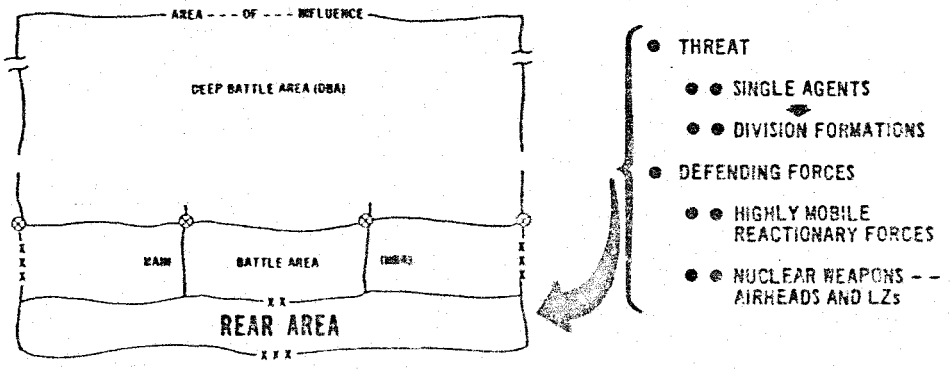
The decisive component of the overall defense is a highly mobile, hard hitting reserve to conduct spoiling attacks and to counterattack enemy forces at a decisive place and time. Nuclear weapons and other fires create opportunities



for the counterattack in a number of ways. They blunt or stop the penetration, seal the base of the penetration, isolate assault echelons and create gaps in the penetration through which maneuver forces counterattack. Counterattack against inherent enemy weaknesses, e.g., an exposed flank, always afford the best opportunity for success. During the actual counterattack, nuclear weapons, and other fire support means, are used to destroy massed formations within the penetration, protect flanks from counterattack by destruction of enemy forces or by creation of obstacles, destroy bypassed formations, create opportunities for further exploitation, deny the enemy use of critical areas and provide a highly flexible reserve. When used as an economy of force measure, they create sufficiently large reserves to decisively defeat the enemy and allows smaller maneuver forces to defeat larger combat formations.

During the MBA battle, combat operations in the deep battle area concentrate on follow-on and support forces sustaining the enemy's main attack. Forces in the rear area react to developments in the MBA by redirection of priority of support and concurrently plan for defense of the rear area.

(7) The rear area (RA) is an equal component of the overall defensive



battle. The threat to the RA ranges from single agents, saboteurs and terrorists to airborne, airmobile and amphibious forces as large as divisions. While the commander must sustain his main defensive effort, he cannot ignore these threats to his rear area. Airmobile forces, attack helicopters and air cavalry units, close air support and mechanized forces are particularly well-suited for rear area combat operations. While limited, there may also be opportunities to use low yield nuclear weapons to eliminate large massed formations in the rear, particularly within airheads and landing zones established by enemy forces.

In summary, nuclear weapons are used in the defense: to destroy assault forces and follow-on echelons before they penetrate the main battle area; to destroy or disrupt logistics support formations, to create obstacles and canalize enemy forces into preferred areas, to blunt or stop a penetration, to destroy enemy forces in the penetration, to control terrain, as an economy of force, to create opportunities for offensive actions, to protect forces during counterattacks, and as highly flexible reserves.

6. SURVIVABILITY

- RISK
- OPERATIONS SECURITY
- CONCEALMENT
- DISPERSION
- SHIELDING
- INTERLOCKING

a. Risk is inherent in war and is involved in every mission. It is common to both action and inaction, but inaction does not win battles. Risks are also related to gain; normally, greater gains require taking greater risks.

In a nuclear environment, the magnitude of both risks and gains are multiplied, and the consequences of mistakes are significantly greater. The destructive power of nuclear weapons requires particular attention to measures that reduce vulnerabilities. It must be recognized that measures to reduce vulnerability to one form of attack may increase vulnerability to other forms of attack and may detract from the overall effectiveness of the force. Dispersion may reduce vulnerability from nuclear attacks, but it increases vulnerability to infiltration and possible defeat in detail. Mobility, offensive maneuvers and other measures are effective in reducing vulnerability.

b. Survivability in any battlefield environment results from the combined application of sound protective measures and operational practices that reduces a force's vulnerability: to detection, to attack if detected, and to destruction if attacked. In a nuclear environment, survivability measures and practices take on added importance and become equal partners with the interrelated principles, basic tenets and other imperatives of contemporary warfare. The specific application of protective measures is dictated by the mission of each organization and the threat to the organization.

c. The enemy has a sophisticated intelligence system that includes resources to monitor communications, locate emitters, control agents located deep in rear areas and see the battlefield from overhead. The enemy's intelligence gathering resources are similar to those of the United States. Countermeasures to the enemy intelligence collection effort are derived from the four main parts of OPSEC -- deception, information security, physical security, and signal security. All are interrelated and considered simultaneously for each operation.

(1) Deception measures prevent the enemy from obtaining operational information and are used to deceive and confuse the enemy about friendly operations, e.g., deliberately conveying false operational data, feints, and decoy positions reinforced by dummy message traffic.

(2) Information security measures prevent the disclosure of information through written, verbal or graphical communications, e.g., convey information to subordinate commands only as needed and use multiple level codes.

(3) Physical security measures limit or deny enemy access to facilities, areas, equipment, documents and personnel by using guards, barriers and anti-intrusion devices.

(4) Signal security (SIGSEC) protects operational information by using communications security (COMSEC) and electronic security (ELSEC) techniques. COMSEC includes using only authorized codes, digital burst and frequency hopping, secure voice equipment, listening silence and proper radiotelephone procedures. ELSEC protects noncommunications emitters by actions such as proper radar positioning, antenna masking and cuing operation with passive devices, e.g., using sound or flash to cue AN/TPQ-37 radar. Active measures include jamming and attack with antiradiation munitions.

d. Other countermeasures include prevention of signatures, profiles and patterns. Signatures derive from physical presence; profiles derive from unit activity; and patterns derive from doing things the same way each and every time. An example countermeasure for each includes conceal unique items of

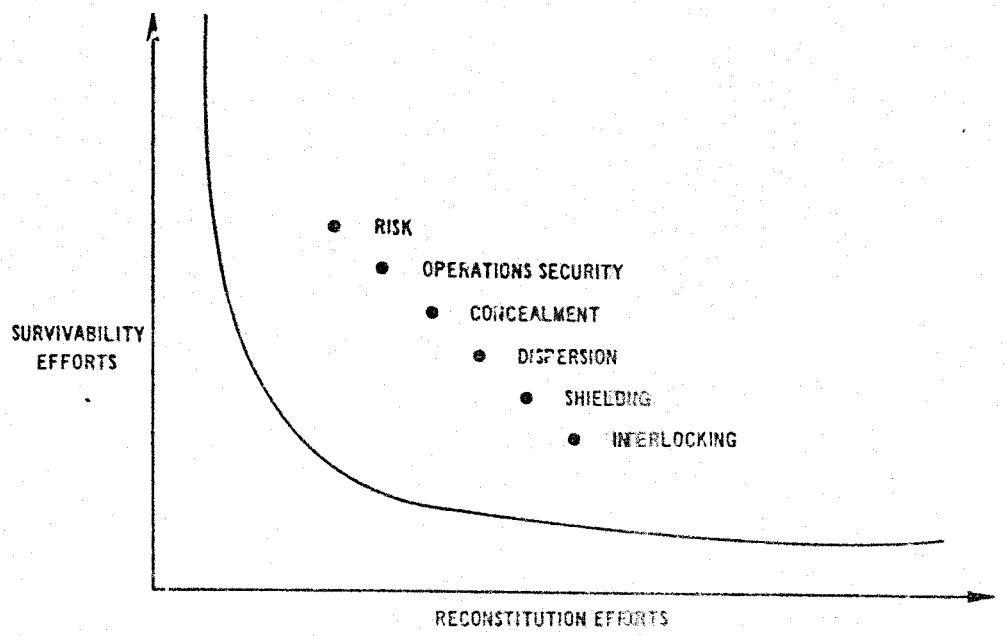
equipment, minimize personnel and vehicular activity and position artillery in villages vice forward edge of treelines.

e. It will neither be possible nor desirable to attain a degree of dispersion that is directly proportional to the threat yields and numbers of nuclear weapons. Formations too dispersed invite defeat in detail. Other limiting factors which impact dispersion include the assigned mission of the force, control of subordinate formations, responsiveness of the logistics system, weather, terrain and weather effects on terrain, mobility of the force, and the amount of intelligence and combat information available on the nature and disposition of enemy forces. Thus, there is no mathematical "rule of thumb" that is universally applicable to dispersion. The degree of dispersion possible is that which permits mission accomplishment while not subjecting the force to an unacceptable risk. Consideration of physical separation distances -- in isolation -- is meaningless.

f. In many instances, the same measures that provide security against detection also provide a degree of protection against attack, or minimize the effects of being attacked. Terrain shielding not only minimizes the risks of detection, but also reduces the extent and degree of weapons effects. Any cover, to include natural vegetation, reduces thermal radiation significantly and may even diminish the intensity of nuclear radiation. Natural and man-made terrain features modify blast waves; these features, particularly on reverse slopes, diminish the intensity of the shock front. Standard protection practices, e.g., digging in, foxholes with overhead cover and buttoning up armored vehicles, attentuate all nuclear effects.

g. It is also possible to provide survivability against nuclear attack, at least to forward elements of close combat forces, by closing with the enemy. Commanders are advised to employ aggressive maneuver and offensive actions that contribute both to the objective of the overall operation and to overall force survivability. These are best accomplished by infiltrating at multiple points, conducting spoiling attacks and otherwise interlocking with the enemy.

h. Regardless of measures taken to enhance force survivability, some close combat forces will suffer severe losses on the modern battlefield. The nuclear environment does not allow the luxury of long personnel and materiel pipelines and withdrawal and rehabilitation of units; therefore, reorganization, reconstitution and restoration will be accomplished, at least initially, from residual assets.



In addition to the active and passive measures to physically reduce vulnerability, training and prudent task organization assist in maintaining or rapidly regenerating combat power. Psychological preparation and cross training in individual technical skills facilitate uninterrupted performance of critical control functions and key combat tasks. Further, close combat forces not only must be composed of combined arms elements, they must also contain sufficient support forces to simplify the reconstitution of teams, crews and units.

In the final analysis, the more survivable and the better prepared the unit is to absorb an attack supported with nuclear fires, the less effort required to maintain and regenerate combat power.

7. FUNCTIONAL AREAS.

a. It is fundamental to the success of contemporary campaigns and battles that all AirLand forces are employed in a coordinated, integrated and synchronized manner to attain overall objectives, particularly in a nuclear environment. The air forces and ground forces are equal partners in the projection of combat power.

- CLOSE COMBAT
- COMMAND AND CONTROL
- AIR SUPPORT
- FIRE SUPPORT
- AIR DEFENSE
- COMMUNICATIONS
- INTELLIGENCE AND ELECTRONIC WARFARE
- ENGINEER AND MINE WARFARE
- COMBAT SERVICE SUPPORT

b. Close Combat. Close combat elements are normally combined arms teams (CATs) which include infantry, armor, artillery and combat engineers as appropriate to mission and operational environment, with external support provided on an as needed basis. In a nuclear environment, CATs must have the agility to generate decisive combat power -- repetitively -- to accomplish a variety of tasks and missions without the need to effect major changes in task organizations. Such teams must be capable of semi-independent operations for prolonged periods without extensive external support; this requires a high degree of self-sufficiency. In short, the full spectrum of combat, combat support and combat service support personnel, skill and capabilities must be intrinsic to the CAT. All elements of the CAT must be able to traverse large areas of the battlefield rapidly. Each element must have sufficient mobility and command and control means to operate as a team in dispersed areas, rapidly mass at critical times and places and redisperse before the enemy can react. Each semi-independent CAT must be capable of maneuvering in concert with other CATs, while separated from each other by an interval large enough to provide unit security from the effects of nuclear weapons. Within CATs, subordinate elements must be dispersed and organized to be self-sufficient to the maximum extent possible. Each CAT must have complementary capabilities to provide force security, e.g., ground and air intelligence gathering means, concealment and deception means, and antipersonnel, antiarmor and antiaircraft fires. Effective employment of these diverse assets in a synchronized manner requires combined arms teams to organize and train in peace as they will fight in war.

c. Command and Control. Command and control consists of the organizations, processes, procedures and facilities that enable the coordination, integration and synchronization of widely spread and varied elements of combat

power toward a common goal -- decisive defeat of the enemy. The exigencies of modern combat dictate that the command and control system be reliable, secure, fast and durable in a wide range of possible battlefield environments. Electronic warfare, the threat of chemical warfare and the destructive power of nuclear weapons, the vulnerability of communications to electromagnetic pulse and the increased dispersion of forces in a nuclear environment impose added burdens on the maintenance of continuous command and control. Simple and effective measures must be developed to allow the continuity of operations in an environment where command and control and communications are frequently interrupted or even lost for prolonged periods. Security and survivability of command and control are achieved through a combination of redundancy, concealment, frequent displacement, reduction of physical and electronic signatures, dispersion, discipline, deception, mobility and hardening.

d. Air Support. Air support of the AirLand Battle consists of counterair and interdiction operations, offensive air support and tactical airlift operations during all possible battlefield environments. Offensive air support is air operations conducted in direct support of ground operations and consists of tactical air reconnaissance, battlefield air interdiction and close air support. Tactical air reconnaissance intelligence information must be disseminated rapidly to appropriate command levels. Battlefield air interdiction and close air support are conducted against enemy ground targets which are in a position to directly affect friendly operations. Offensive air support -- conventional, nuclear and chemical -- requires joint air and ground planning and coordination at corps, division and brigade. Responsiveness and timeliness of nuclear and chemical fire support must be comparable to that of conventional support.

e. Fire Support. The fire support system must be capable of delivering timely and responsive conventional, nuclear and chemical fires to destroy, neutralize or suppress enemy targets by means of close support, counterfires and interdiction operations. It must be closely linked with the commander's intelligence, surveillance and target acquisition (ISTA) means. Fire support assets are high priority Soviet targets. Accordingly, security and survivability measures must be taken to assure their availability in requisite numbers. Examples of such measures include dispersion, reduction of signatures, frequent displacement, use of hide positions, cover and concealment, commonality of equipment, proliferation, deception, operations security, discipline and mobility.

f. Air Defense. Air defenses must restrict enemy airpower and ground-launched missiles from impeding combat operations throughout the depth of the battlefield in all possible battlefield environments. This must be a fully coordinated and integrated effort between air and ground components. The joint air defense system must be capable of detecting and destroying enemy airpower prior to launch, providing early warning of imminent attacks, and detecting and destroying enemy airpower and ground-launched missiles while in flight. Passive air defense, hardening, dispersing and concealing potential targets make them more difficult to locate and destroy. Active air defense, ground-based firepower, electronic warfare and airborne platforms neutralize or destroy enemy airpower and ground-launched missiles prior to launch or in flight.

g. Communications. Communications provide the means by which the commander exercises command and control of organic and attached forces and coordinates the employment of supporting land, sea and air forces. Commanders are

required to communicate speedily and efficiently in all battlefield environments with subordinate elements, adjacent commands, supporting forces, and higher headquarters. Means for transmitting information and orders range from the time-tested radio, wire and messenger systems to high-speed data links and manpack satellite communications terminals. Communications survivability is enhanced by redundancy of numbers and types of systems, discipline, operations security, communications security, hardening, electronic countermeasures, reduction of signatures, deception, and combinations of both electronic and nonelectronic means.

h. Intelligence and Electronic Warfare. The intelligence and electronic warfare system must provide the commander timely and reliable combat information and intelligence about the enemy and the area of operation. It must include survivable reconnaissance, surveillance and target acquisition systems and organizations to determine movement, character, disposition, type and intention of enemy forces. The electronic warfare element of this functional area must include the capabilities to detect, identify, locate, report, disrupt, deceive and exploit enemy electromagnetic systems. The commander must be aware of enemy forces in his area of interest, have detailed and timely knowledge of both enemy and friendly forces throughout the depth of the battlefield from the forward limits of the area of influence through the rear area, and be knowledgeable of the terrain and weather in all of these areas. Timely reporting of the enemy's imminent use of nuclear weapons is of particular importance to insure adequate survivability measures are in effect. It is equally important to permit the most effective and efficient employment of nuclear weapons.

i. Engineer and Mine Warfare. Combat engineers contribute to combat power by performing mobility, countermobility and survivability missions in both offensive and defensive operations. Mobility missions include breaching enemy minefields and obstacles, improving existing routes or building new ones and providing bridge and raft support for crossing major water obstacles. Terrain alteration in a nuclear environment will exacerbate an already difficult mobility mission. Countermobility efforts limit the maneuver of enemy forces and enhance the effectiveness of our fires. Atomic demolition munitions and other nuclear weapons provide timely and effective means for the accomplishment of this mission. Engineers improve the survivability of the friendly force by hardening command and control facilities and other key facilities. The destructive power of nuclear weapons significantly increases the difficulty of these survivability tasks.

j. Combat Service Support. Combat service support is the lifeline of AirLand forces. It includes the provision of supplies, maintenance, services, energy, medical, transportation and personnel administration support. "Routine" combat service support in a nuclear environment is an invitation for disaster. Combat service support must be echeloned organizationally throughout the force structure and geographically throughout the area of operations, to include maximum use of small, specially tailored teams to accomplish multiple combat service support functions well forward.

Measures must be taken to assure availability of essential commodities, where and when needed, during periods characterized by extreme violence, stress and confusion. Close combat forces must maintain essential commodities at or above authorized levels, especially when starting new operations or battles.

Caches of essential commodities must be positioned throughout the main battle area, and perhaps the covering force area, where they are immediately available to the combined arms teams. These caches must be replenished, abandoned or destroyed as the situation dictates and new ones established to support the scheme of maneuver. "Push packages" of essential consumables must be delivered to deployed forces on a routine and scheduled basis. Aerial delivery may be the only means available to accomplish this mission. Resupply must take place during the hours of darkness and periods of reduced visibility.

Medical triage, treatment and evacuation of casualties must be accomplished on a large scale. Reconstitution of both combined arms and combat service support capabilities must be accomplished rapidly to maintain effective fighting forces.

APPENDIX

BRIEFING:
CONCEPT FOR OPERATIONS
IN A
NUCLEAR ENVIRONMENT

VU-GRAPH 1 (TITLE) OFF

VU-GRAPH 2 ON

( ) THIS IS A DECISION BRIEFING. AT THE END OF THIS PRESENTATION, YOU WILL BE ASKED TO APPROVE THE CONCEPT FOR OPERATIONS IN A NUCLEAR ENVIRONMENT.

VU-GRAPH 2 OFF

VU-GRAPH 3 ON

THE SCOPE OF THE PRESENTATION AND THE BROAD OUTLINE OF THE WRITTEN CONCEPT ARE AS DEPICTED ON THIS VISUAL. I WILL ELABORATE ON EACH OF THESE SUBJECT AREAS DURING THE COURSE OF MY PRESENTATION. I WOULD LIKE TO EMPHASIZE FROM THE OUTSET THAT THIS IS NOT A RADICALLY NEW CONCEPT. RATHER, IT EXPANDS UPON TRADOC PAMPHLET 525-5, OPERATIONAL CONCEPTS FOR THE AIRLAND BATTLE AND CORPS OPERATIONS, AND IMPLEMENTS DRAFT FM 100-5, OPERATIONS, FOR A NUCLEAR ENVIRONMENT.

VU-GRAPH 3 OFF

VU-GRAPH 4 ON

IT'S PURPOSE IS TO PROVIDE A CONCEPT FOR THE CONDUCT OF MILITARY OPERATIONS BY U.S. ARMY FORCES IN A NUCLEAR ENVIRONMENT. SUCH A CONCEPT IS NECESSARY FOR A NUMBER OF REASONS. FIRST, THE

OBJECTIVE OF THIS PRESENTATION

TO OBTAIN APPROVAL OF THE CONCEPT FOR OPERATIONS IN A NUCLEAR ENVIRONMENT.

A-4

SCOPE

- PURPOSE
  - ENVIRONMENT
    - LIMITATIONS
      - FUNDAMENTALS
        - OPERATIONS
          - SURVIVABILITY
            - FUNCTIONAL AREAS

PURPOSE

TO PROVIDE A CONCEPT FOR THE CONDUCT OF MILITARY OPERATIONS BY US ARMY FORCES IN A NUCLEAR ENVIRONMENT.

- COUNTER THE THREAT
  - INCREASED COMBAT POWER
    - WARFIGHTING AT CORPS AND BELOW
      - APPLICABLE TO OTHER ENVIRONMENTS

DOCTRINE OF LIKELY ADVERSARIES EMPHASIZES THE USE OF NUCLEAR WEAPONS WHEN AND WHERE NEEDED TO ASSURE SUCCESS. TO COUNTER THIS THREAT, U.S. ARMY FORCES MUST PREPARE NOW WITH APPROPRIATE DOCTRINE, MATERIEL, FORCE STRUCTURES, TACTICS AND TRAINING DIRECTED TOWARD A DEMONSTRATED CAPABILITY TO OPERATE EFFECTIVELY IN SUCH AN ENVIRONMENT. SECOND, NUCLEAR WEAPONS PROVIDE THE ARMY A SIGNIFICANT FORCE MULTIPLIER AND INCREASED WARFIGHTING CAPABILITY WHEN THEIR USE AND EFFECTS ARE PROPERLY INTEGRATED AND SYNCHRONIZED WITH THE MANEUVER OF FORCES. THIRD, IT SPECIFICALLY ADDRESSED WARFIGHTING AT CORPS AND BELOW IN AN ACTIVE NUCLEAR ENVIRONMENT; INFLUENCES AND CONSTRAINTS EXTERNAL TO CORPS ARE NOT EXPLICITLY ADDRESSED. FURTHER, THE CONCEPT IS EQUALLY APPLICABLE IN AN INACTIVE NUCLEAR ENVIRONMENT WHEREIN NUCLEAR USE HAS NOT OCCURRED, BUT IS POSSIBLE OR IMMINENT. LASTLY, IT CAN BE EXPANDED TO INCLUDE OPERATIONS IN A COMBINED CONVENTIONAL-NUCLEAR-CHEMICAL ENVIRONMENT.

VII-GRAPH 4 OFF

VU-GRAPH 5 ON

THE AREAS OF GREATEST STRATEGIC CONCERN TO THE UNITED STATES ARE EUROPE, SOUTHWEST ASIA AND NORTHEAST ASIA. THE OPERATIONAL ART, TACTICS, ORGANIZATIONS AND EQUIPMENT OF ENEMY FORCES TO BE ENCOUNTERED IN THESE AREAS ARE PATTERNED AFTER THE FORCES OF THE SOVIET UNION. SOVIET DOCTRINE EMPHASIZES THE PRINCIPLES OF MASS AND MANEUVER AND SEEKS VICTORY THROUGH THE RELENTLESS PROSECUTION

OPERATIONAL ENVIRONMENT

- AREAS OF STRATEGIC CONCERN
- THREAT
  - SOVIET MODEL
  - DOCTRINE
  - NUCLEAR EMPLOYMENT
- US COUNTER TO THE THREAT
  - AIRLAND BATTLE CONCEPT
  - CORPS 86 AND DIVISION 86
  - AIR AND GROUND PARTNERSHIP

OF OFFENSIVE OPERATIONS. SURPRISE, SHOCK AND RAPID EXPLOITATION OF THE EFFECTS OF NUCLEAR WEAPONS ARE BASIC TENETS OF SOVIET DOCTRINE. DECLARATIONS INDICATE THAT NUCLEAR WEAPONS WILL BE USED NOT ONLY TO ASSURE SUCCESS ON THE BATTLEFIELD, BUT ALSO TO PREEMPT U.S. USE. HIGH PRIORITY TARGETS ARE NUCLEAR DELIVERY UNITS, COMMAND POSTS, GROUND COMBAT FORCES, AIR BASES, SUPPORT UNITS AND MILITARY BASES. SOVIET FORCES ARE POSTURED AND TRAINED TO EXPLOIT NUCLEAR ATTACKS BY RAPID, DEEP, MULTIPLE THRUSTS TO DESTROY REMAINING FORCES AND SEIZE TERRITORY.

THE U.S. COUNTER TO THIS THREAT IS EMBODIED IN THE ARMY'S OPERATIONAL CONCEPT FOR THE CONDUCT OF THE AIRLAND BATTLE. THROUGH THE 1990s, THE ARMY'S PORTION OF THE AIRLAND BATTLE CONCEPT WILL BE EXECUTED BY FORMATIONS ORGANIZED, MANNED AND EQUIPPED WITH SYSTEMS AND MATERIEL RESULTING FROM ARMY 86, CORPS 86 AND DIVISION 86 STUDIES. AIR SUPPORT OF GROUND FORCE'S OPERATIONS AND THOROUGHLY SYNCHRONIZED AIR AND GROUND ACTIONS THROUGHOUT THE DEPTH OF THE BATTLEFIELD ARE CRUCIAL TO THE SUCCESS OF THIS CONCEPT.

VU-GRAPH 5 OFF

VU-GRAPH 6 ON

OPERATIONS IN A NUCLEAR ENVIRONMENT ARE CHARACTERIZED BY VIOLENCE, STRESS, CONFUSION AND AUSTERITY. THE INTENSITY AND VIOLENCE OF COMBAT, COMBINED WITH INSTANTANEOUS MASS CASUALTIES AND

OPERATIONAL ENVIRONMENT (CONTINUED)

- NUCLEAR BATTLEFIELD ENVIRONMENT
  - OVERVIEW
  - EFFECTIVE EMPLOYMENT
    - -- OFFENSE
    - -- DEFENSE

LARGE EQUIPMENT LOSSES, CREATE A PSYCHOLOGICAL RESPONSE REQUIRING EXTRAORDINARY DISCIPLINE AND LEADERSHIP. THE FACE OF THE BATTLEFIELD CHANGES IN SECONDS AS ADDITIONAL OBSTACLES ARE CREATED AND TERRAIN IS PHYSICALLY ALTERED. LINES OF CONTACT LOSE CONTINUITY. ESSENTIAL SUPPLIES ARE LIMITED AND RESUPPLY DELAYED FOR LONG PERIODS. RECONSTITUTION IS ACCOMPLISHED, AT LEAST INITIALLY, FROM RESIDUAL ASSETS. THE SITUATION CONFRONTING THE COMMANDER IS FURTHER AGGRAVATED BY THE DISRUPTION OR EVEN THE TEMPORARY LOSS OF COMMAND AND CONTROL COMMUNICATIONS AT THE TIME WHEN MOST NEEDED TO REGROUP THE FORCE, SEIZE THE INITIATIVE AND CONTINUE OPERATIONS.

THERE ARE TWO BASIC ELEMENTS OF THIS ENVIRONMENT WHICH MUST BE UNDERSTOOD AND MASTERED BY U.S. FORCES. FIRST, THE EFFECTIVE EMPLOYMENT OF NUCLEAR WEAPONS IN BOTH OFFENSIVE AND DEFENSIVE OPERATIONS. SECOND, THE INCREASED VULNERABILITY OF FORCES AND THE RESULTANT REQUIREMENT FOR IMPLEMENTATION OF EXTRAORDINARY SURVIVABILITY AND RECONSTITUTION MEASURES.

VU-GRAPH 6 OFF

VU-GRAPH 7 ON

THIS VISUAL DEPICTS THE VARIOUS USES OF NUCLEAR WEAPONS IN OFFENSIVE OPERATIONS - MORE DETAILED APPLICATION WILL BE DISCUSSED LATER IN OFFENSIVE OPERATIONS. (PAUSE)

NUCLEAR WEAPONS EMPLOYMENT-OFFENSE

- SUBSTITUTE FOR AND COMPLEMENT TO MANEUVER
  - CREATE GAPS
    - HOLD ENEMY IN PLACE
      - CONTROL TERRAIN
        - PROTECT FLANKS
          - DESTROY ENEMY FORCES
            - ECONOMY OF FORCE
              - RESERVES
                - CREATE EXPLOITATION OPPORTUNITIES

PLACE ENEMY AT RISK THROUGHOUT AREA OF INFLUENCE

VU-GRAPH 7 OFF

VU-GRAPH 8 ON

SIMILARLY, NUCLEAR WEAPONS ARE USED IN THE DEFENSE AS SHOWN HERE. NUCLEAR WEAPONS GIVE THE COMMANDER THE ABILITY TO HOLD THE ENEMY AT RISK THROUGHOUT HIS AREA OF INFLUENCE. DEPENDING ON DECEPTION, SURPRISE, TARGET ACQUISITION AND USER BOLDNESS, NUCLEAR WEAPONS CAN CHANGE THE COURSE OF THE BATTLE SUDDENLY AND DECISIVELY IN FAVOR OF U.S. FORCES.

VU-GRAPH 8 OFF

VU-GRAPH 9 ON

HOWEVER, POSITIVE MEASURES MUST BE TAKEN TO REDUCE THE EFFECTS OF ENEMY WEAPONS AND TO MAINTAIN A COHESIVE FIGHTING FORCE. PRE-STRIKE ACTIONS OFFER THE BEST PAY-OFF. THE LESS VULNERABLE AND MORE SURVIVABLE A UNIT, THE LESS EFFORT REQUIRED TO RESTORE MISSION CAPABILITY. CONTEMPORARY SURVIVABILITY MEASURES AND PRACTICES ARE EXPANDED IN A NUCLEAR ENVIRONMENT TO EMPHASIZE GREATER FORCE DISPERSION AND FREQUENT AND RAPID MOVEMENT. RAPID AND EFFECTIVE POST-STRIKE RECONSTITUTION OF COMBAT POWER IS ESSENTIAL IN BOTH THE OFFENSE AND DEFENSE. THOSE ACTIONS TAKEN IMMEDIATELY AFTER ENEMY USE OF NUCLEAR WEAPONS ARE KEY TO PREVENTING HIS EXPLOITATION AND ADDITIONAL LOSS OF FRIENDLY FORCES.

NUCLEAR WEAPONS EMPLOYMENT-DEFENSE

- DESTROY ASSAULT FORCES AND FOLLOW-ON ECHELONS
- DESTROY OR DISRUPT LOGISTICS SUPPORT
- CREATE OBSTACLES AND CANALIZE ENEMY FORCES
- BLUNT OR STOP PENETRATIONS
- CONTROL TERRAIN
- DESTROY FORCES IN PENETRATIONS
- ECONOMY OF FORCE
- CREATE OFFENSIVE OPPORTUNITIES
- PROTECT FORCES DURING COUNTERATTACKS
- HIGHLY FLEXIBLE RESERVES

PLACE ENEMY AT RISK THROUGHOUT AREA OF INFLUENCE

OPERATIONAL ENVIRONMENT (CONTINUED)

- NUCLEAR BATTLEFIELD ENVIRONMENT
  - OVERVIEW
  - EFFECTIVE EMPLOYMENT
    - -- OFFENSE
    - -- DEFENSE
- VULNERABILITY
  - PROTECTION
  - RECONSTITUTION

IN THE FINAL ANALYSIS, SUCCESS ACCRUES TO THE COMBATANT MOST EFFICIENT IN THE EMPLOYMENT OF NUCLEAR WEAPONS AND MOST CAPABLE OF MAINTAINING OR RECONSTITUTING AND EFFECTIVE FIGHTING FORCE TO EXPLOIT THE EFFECTS OF NUCLEAR USE — NOT ONCE BUT TIME AFTER TIME.

VU-GRAPH 9 OFF

VU-GRAPH 10 ON

THIS CONCEPT IS LIMITED TO THE ARMY'S RESPONSIBILITIES AT CORPS AND BELOW FOR USING NUCLEAR WEAPONS TO OBTAIN MAXIMUM OPERATIONAL AND TACTICAL ADVANTAGE WHILE LIMITING DAMAGE THE ENEMY CAN INFLICT ON FRIENDLY FORCES. WHILE IT IS RECOGNIZED THAT CHEMICAL WEAPONS MAY BE USED BY EITHER SIDE, THIS CONCEPT DOES NOT SPECIFICALLY ADDRESS THE OFFENSIVE AND DEFENSIVE CONSIDERATIONS CONCERNING THEIR EMPLOYMENT.

VU-GRAPH 10 OFF

VU-GRAPH 11 ON

THESE FUNDAMENTALS PRESCRIBED THE GENERAL WAY IN WHICH OPERATIONS AND BATTLES ARE CONDUCTED AT CORPS AND BELOW IN A NUCLEAR ENVIRONMENT. THEY ARE INTENTIONALLY BROAD ENOUGH TO DESCRIBE OPERATIONS IN MOST ANTICIPATED CIRCUMSTANCES AND ALLOW FREEDOM FOR OPERATIONAL AND TACTICAL VARIATIONS APPROPRIATE TO SPECIFIC

LIMITATIONS

- ARMY'S RESPONSIBILITIES AT CORPS AND BELOW
  - CHEMICAL WARFARE NOT SPECIFICALLY ADDRESSED

OPERATIONAL FUNDAMENTALS

- PRINCIPLES OF WAR
  - BASIC TENETS
    - IMPERATIVES OF MODERN COMBAT

A-18

SITUATIONS. THE PRINCIPLES OF WAR AND THE APPLICATION OF THOSE PRINCIPLES ARE THE FOUNDATION OF U.S. DOCTRINE.

VU-GRAPH 11 OFF

VU-GRAPH 12 ON

THE PRINCIPLES OF WAR ARE VALID FOR THE ENTIRE SPECTRUM OF COMBAT INTENSITY, TO INCLUDE THE NUCLEAR ENVIRONMENT. THEY CONTINUE TO PROVIDE THE UMBRELLA UNDER WHICH ALL ECHELONS OF COMMAND AND MILITARY ORGANIZATIONS -- FROM TEAMS AND SQUADS TO ECHELONS ABOVE CORPS -- MUST OPERATE IF THEY ARE TO BE SUCCESSFUL ON THE MODERN BATTLEFIELD.

VU-GRAPH 12 OFF

VU-GRAPH 13 ON

A COUPLE OF EXAMPLES WILL SERVE TO SHOW THE APPLICATION OF THESE PRINCIPLES IN THE NUCLEAR ENVIRONMENT. (PAUSE)

VU-GRAPH 13 OFF

VU-GRAPH 14 ON

AT BOTH THE OPERATIONAL AND TACTICAL LEVELS, THE GENERATION OF COMBAT POWER REQUIRES THE CONVERSION OF THE POTENTIAL CAPABILITY

PRINCIPLES OF WAR

- OFFENSIVE
- MANEUVER
- MASS
- OBJECTIVE
- ECONOMY OF FORCE
- UNITY OF COMMAND
- SURPRISE
- SECURITY
- SIMPLICITY

VALID FOR ENTIRE SPECTRUM OF CONFLICT INTENSITY

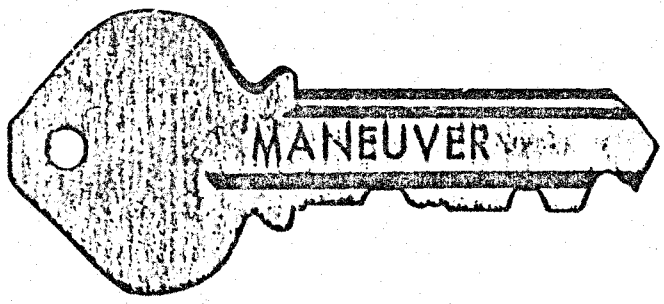
PRINCIPLES OF WAR

- MASS CONCENTRATES COMBAT POWER AT THE DECISIVE TIME AND PLACE TO THE MAXIMUM PERMITTED BY THE CONFLICT SITUATION. NUCLEAR WEAPONS CAN CREATE THE EFFECT OF MASS RAPIDLY.

- ECONOMY OF FORCE ALLOCATES MINIMUM ESSENTIAL COMBAT POWER TO SECONDARY EFFORTS. THE USE OF NUCLEAR WEAPONS PERMITS EXPLOITATION BY SMALLER FORCES AND ALLOWS SECONDARY EFFORTS TO BE ACCOMPLISHED MORE ECONOMICALLY.

BASIC TENETS

- INITIATIVE
- DEPTH
- AGILITY
- SYNCHRONIZATION



A-22

REPRESENTED BY TRAINED FORCES, RESOURCES AND OPPORTUNITY INTO REALITY THROUGH PURPOSEFUL AND COORDINATED COMBAT ACTIONS. THESE COMBAT ACTIONS MUST BE FOUGHT IN ACCORDANCE WITH THE BASIC TENETS OF THE AIRLAND BATTLE.

MODERN WARFARE DEMANDS DECENTRALIZATION, PROMPT ACTION AND A HIGH DEGREE OF INDIVIDUAL INITIATIVE. IN A NUCLEAR ENVIRONMENT, SEMI-INDEPENDENT OPERATIONS BY CLOSE COMBAT FORCES, UNDER MISSION-TYPE ORDERS, ARE THE RULE RATHER THAN THE EXCEPTION. FURTHER, IT WILL FREQUENTLY BE NECESSARY TO DECENTRALIZE CONTROL OF FIRE SUPPORT, COMBAT SUPPORT AND COMBAT SERVICE SUPPORT UNITS BY ATTACHING THEM TO CLOSE COMBAT ELEMENTS. THE LOSS OF COMMAND AND CONTROL COMMUNICATIONS MAY PRECLUDE TRANSMISSION AND RECEIPT OF SPECIFIC ORDERS OR DIRECTION. IN SUCH AN EVENT - THE RISK OF WHICH IS MORE LIKELY IN A NUCLEAR ENVIRONMENT - THE COMMANDER DEDUCES THE ACTION REQUIRED BASED ON HIS KNOWLEDGE OF THE SITUATION AND THE INTENT OF HIS COMMANDER, AND ACTS ON HIS OWN INITIATIVE. EVEN WHEN THE COMMAND AND CONTROL SYSTEMS PERMIT THE INTERCHANGE OF ESSENTIAL ORDERS AND INFORMATION, COMMANDERS MUST PLACE GREATER RELIANCE UPON THE INITIATIVE, INTEGRITY, COURAGE AND PROFESSIONAL ABILITY OF THEIR SUBORDINATES IF OPERATIONS AND BATTLES ARE TO BE WAGED SUCESSFULLY.

Combat in C3 N-C-C

THE CONCEPT OF FIGHTING IN DEPTH MUST BE SO INGRAINED THAT ITS APPLICATION IS AUTOMATIC. IT IS CRUCIAL THAT FORCES ARE DISPERSED TO MINIMIZE THE PRESENTATION OF REMUNERATIVE TARGETS SUSCEPTIBLE TO ATTACK BY THE ENEMY'S NUCLEAR WEAPONS. THIS

CREATES THE REQUIREMENT FOR THE ASSIGNMENT OF LARGER GEOCRAPHICAL AREAS OF RESPONSIBILITY. THE INCREASED POTENCY OF COMBAT POWER, THE CORRESPONDING VULNERABILITY OF THE ENEMY, REDUNDANT AND SIMPLIFIED CONTROL MEASURES AND ENHANCED MOBILITY PERMIT CLOSE COMBAT FORCES TO OPERATE IN THESE LARGER AREAS AND PROVIDE FREQUENT OPPORTUNITIES FOR BOLD AND DECISIVE ATTACKS DEEP INTO ENEMY TERRITORY.

THE GENERATION OF SUPERIOR COMBAT POWER THROUGH MANEUVER REQUIRES THE AVOIDANCE OF ENEMY STRENGTH AND THE ATTACK OF HIS VULNERABILITIES AND, ONCE GENERATED, MUST BE APPLIED AT A CRITICAL TIME AND PLACE. THE DEGREE OF COMBAT POWER ATTAINED REFLECTS THE COMMANDER'S IMAGINATIVE PLANNING, LEADERSHIP AND ABILITY TO STAY ABREAST OF CRITICAL EVENTS AS THEY OCCUR AND HIS ABILITY TO TAKE ACTION FASTER THAN THE ENEMY. THIS MUST BE DONE REPEATEDLY SO THAT EVERY TIME THE ENEMY BEGINS TO COUNTER ONE ACTION ANOTHER UPSETS HIS PLANS. THIS WILL LEAD TO INEFFECTIVE, UNCOORDINATED AND PIECEMEAL ENEMY RESPONSES AND EVENTUALLY TO HIS DEFEAT. THE AGILITY TO GENERATE DECISIVE COMBAT POWER -- REPETITIVELY -- REQUIRES FLEXIBILITY IN EFFECTING TASK ORGANIZATIONS FOR CLOSE COMBAT, FIRE SUPPORT, COMBAT SUPPORT AND COMBAT SERVICE SUPPORT. IT IS AXIOMATIC THAT METT AND AVAILABLE RESOURCES DRIVE TASK ORGANIZATION AND REORGANIZATION. IN A NUCLEAR ENVIRONMENT, IT IS ALSO AXIOMATIC THAT FORCES MUST BE COMPOSED TO ACCOMPLISH A VARIETY OF COMBAT TASKS -- WITHOUT MAJOR CHANGES IN TASK ORGANIZATION.

THE EFFECTIVE APPLICATION OF COMBAT POWER REQUIRES HARMONIOUS UNITY OF EFFORT THROUGHOUT ALL ECHELONS AND WITHIN EACH ECHELON OF THE FORCE. THIS SYNCHRONIZATION IS A BASIC FUNCTION OF COMMAND, AND IS PARTICULARLY SIGNIFICANT IN DERIVING FULL ADVANTAGE FROM MANEUVER AND FIREPOWER IN A NUCLEAR ENVIRONMENT. REPETITIVE GENERATION OF SUPERIOR COMBAT POWER, TO CAPITALIZE UNHESITATINGLY ON BATTLEFIELD OPPORTUNITIES, REQUIRES THE SKILLFUL INTEGRATION AND COORDINATION OF AIR AND LAND FORCES THROUGHOUT THE DEPTH OF THE BATTLEFIELD -- ALL ORIENTED TOWARD A COMMON GOAL.

IN SUM, SUPERIOR COMBAT POWER IS GENERATED THROUGH A COMMANDER'S SKILLFUL INTEGRATION OF MANEUVER, FIREPOWER, PROTECTION AND INTELLIGENT LEADERSHIP. THE USE OF NUCLEAR WEAPONS MAY, ON OCCASION, BE THE PREDOMINANT EXPRESSION OF COMBAT POWER. HOWEVER, EFFECTIVE MANEUVER IS STILL VITAL FOR ACHIEVING LOCAL COMBAT SUPERIORITY. THE SIDE POSSESSING MATERIEL SUPERIORITY OVERALL MAY CHOOSE FREELY BETWEEN ATTRITION AND MANEUVER, BUT THE SIDE WHOSE RESOURCES ARE INFERIOR CAN ONLY PREVAIL BY SUCCESSFUL MANEUVER.

VU-GRAPH 14 OFF

VU-GRAPH 15 ON

UNDERSTANDING AND APPLICATION OF THE IMPERATIVES OF MODERN COMBAT TAKE ON ADDED DIMENSIONS IN A NUCLEAR ENVIRONMENT.

IMPERATIVES OF MODERN COMBAT

- UNITY OF EFFORT
  - MOVE FAST, STRIKE HARD, FINISH RAPIDLY
    - ENEMY WEAKNESSES
      - MAIN EFFORT
        - SUSTAINING THE FIGHT
          - TERRAIN AND WEATHER
            - PROTECTION

PREPAREDNESS IS ESSENTIAL – –
NO TRANSITIONAL PERIOD

A-26

VICTORY IN MODERN WARFARE IS MADE POSSIBLE THROUGH COMPLETE UNITY OF EFFORT PROVIDED BY THOROUGHLY COORDINATED AND SYNCHRONIZED ACTIONS BY GROUND AND AIR FORCES, BRINGING TO BEAR AND KEEPING IN OPERATION EVERY ELEMENT CAPABLE OF SUSTAINING AND CONTRIBUTING TO THE PROJECTION OF SUPERIOR COMBAT POWER. INDIVIDUAL AND COLLECTIVE UNITY OF EFFORT REQUIRES MUTUAL TRUST, CONFIDENCE, LOYALTY, PRIDE, MOTIVATION, ESPRIT, DISCIPLINE AND A COMMON UNDERSTANDING OF UNIT MISSIONS AND CAPABILITIES. THESE HUMAN FACTORS MUST BE DEVELOPED THROUGH LEADERSHIP AND TRAINING SO THAT INDIVIDUALS AND UNITS ARE TECHNICALLY AND PSYCHOLOGICALLY PREPARED FOR THE NUCLEAR ENVIRONMENT.

CONTEMPORARY OPERATIONS AND BATTLES ENVISIONED BY THE AIRLAND CONCEPT EXTEND OVER GREATER DISTANCES AND FOR LONGER PERIODS OF CONTINUOUS COMBAT THAN MILITARY OPERATIONS OF THE PAST. IN A NUCLEAR ENVIRONMENT, THEY ARE ACTUALLY SUSTAINED SERIES OF SHORT AND VIOLENT ENGAGEMENTS BY CLOSE COMBAT FORCES MANNED AND EQUIPPED TO MOVE FAST, STRIKE HARD AND FINISH RAPIDLY AGAINST ENEMY WEAKNESSES - <u>TIME AND TIME AGAIN</u>.

NUCLEAR WEAPONS MUST BE VIEWED AS AN EXTENSION OF MANEUVER, NOT JUST AS AN ELEMENT OF FIRE SUPPORT. FOR EXAMPLE, ENEMY WEAKNESSES MAY EITHER NOT BE APPARENT OR MAY BE TOO DISTANT TO BE SUCCESSFULLY EXPLOITED BY AVAILABLE MANEUVER FORCES. IN SUCH CASES, "WEAKNESSES" ARE CREATED BY NUCLEAR FIRES AND THEN EXPLOITED BY MANEUVER AND ADDITIONAL FIRE SUPPORT. IDENTIFIED, DISTANT ENEMY WEAKNESSES OR VULNERABILITIES ARE EXPLOITED BY

GROUND AND AIR DELIVERED FIRES -- NUCLEAR AND NONNUCLEAR -- TO THE EXTENT PERMITTED BY AVAILABLE RESOURCES AND TO THE DEGREE SOUGHT BY THE OBJECTIVES OF DELAY, DENIAL, DISRUPTION OR DESTRUCTION.

THE PRINCIPLES OF MASS AND ECONOMY OF FORCE DEMAND DESIGNATING AND SUSTAINING A MAIN EFFORT. IN A NUCLEAR ENVIRONMENT, SUSTAINING THE MAIN EFFORT INVOLVES THE CONTINUING APPLICATION OF COMBAT POWER TO EXPLOIT OPPORTUNITIES IN ANY AREA OF THE BATTLEFIELD. NUCLEAR WEAPONS NOT ONLY WEIGHT THE MAIN EFFORT BUT ALSO CREATE OPPORTUNITIES FOR SUCCESS IN OTHER AREAS. WHEN SUCH OPPORTUNITIES DEVELOP, THEY ARE EXPLOITED IMMEDIATELY BY REDIRECTING FORCES, FIRES AND LOGISTICS. THE VIOLENCE, STRESS AND CONFUSION CHARACTERSTIC OF A NUCLEAR ENVIRONMENT SERVE TO DIVERT ATTENTION FROM SUSTAINING THE FIGHT. SUPERIOR DISCIPLINE AND LEADERSHIP ARE REQUIRED TO OVERCOME THESE DISTRACTIONS AND TO MAINTAIN THE FOCUS ON THE MISSION AT HAND. COMMANDERS MUST CONTINUALLY ASSESS HUMAN ABILITIES AND LIMITATIONS AS THEY PLAN AND FIGHT SUCCESSIVE BATTLES.

THE EFFECTS OF TERRAIN AND WEATHER ARE ALWAYS IMPORTANT IN THE APPLICATION OF COMBAT POWER. IN A NUCLEAR ENVIRONMENT, BOTH AFFECT THE EFFICIENT AND EFFECTIVE EMPLOYMENT OF NUCLEAR WEAPONS AND MAY HAVE A MUCH GREATER INFLUENCE ON MANEUVER ACTIONS.

PROTECTION INVOLVES PRESERVATION OF THE FIGHTING STRENGTH OF THE FORCE UNTIL OPTIMAL COMBAT POWER CAN BE APPLIED AT THE RIGHT TIME

AND PLACE. THIS IS ACCOMPLISHED BY ASSURING SECURITY AND SURVIVABILITY, KEEPING TROOPS HEALTHY AND EQUIPMENT READY, AND SUSTAINING DISCIPLINE AND MORALE.

PREPAREDNESS IS FUNDAMENTAL TO REALIZATION OF THE IMPERATIVES OF MODERN COMBAT. PREPAREDNESS PERMITS SURVIVAL AND PERMITS EXPLOITATION OF OPPORTUNITIES CREATED BY THE EMPLOYMENT OF NUCLEAR WEAPONS. SUCH PREPAREDNESS IS ESSENTIAL AS THERE WILL BE NO TRANSITIONAL PERIOD TO ALLOW FOR IMPLEMENTATION OF ADDITIONAL MEASURES.

VU-GRAPH 15 OFF

VU-GRAPH 16 ON

THE OFFENSIVE IS THE DECISIVE FORM OF WAR, THE COMMANDER'S ONLY MEANS OF ATTAINING A POSITIVE GOAL AND OF DEFEATING ANY ENEMY. DECISIVE OFFENSIVE ACTIONS WIN BATTLES. THEY ARE CHARACTERIZED BY INITIATIVE, IMPROVISATION AND AGGRESSIVENESS; BY DEEP, BOLD ATTACKS THROUGHOUT THE DEPTH OF THE BATTLEFIELD; BY FLEXIBLE APPLICATION OF COMBAT POWER TO AVOID ENEMY STRENGTHS AND TO UNHESITATINGLY EXPLOIT HIS WEAKNESSES; AND BY SYNCHRONIZATION OF ALL RESOURCES IN SIMULTANEOUS AND SEQUENTIAL BATTLES DESIGNED TO TOTALLY DISRUPT AND DISLOCATE THE ENEMY'S SYSTEM FOR COMBAT. I WILL DISCUSS THE SUBJECT AREAS SHOWN HERE AS THEY PERTAIN TO OFFENSIVE OPERATIONS.

VU-GRAPH 16 OFF

OFFENSIVE OPERATIONS

- THREAT
  - ATTRIBUTES
    - PREPARATION
      - BASIC FORMS

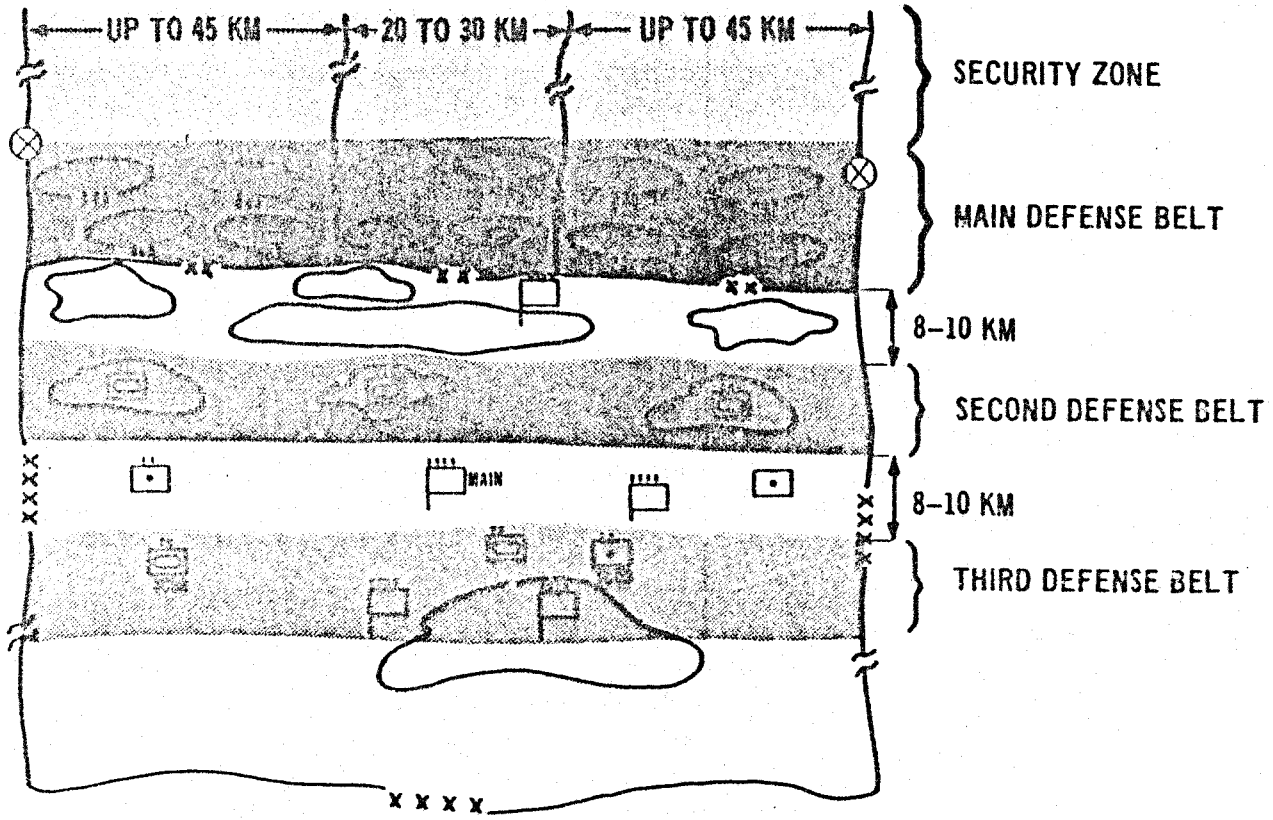
VU-GRAPH 17 ON

SOVIET-STYLE OPERATIONS ARE CHARACTERIZED BY THE RELENTLESS AND VIOLENT PROSECUTION OF OFFENSIVE ACTIONS; DEFENSE IS AN ANATHEMA TO SOVIET MILITARY STRATEGY. HOWEVER, SOVIET DOCTRINE RECOGNIZES THAT TEMPORARY DEFENSIVE OPERATIONS MAY BE REQUIRED IN THOSE SECTORS OF THE BATTLEFIELD WHERE OFFENSIVE ACTIONS ARE INITIALLY UNSUCCESSFUL. IN SUCH CASES, SOVIET DOCTRINE FOR DEFENSIVE OPERATIONS FEATURES THE EMPLOYMENT OF SECURITY FORCES, MAIN DEFENSIVE FORCES AND RESERVE FORCES.

SECURITY FORCES OCCUPY AN AREA FORWARD OF THE MAIN DEFENSES AND SEEK TO ENGAGE THE ENEMY AT THE LONGEST POSSIBLE RANGE, CAUSING PREMATURE DEPLOYMENT OF ASSAULT FORCES. CONVENTIONAL, NUCLEAR AND CHEMICAL FIRES ARE CONCENTRATED TO DESTROY ATTACKING FORCES AND MINES AND BARRIERS ARE USED IN CONJUNCTION WITH MANEUVER FORCES TO CANALIZE ATTACKING UNITS INTO KILLING ZONES.

MAIN DEFENSIVE FORCES ARE DEPLOYED IN DEPTH, NORMALLY IN BELTS OF MUTUALLY SUPPORTING STRONGPOINTS. COMBAT POWER IS FOCUSED ON ATTRITING AND DESTROYING THE ATTACKER WELL FORWARD AND CANALIZING HIM INTO AREAS WHERE HE IS VULNERABLE TO DESTRUCTION BY COUNTER-ATTACK. NUCLEAR AND CHEMICAL WEAPONS, MASSED ARTILLERY, AIR-POWER, MINES AND BARRIERS AND MANEUVER FORCES ARE USED TO SUPPORT MAIN DEFENSE FORCES.

DEFENSIVE BELTS



RESERVES GENERALLY OCCUPY THE DEEPER DEFENSIVE BELTS AND ARE POSITIONED TO BLOCK, REINFORCE FORWARD BELTS AND COUNTERATTACK. STRONG ANTITANK RESERVES ARE COMMITTED TO DESTROY ARMORED FORMATIONS AND TO SUPPORT TANK HEAVY COUNTERATTACK FORCES.

VU-GRAPH 17 OFF

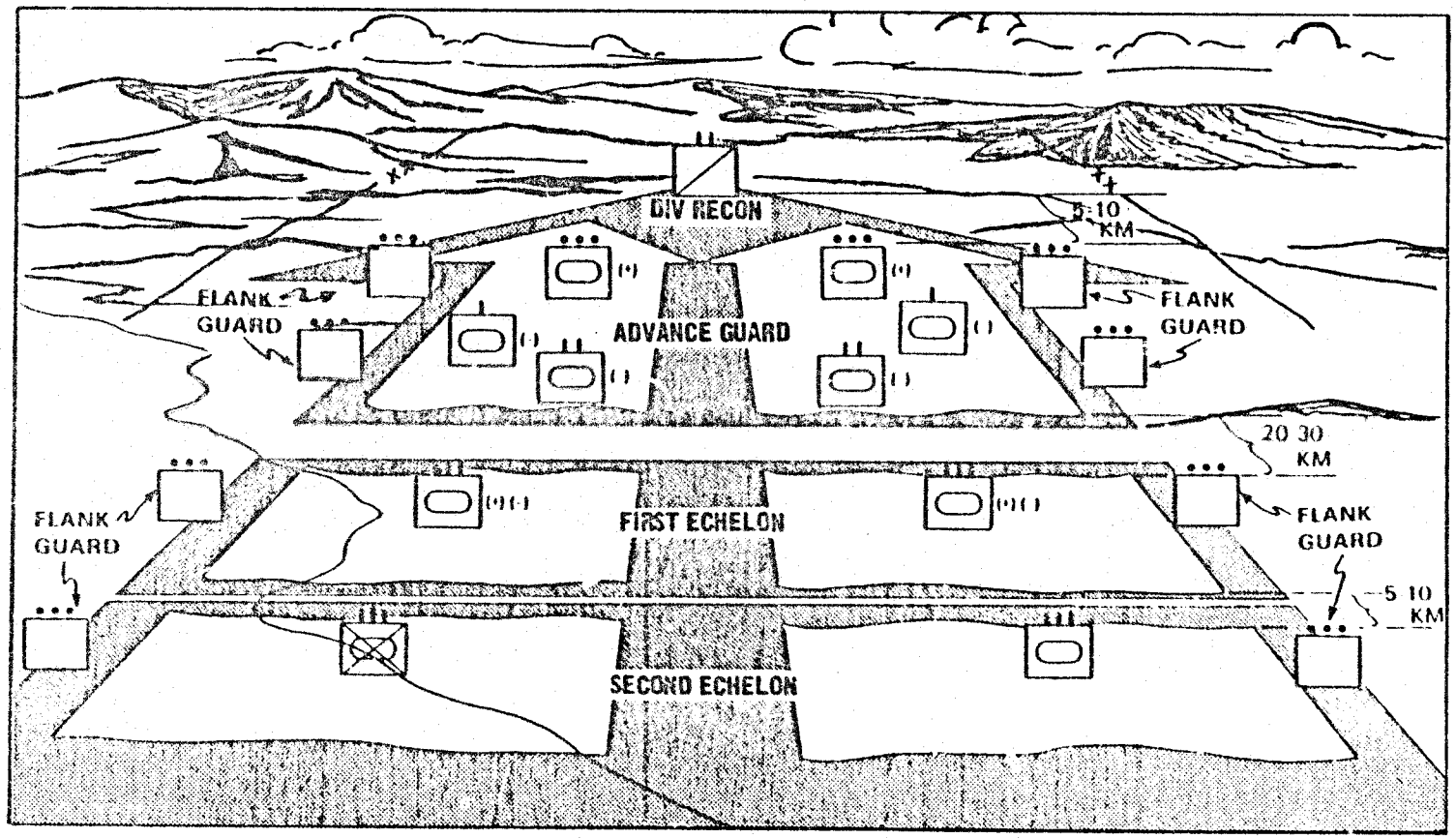
VU-GRAPH 18 ON

DEFENSIVE DOCTRINE NOTWITHSTANDING, THE SOVIETS CONSIDER A MEETING ENGAGEMENT AS THE MORE LIKELY EVENT IN A NUCLEAR ENVIRONMENT, WHICH THEY DEFINE AS A "CLASH BETWEEN OPPOSING SIDES WHEN THEY ARE SIMULTANEOUSLY STRIVING TO FULFILL ASSIGNED MISSIONS BY MEANS OF OFFENSIVE ACTIONS." THE SOVIETS RECOGNIZE AND ATTEMPT TO EXPLOIT (AS MOST U.S. FORCES) CERTAIN CHARACTERISTICS OF A MEETING ENGAGEMENT. THESE INCLUDE LACK OF DETAILED INTELLIGENCE, RAPID SITUATIONAL CHANGES, DEVELOPMENT OF ACTIONS ON A WIDE FRONT AND PROBABLE EXPOSED FLANKS. SUCCESSFUL OPERATIONS REQUIRE SPEEDY EXTEMPORANEOUS PLANNING, CONTINUOUS EFFORT TO SEIZE AND RETAIN THE INITIATIVE, DEPLOYMENT INTO COMBAT FROM THE MARCH COLUMN AND REDIRECTION OF COMBAT EFFORT AS REQUIRED.

VU-GRAPH 18 OFF

VU-GRAPH 19 ON

MEETING ENGAGEMENT



ATTRIBUTES OF OFFENSIVE OPERATIONS

- INITIATIVE AND DECENTRALIZATION
- INTEGRATION OF MANEUVER AND FIREPOWER
- ATTACK WEAKNESS AND EXPLOIT SUCCESS
- MULTIPLE ATTACKS
- ATTACK DEEP
- IMPROMPTU PLANNING

WITHIN THE ENEMY'S DECISION CYCLE

SOVIET OPERATIONAL ART AND TACTICS PRESENT AMPLE OPPORTUNITIES FOR U.S. FORCES TO SEIZE THE INITIATIVE AND TO DESTROY HIS COHESIVENESS AND WILL TO CONTINUE TO FIGHT -- THE PRIMARY REASONS FOR CONDUCTING OFFENSIVE OPERATIONS. IT IS IMPORTANT TO UNDERSTAND THE USE OF NUCLEAR WEAPONS IN THE PURSUIT OF THESE MISSIONS AND TO SURVIVE WHILE DOING SO.

U.S. ARMY FORCE'S ADVANTAGE, AS COMPARED TO THE ENEMY, ACCRUES FROM GREATER INITIATIVE AND DECENTRALIZATION OF MISSION EXECUTION. THE SUCCESS OF ATTACKS ULTIMATELY DEPENDS ON THE SPEED OF MANEUVER AND THE APPLICATION OF FIREPOWER. RAPID MANEUVER AND COORDINATED APPLICATION OF FIREPOWER AT THE DECISIVE TIME AND PLACE DISRUPT THE ENEMY'S PLANS AND DECREASE THE EFFECTIVENESS OF HIS COUNTERMEASURES. SURPRISE, DECEPTION, FLEXIBILITY, CREATION AND EXPLOITATION OF ENEMY WEAKNESSES AND SUPERIORITY IN COMBAT READINESS GENERATE SUPERIOR COMBAT POWER. IF AN OPPORTUNITY FOR SUCCESS DEVELOPS IN AN AREA OTHER THAN ORIGINALLY PLANNED, IT IS EXPLOITED IMMEDIATELY; FIRES ARE SHIFTED AND CLOSE COMBAT FORCES ARE ORIENTED TO TAKE ADVANTAGE OF THE NEW OPPORTUNITY. THE DEVELOPMENT OF SUCH OPPORTUNITIES IS ACCOMPLISHED BY SIMULTANEOUSLY ATTACKING SEVERAL ENEMY WEAKNESSES. LIMITED CLOSE COMBAT FORCES ARE COMPENSATED BY THE USE OF NUCLEAR WEAPONS. THE COMBINATION OF MULTIPLE ATTACKS AND RAPIDLY CHANGING THE WEIGHT PROVIDED TO THE ATTACKS CONFUSES AND DECEIVES THE ENEMY AS TO THE MAIN EFFORT AND CAUSES HIM TO CONDUCT INEFFECTIVE COUNTERACTIONS. PROPER EMPLOYMENT OF NUCLEAR WEAPONS TO CREATE GAPS RAPIDLY, TO DISRUPT OR DESTROY RESERVES AND TO DISRUPT KEY C^3

RESOURCES GENERATES OPPORTUNITIES FOR EXPLOITATION BY NEWLY DESIGNATED MAIN ATTACKS. INTENSIVE ELECTRONIC WARFARE IS EMPLOYED TO FURTHER DISRUPT C^3 SYSTEMS, THUS DELAYING THE ENEMY COMMANDER'S ASSESSMENT OF THE SITUATION AND HIS RECONSTITUTION MEASURES.

THE DEPTH OF ATTACKS IS LIMITED ONLY BY RESOURCES AVAILABLE AND THE CAPABILITY TO SUPPORT, REINFORCE OR LINK UP WITH ATTACKING FORCES. WHILE LIMITED OBJECTIVE ATTACKS MAY BE REQUIRED AT TIMES, COMMANDERS MUST RECOGNIZE OR CREATE OPPORTUNITIES FOR BOLD, DEEP THRUSTS WELL BEHIND THE ENEMY'S FORWARD ELEMENTS. IDEALLY, BRIGADES ORIENT ON SECOND ECHELON REGIMENTS, DIVISIONS ON SECOND ECHELON DIVISIONS AND CORPS ON FOLLOW-ON ARMIES. NUCLEAR WEAPONS ARE USED TO CREATE OPPORTUNITIES FOR THESE DEEP ATTACKS, AS AN ECONOMY OF FORCE TO HOLD FLANK FORCES IN PLACE, TO PROTECT EXPOSED FLANKS, TO DESTROY ENEMY STRONGPOINTS AND POCKETS OF BY-PASSED FORMATIONS AND TO DESTROY, DISRUPT AND DELAY FOLLOW-ON FORCES. THE OPERATIONS MANEUVER GROUPS ARE ALWAYS HIGH PRIORITY TARGETS. NUCLEAR WEAPONS ARE ALSO USED TO WEIGH THE MAIN EFFORT, TO SUSTAIN THE FIGHT AND AS HIGHLY FLEXIBLE RESERVES. VULNERABILITY DURING DEEP THRUSTS IS REDUCED BY SPEED OF ACTION, WIDENING GAPS AND ROLLING UP FLANKS, RAPID EXPLOITATION AND ORIENTATION ON FOLLOW-ON FORCES. ATTACKING FORCES MASS RAPIDLY, MOVE FAST AND STRIKE HARD AND REDISPERSE QUICKLY TO PRECLUDE PRESENTATION OF REMUNERATIVE TARGETS -- TIME AND TIME AGAIN.

IMPROMPTU PLANNING IS NECESSITATED BY THE RAPIDITY WITH WHICH OPPORTUNITIES FOR EXPLOITATION CAN BE GENERATED; THE RAPIDITY WITH WHICH EXPLOITATION OF OPPORTUNITIES MUST BE EXECUTED BY CLOSE COMBAT FORCES; AND THE RAPIDITY WITH WHICH THE ATTACKING FORCES MUST REDISPERSE -- ALL DRIVEN BY THE NEED TO OPERATE WELL INSIDE THE ENEMY'S DECISION CYCLE. THAT IS, MAKE DECISIONS AND ACT MORE RAPIDLY THAN THE ENEMY. THIS CAPABILITY IS ENHANCED BY THE PROPER APPLICATION OF NUCLEAR WEAPONS IN SPACE WITH TIME.

VU-GRAPH 19 OFF

VU-GRAPH 20 ON

THE ATTACKER HAS FREEDOM OF ACTION; HE DETERMINES THE OBJECTIVE, DIRECTION AND TIME OF ATTACK. THE ATTACKING COMMANDER MAY BE ABLE TO SELECT EITHER A HASTY OR DELIBERATE ATTACK. IF THE ENEMY CAN BE SURPRISED, AN ATTACK IS LAUNCHED WITHOUT DELAY AND WITHOUT EXTENSIVE PREPARATION; SURPRISE IS USED TO OFFSET THE LESS THAN OPTIMAL EMPLOYMENT OF COMBAT POWER. IF THE ENEMY HAS EQUAL OR GREATER COMBAT POWER, THE ATTACK PREPARATION MUST BE MORE EXTENSIVE SO OPTIMAL COMBAT POWER CAN BE APPLIED FROM THE ONSET.

EITHER TYPE OF ATTACK REQUIRES A CLEARLY DEFINED OBJECTIVE AND TIMELY INTELLIGENCE, BOTH ON THE ENEMY AND FRIENDLY FORCES.

PREPARATION FOR OFFENSIVE OPERATIONS

- TIMING
- OBJECTIVES
- INTELLIGENCE
- SCHEME OF MANEUVER
- RESOURCE ALLOCATION
- CONTROL MEASURES

CONCEALMENT AND DECEPTION

A MAIN ATTACK AND ONE OR MORE SUPPORTING ATTACKS ARE DESIGNATED. ADVANCING ON MULTIPLE AVENUES OF APPROACH, AND IN GREATER WIDTH THAN DEPTH, ALLOWS DISPERSAL BETWEEN UNITS AND ENABLES CLOSING AND INTERLOCKING MORE QUICKLY WITH THE ENEMY. THE FORCES ADVANCING ON MULTIPLE AXES NEED FREEDOM OF MOVEMENT IN WIDTH SO THEY CAN BYPASS NATURAL AND MANMADE OBSTACLES AND POCKETS OF RESISTANCE.

AFTER THE MISSION, OBJECTIVES AND SCHEME OF MANEUVER HAVE BEEN SELECTED, AVAILABLE MANEUVER FORCES, FIRE SUPPORT, INTELLIGENCE MEANS AND COMBAT SUPPORT AND COMBAT SERVICE SUPPORT ARE ALLOCATED TO BE RESPONSIVE TO THE COMMANDER CONDUCTING THE ATTACK. THE ORGANIZATION FOR COMBAT DEPENDS ON THE MISSION, ENEMY SITUATION, TERRAIN, VISIBILITY AND DISTANCE TO THE OBJECTIVE. SEMI-INDEPENDENT TASK FORCES ADVANCING ON MULTIPLE AVENUES OF APPROACH, WITH A CLEAR UNDERSTANDING OF THE COMMANDER'S INTENT, ARE THE BEST ORGANIZATIONS FOR COMBAT ON THE NUCLEAR BATTLEFIELD. AIRMOBILE FORCES CAN BE MANEUVERED QUICKLY THROUGHOUT THE DEPTH OF THE BATTLEFIELD AND NUCLEAR WEAPONS AND ATTACK HELICOPTERS ARE ESPECIALLY EFFECTIVE AGAINST ENEMY COUNTERATTACKS. NUCLEAR WEAPONS ARE ALSO USED AS AN ECONOMY OF FORCE MEASURE, ALLOWING ADDITIONAL MANEUVER FORCES TO PARTICIPATE IN THE MAIN EFFORT. THEY ARE USED TO CONTROL TERRAIN WHEN PHYSICAL OCCUPATION IS NOT DESIRABLE. AIR RESOURCES ARE USED TO GAIN LOCAL AIR SUPERIORITY, PROVIDE INTELLIGENCE INFORMATION, ATTACK TARGETS IN DEPTH, PROVIDE SUPPORT AGAINST COUNTERATTACKS AND TO FURTHER EXPLOIT THE USE OF NUCLEAR WEAPONS. COMBAT ENGINEERS ARE LOCATED WITH THE FORWARD

ELEMENTS TO ENHANCE BATTLEFIELD MOBILITY. CSS ASSETS ARE DISPERSED AND ESSENTIAL COMMODITIES ARE POSITIONED WELL FORWARD. ATTACKING FORCES AND SUPPORTING ARTILLERY ARE PROVIDED INCREASED LOADS OF AMMUNITION AND POL. RESERVES, INVERSELY PROPORTIONAL IN SIZE TO THE KNOWLEDGE OF THE ENEMY (EXTENSIVE KNOWLEDGE, SMALL RESERVE; LITTLE KNOWLEDGE, LARGE RESERVE), NUCLEAR WEAPONS AND OTHER FIRE SUPPORT ARE THE COMMANDER'S MEANS OF INFLUENCING ACTIONS DURING THE ATTACK.

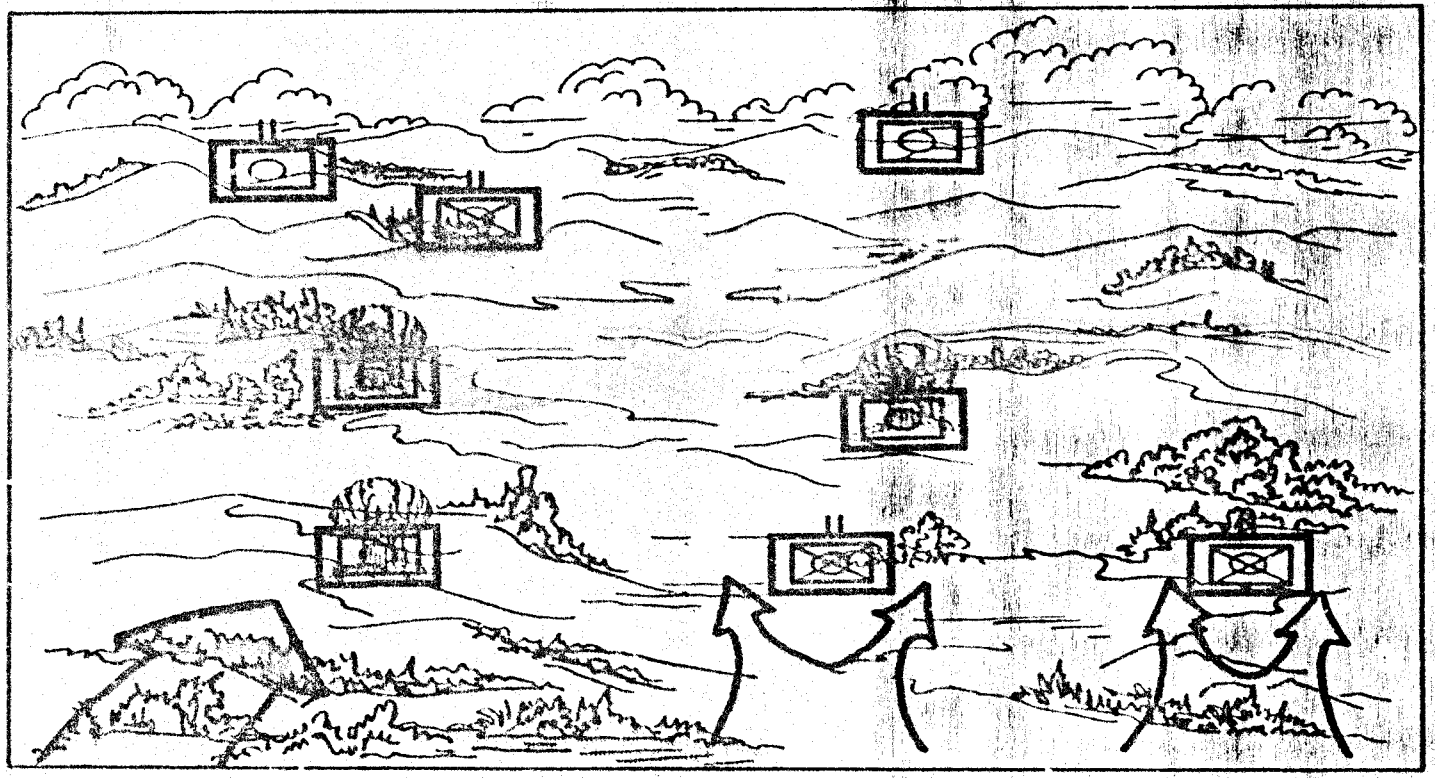
THE LOSS OF COMMAND AND CONTROL COMMUNICATIONS DURING AN ATTACK IS A VERY REAL POSSIBLILITY AND, NOT OVERCOME, COULD RESULT IN FAILURE TO ACHIEVE DESIRED OBJECTIVES. ACCORDINGLY, ALTERNATIVE MEANS OF MAINTAINING SYNCHRONIZATION MUST BE DEVELOPED AND IMPLEMENTED WHEN REQUIRED. THESE CONTROL MEASURES MUST PERMIT THE MAINTENANCE OF ATTACK MOMENTUM AND PROVIDE FOR THE COMMANDER'S POSITIVE CONTROL OF NUCLEAR FIRES.

ALL PREPARATIONS FOR ATTACK MUST BE CONCEALED AND THE ENEMY DECEIVED AS TO FUTURE ACTIONS. BOTH VISUAL AND ELECTRONIC CONCEALMENT ARE REQUIRED. A SUDDEN FLURRY OF ACTIVITY OR A SIGNIFICANT INCREASE IN THE NUMBER OR TEMPO OF MESSAGES WOULD TIP OFF THE ENEMY.

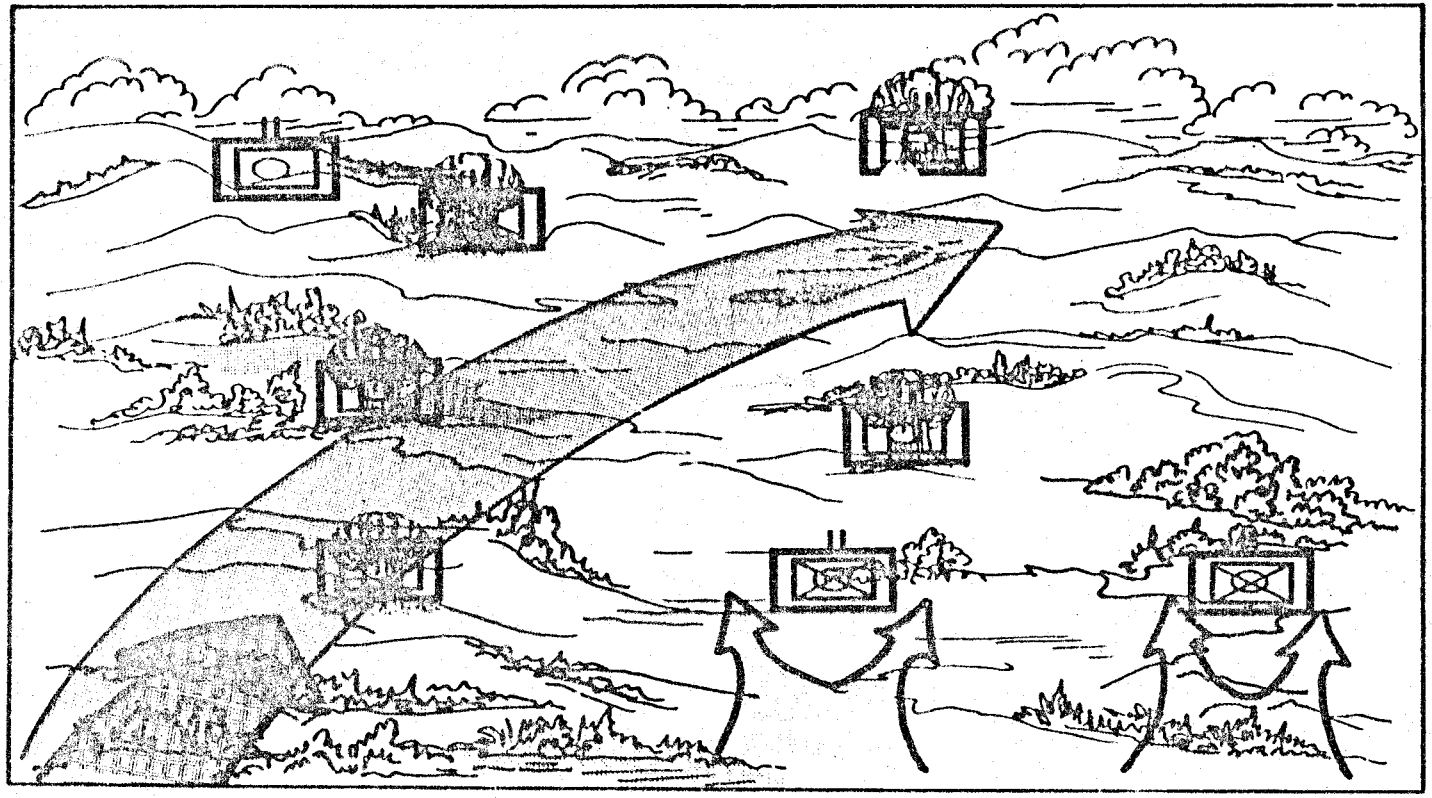
VU-GRAPH 20 OFF

THE BASIC FORMS OF MANEUVER ARE THE ENVELOPMENT, TO INCLUDE DOUBLE ENVELOPMENT AND TURNING MOVEMENT, THE FRONTAL ATTACK AND

ENVELOPMENT



ENVELOPMENT



21 w/ FLIP

THE PENETRATION. REGARDLESS OF THE BASIC FORM EMPLOYED IN THE NUCLEAR ENVIRONMENT, MANEUVER ADVANTAGES ARE ACHIEVED AND MAINTAINED ONLY BY REPEATED IMPROMPTU PLANNING AND EXECUTION IN THE BRIEFEST OF PERIODS.

VU-GRAPH 21 ON (WITH FLIP)

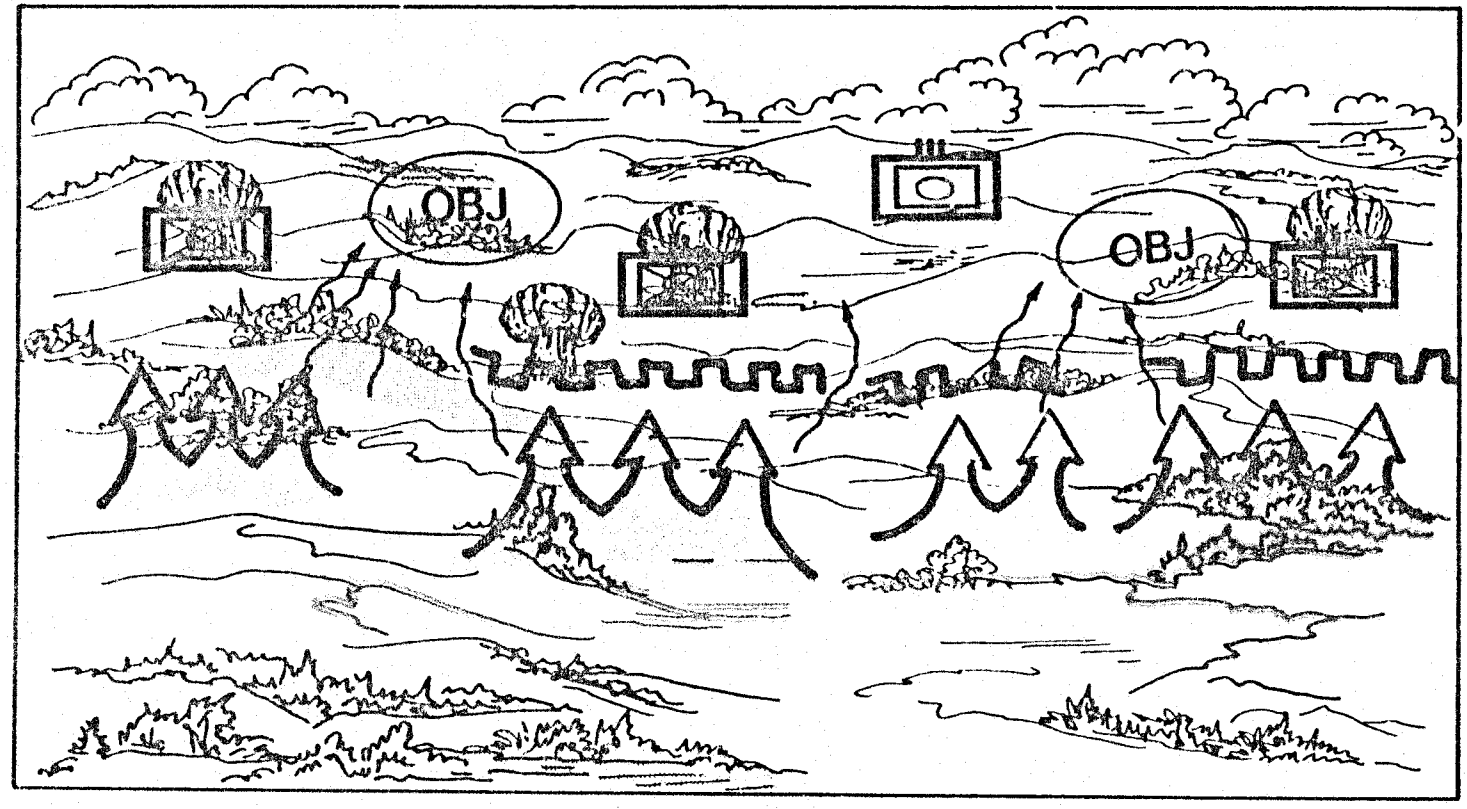
THE ENVELOPMENT STRIKES THE ENEMY ON AN EXPOSED FLANK OR AT ANOTHER POINT OF WEAKNESS IN HIS FORWARD DEFENSE, AVOIDS HIS MAIN STRENGTH AND ATTACKS TOWARD AN OBJECTIVE IN THE REAR. SECONDARY ATTACKS FIX THE ENEMY IN PLACE WHILE THE MAIN ATTACK CUTS ACROSS HIS ROUTES OF ESCAPE. THE ENEMY IS THUS FORCED TO FIGHT ON TWO FRONTS AND IS SUBJECT TO DESTRUCTION IN PLACE. NUCLEAR WEAPONS ARE USED TO CREATE OPPORTUNITIES FOR AN ENVELOPMENT, TO DESTROY THE ISOLATED ENEMY FORCES AND TO PREVENT COUNTERATTACKS AGAINST THE VULNERABLE FLANKS OF THE ENVELOPING FORCE. THE USE OF NUCLEAR WEAPONS ALSO INCREASES THE ELEMENT OF SURPRISE AND COULD DECEIVE THE ENEMY INTO THINKING THE SECONDARY FIXING ATTACK IS ACTUALLY THE MAIN ATTACK.

VU-GRAPH 21 OFF

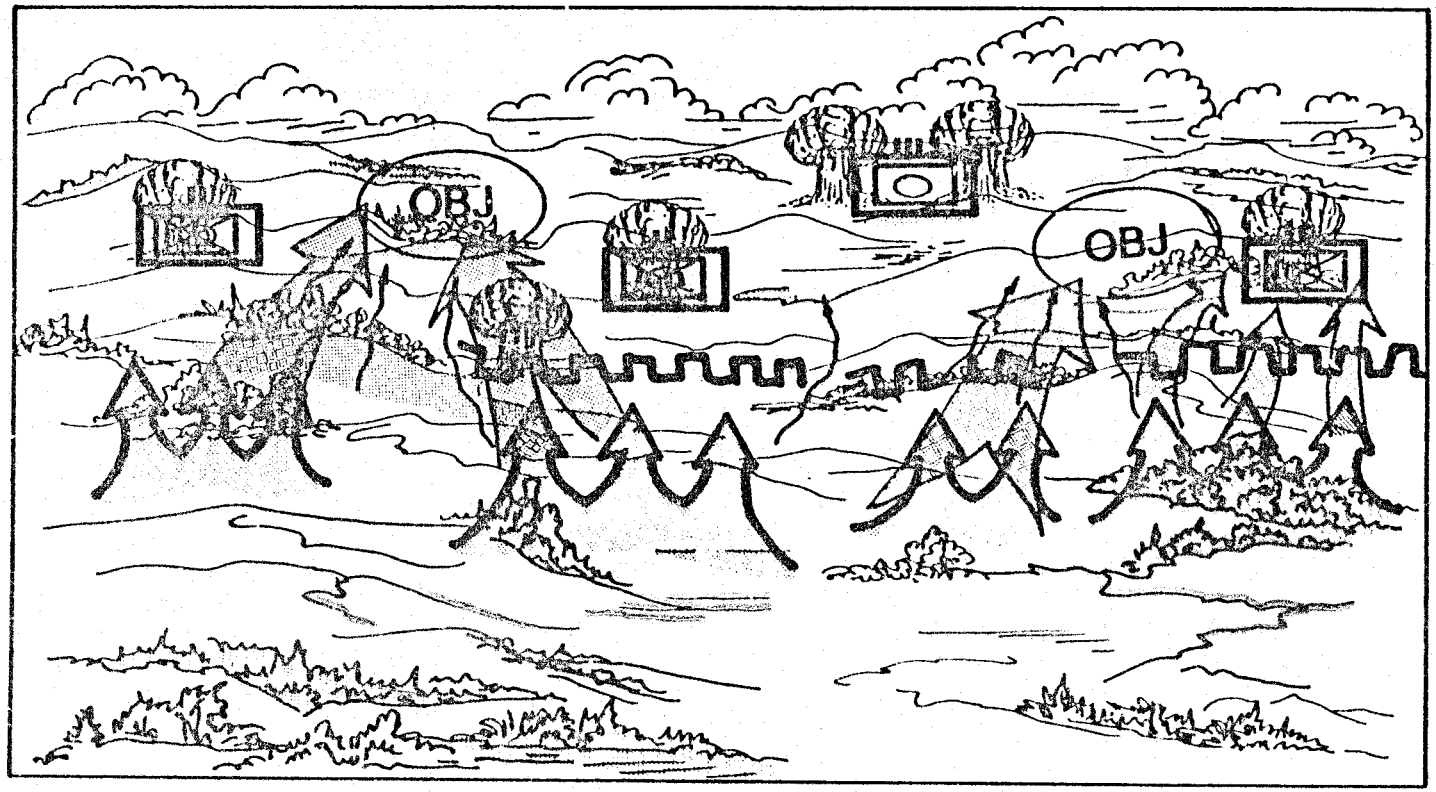
VU-GRAPH 22 ON (WITH FLIP)

THE FRONTAL ATTACK STRIKES THE ENEMY ALL ALONG THE FRONT. IT CAN BE USED AS A MAIN ATTACK AGAINST A WIDELY DEPLOYED THREAT OR AS A SECONDARY ATTACK. NUCLEAR WEAPONS ARE USED ON THE ENEMY'S MAIN

FRONTAL ATTACK



FRONTAL ATTACK



22 w/ FLIP

FORCES TO CREATE GAPS FOR RAPID EXPLOITATION AND AGAINST RESERVE OR FOLLOW-ON FORCES TO PRECLUDE ENEMY COUNTERATTACK. INFILTRATION IN A NUCLEAR ENVIRONMENT CAN BE ESPECIALLY EFFECTIVE DUE TO THE ISLAND-LIKE NATURE OF THE BATTLEFIELD. SMALL GROUPS OF CLOSE COMBAT FORCES CAN MOVE THROUGH THE GAPS BETWEEN ENEMY FORCES AND ASSEMBLE IN THE ENEMY'S REAR TO ATTACK DECISIVE OBJECTIVES. SUCH A TECHNIQUE ENHANCES SURPRISE AND DECREASES NUCLEAR VULNERABILITY. IT REQUIRES BOLDNESS AND INITIATIVE.

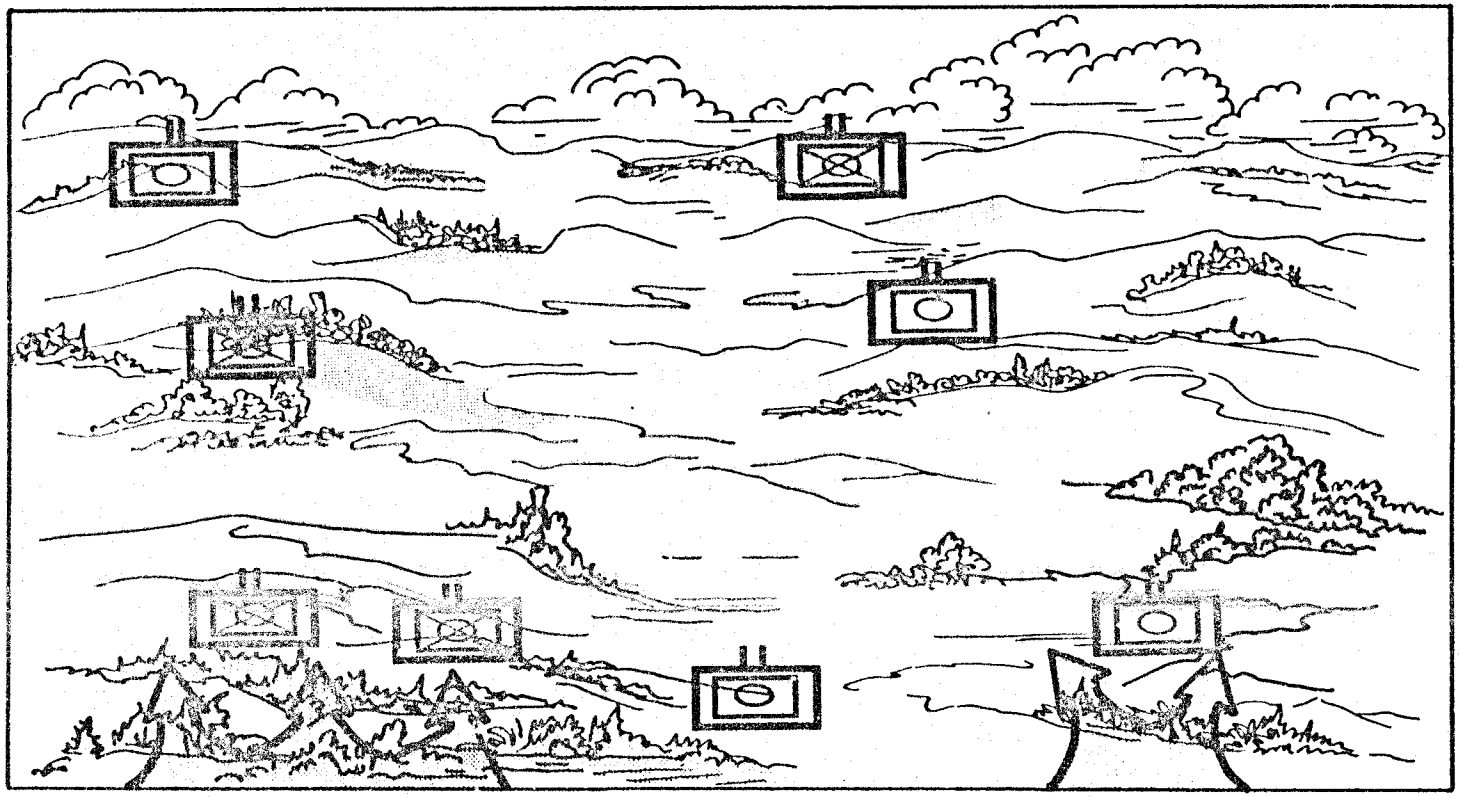
VU-GRAPH 22 OFF

VU-GRAPH 23 ON (WITH FLIP)

IN THE PENETRATION, THE MAIN ATTACK PASSES RAPIDLY THROUGH THE PRINCIPAL DEFENSIVE FORCES OF THE ENEMY. THE GOAL IS TO DESTROY THE CONTINUITY OF THE FORCE, DIVIDE IT AND DEFEAT IT IN DETAIL. ITS SUCCESS REQUIRES SUPERIOR COMBAT POWER AT THE POINT OF PENETRATION. NUCLEAR WEAPONS ARE USED TO REDUCE THE EFFECTIVE ENEMY STRENGTH AT THE PLANNED BREACHING POINT; AGAINST ENEMY FLANK FORCES TO INSURE THEY DO NOT MOVE TO BLOCK THE GAP OR ATTACK THE FLANKS OF THE PENETRATION; AND AGAINST RESERVES OR OTHER FORCES IN THE ENEMY'S REAR AREA WHICH MUST BE PRECLUDED FROM COUNTERATTACKING. FRIENDLY RESERVES AND FOLLOW-ON FORCES WIDEN THE GAP, ROLL UP THE FLANKS OF THE MAIN EFFORT AND EXPLOIT OPPORTUNITIES CREATED BY THE PENETRATION.

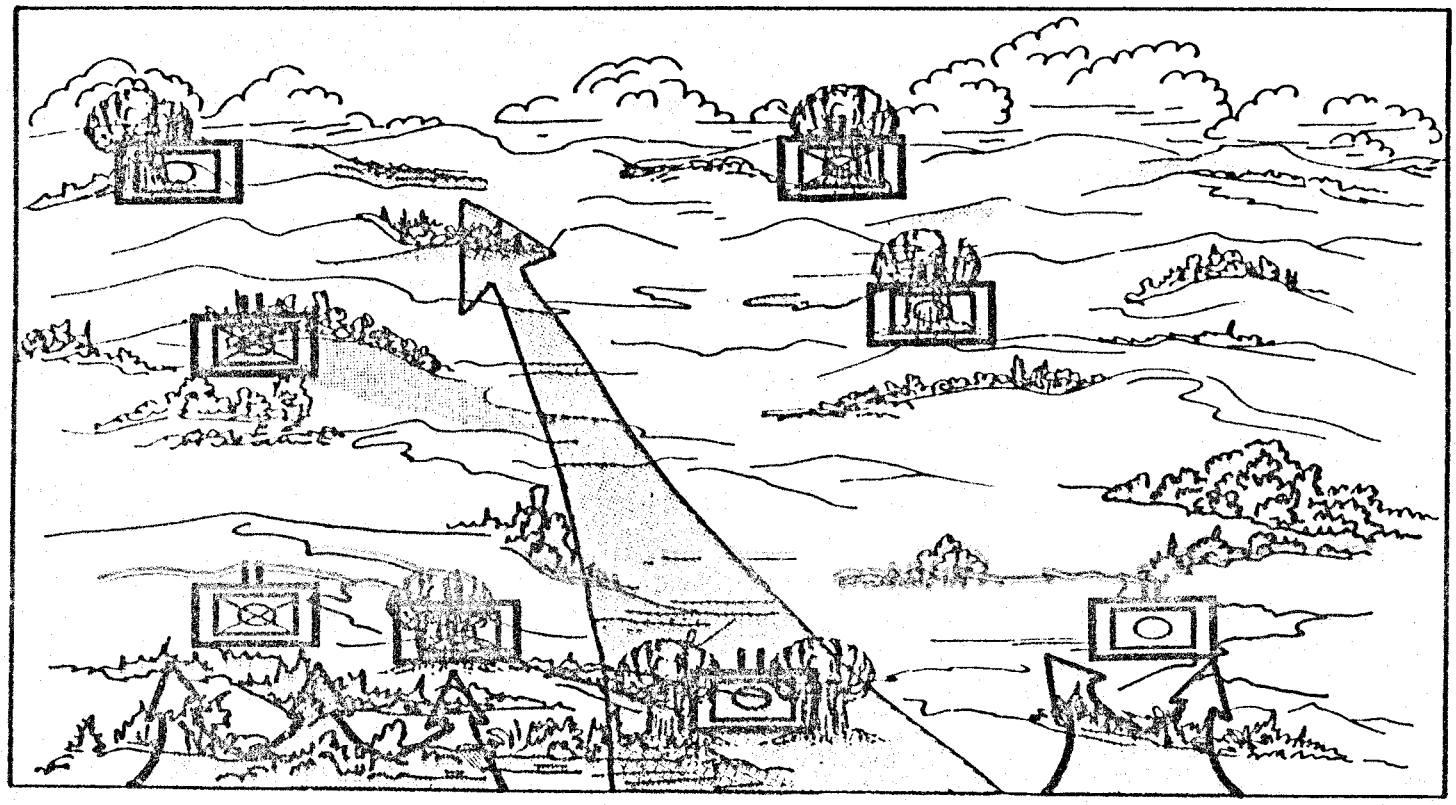
VU-GRAPH 23 OFF

PENETRATION



23

PENETRATION



23 w/ FLIP

IN SUM, THE OFFENSIVE IS THE DECISIVE FORM OF WAR; BOLD, DECISIVE OFFENSIVE ACTIONS WITH BATTLES. NUCLEAR WEAPONS MAY BE USED IN A NUMBER OF WAYS TO ASSURE SUCCESS IN OFFENSIVE OPERATIONS. (PAUSE)

VU-GRAPH 24 OFF

THERE ARE INHERENT WEAKNESSES ASSOCIATED WITH SOVIET-STYLE OPERATIONS WHICH PROVIDE NUMEROUS OPPORTUNITIES FOR EXPLOITATION BY AGGRESSIVE OFFENSIVE ACTIONS, TO INCLUDE CENTRALIZED CONTROL OF OPERATIONS, ESPECIALLY NUCLEAR OPERATIONS; ADHERENCE TO ESTABLISHED TIMETABLES, ECHELONMENT OF FORCES AND THE REQUIREMENT TO CONCENTRATE AND MASS FORCES.

VU-GRAPH 25 ON

HOWEVER, EVEN IN LIGHT OF THESE WEAKNESSES, IT WILL BE NECESSARY FOR U.S. FORCES TO CONDUCT DEFENSIVE OPERATIONS FOR LIMITED PERIODS TO PREPARE FOR DELIBERATE OFFENSIVE OPERATIONS; PERMIT CONCENTRATION OF FORCES IN OTHER AREAS OF THE BATTLEFIELD; GAIN TIME; CONTROL TERRAIN; DENY ENEMY DEEP OBJECTIVES; OR PERMIT CONSOLIDATION AND REORGANIZATION OF FORCES. I WILL ADDRESS THESE GENERAL AREAS IN THE DISCUSSION OF DEFENSIVE OPERATIONS.

VU-GRAPH 25 OFF

NUCLEAR WEAPONS EMPLOYMENT-OFFENSE

- SUBSTITUTE FOR AND COMPLEMENT TO MANEUVER
  - CREATE GAPS
    - HOLD ENEMY IN PLACE
      - CONTROL TERRAIN
        - PROTECT FLANKS
          - DESTROY ENEMY FORCES
            - ECONOMY OF FORCE
              - RESERVES
                - CREATE EXPLOITATION OPPORTUNITIES

PLACE ENEMY AT RISK THROUGHOUT AREA OF INFLUENCE

DEFENSIVE OPERATIONS

- THREAT
  - OVERVIEW
    - DEEP BATTLE AREA
      - COVERING FORCE AREA
        - MAIN BATTLE AREA
          - REAR AREA

OFFENSIVE ACTIONS MUST PREVAIL -- EVEN DURING THE DEFENSE -- TO OVERCOME SOVIET-STYLE OFFENSIVE OPERATIONS, WHICH ARE CHARACTERIZED BY NUMERICAL SUPERIORITY, MOBILITY AND FIREPOWER TO ACHIEVE AND MAINTAIN MOMENTUM. SOVIET OFFENSIVE OPERATIONS MAY BE CATEGORIZED AS MEETING ENGAGEMENTS, ATTACKS OF A DEFENDING ENEMY AND PURSUIT OPERATIONS. I WILL DISCUSS ONLY THE FIRST TWO CATEGORIES.

VU-GRAPH 26 ON

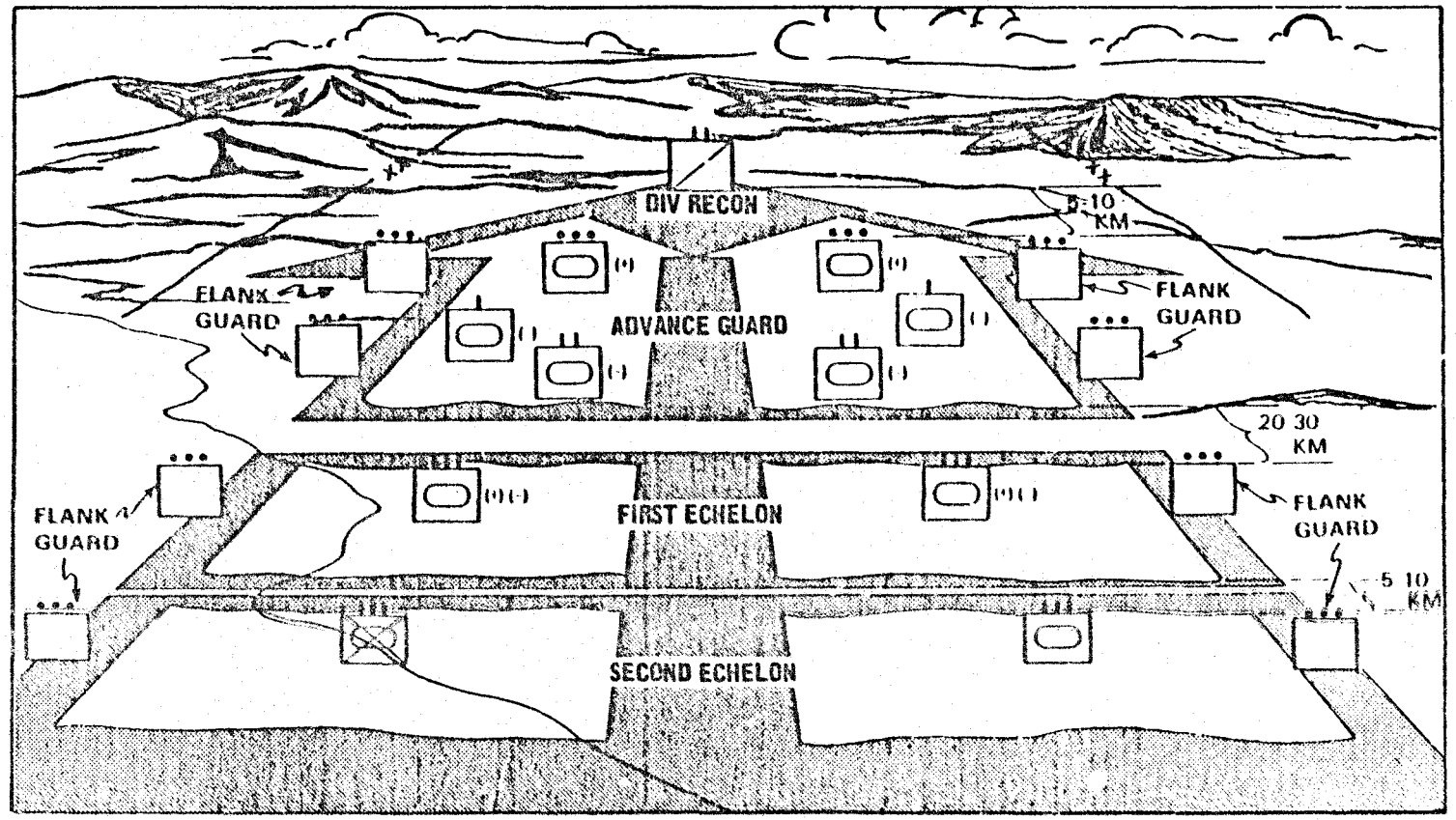
THE SOVIETS CONSIDER THE MEETING ENGAGEMENT, PREVIOUSLY DISCUSSED, AS THE OFFENSIVE ACTION MOST LIKELY TO OCCUR, PARTICULARLY IN A NUCLEAR ENVIRONMENT. THE MEETING ENGAGEMENT MAY, HOWEVER, OCCUR UNDER WIDELY DIFFERING CIRCUMSTANCES AND ENVIRONMENTS; AT THE BEGINNING OF A WAR; AT THE OUTSET OF ANY ATTACK WHEN OPPOSING FORCES ARE NOT IN INITIAL CONTACT; AFTER PENETRATION OF ENEMY'S DEFENSIVE LINES IN EXPECTATION OF MEETING RESERVE ELEMENTS; DURING PURSUIT OPERATIONS; AND DURING COUNTERATTACKS.

VU-GRAPH 26 OFF

VU-GRAPH 27 ON

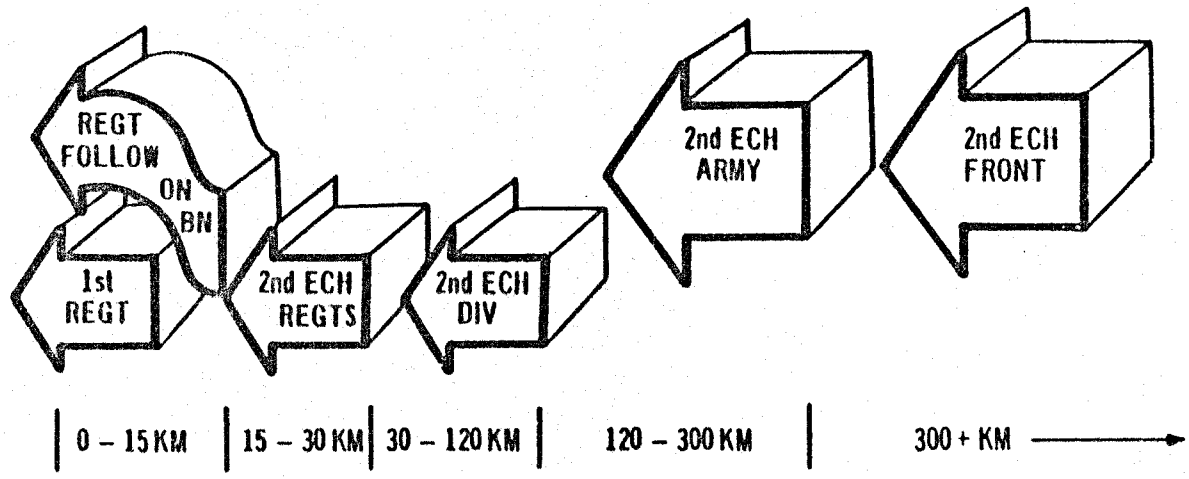
THE ESSENTIAL AIMS OF SOVIET OFFENSIVE OPERATIONS ARE TO DESTROY ENEMY FORCES AND SEIZE IMPORTANT TERRAIN. THESE AIMS ARE ALSO BASIC TO THE ATTACK OF A DEFENDING FORCE, WHICH FEATURES THE RAPID BUILD UP OF REQUIRED FORCES; ECHELONMENT OF FORCES; MASSING

MEETING ENGAGEMENT



26

ATTACK ECHELONMENT



OF FORCES AND FIRES; USE OF NUCLEAR AND CHEMICAL WEAPONS; AND CONTINUOUS ATTACK UNDER ALL CONDITIONS OF WEATHER AND VISIBILITY. ASSAULT ECHELONS ATTACK BOTH TO DESTROY THE OPPOSING ENEMY FORCES THAT SURVIVED INITIAL FIRES AND TO CREATE FAVORABLE CONDITIONS FOR FOLLOW-ON FORCES SUCH AS THE OPERATIONAL MANEUVER GROUPS TO EXPLOIT.

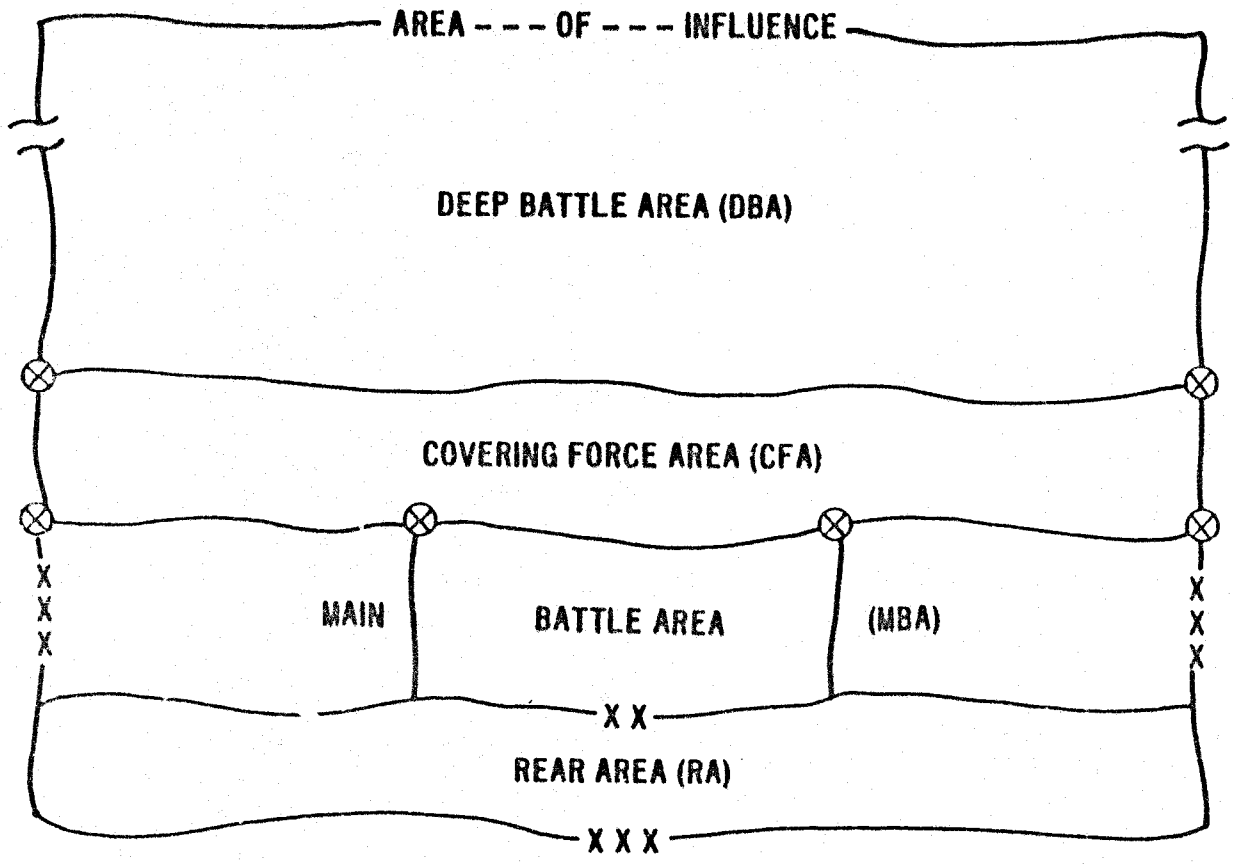
VU-GRAPH 27 OFF

VU-GRAPH 28 ON

DEFENSIVE OPERATIONS ARE CONDUCTED THROUGHOUT THE DEPTH OF THE BATTLEFIELD USING ALL AVAILABLE COMBAT POWER. AIRLAND FORCES FIGHT A UNIFIED AND SYNCHRONIZED BATTLE IN FOUR AREAS OF THE BATTLEFIELD: THE DEEP BATTLE AREA - THAT AREA BEYOND FRIENDLY FORCES TO THE FORWARD EXTENT OF THE AREA OF INFLUENCE; THE COVERING FORCE AREA; THE MAIN BATTLE AREA; AND THE REAR AREA. WHILE COMBAT ACTIONS MAY BE UNDERWAY IN TWO OR MORE OF THESE AREAS AT THE SAME TIME, THEY ARE ALWAYS CONDUCTED AS ONE INTEGRATED AND COORDINATED BATTLE.

THE DEFENSE IS A TEMPORARY EXPEDIENT. DEFENSIVE OPERATIONS DO NOT WIN CAMPAIGNS AND BATTLES. THEREFORE, THEY ARE CHARACTERIZED BY DELAYING AND DISRUPTING THE ENEMY THROUGHOUT THE DEPTH OF THE BATTLEFIELD; SEIZING THE INITIATIVE AND EXPLOITING OPPORTUNITIES FOR OFFENSIVE ACTIONS; FLEXIBILITY IN PLANNING AND USE OF MANEUVER AND FIREPOWER; AND COORDINATION AND SYNCHRONIZATION OF ALL

OVERVIEW


AREA - - - OF - - - INFLUENCE
DEEP BATTLE AREA (DBA)
COVERING FORCE AREA (CFA)
X X X
MAIN
BATTLE AREA
(MBA)
X X X
X X
REAR AREA (RA)
X X X

COMBAT POWER IN VIOLENT AND AGGRESSIVE EXPLOITATION OF ENEMY VULNERABILITIES. NUCLEAR WEAPONS ARE SIGNIFICANT FORCE MULTIPLIERS AND ASSIST IN BOTH THE CREATION OF OPPORTUNITIES FOR OFFENSIVE ACTIONS AND THE SUBSEQUENT SUCCESSFUL CONDUCT OF THOSE ACTIONS.

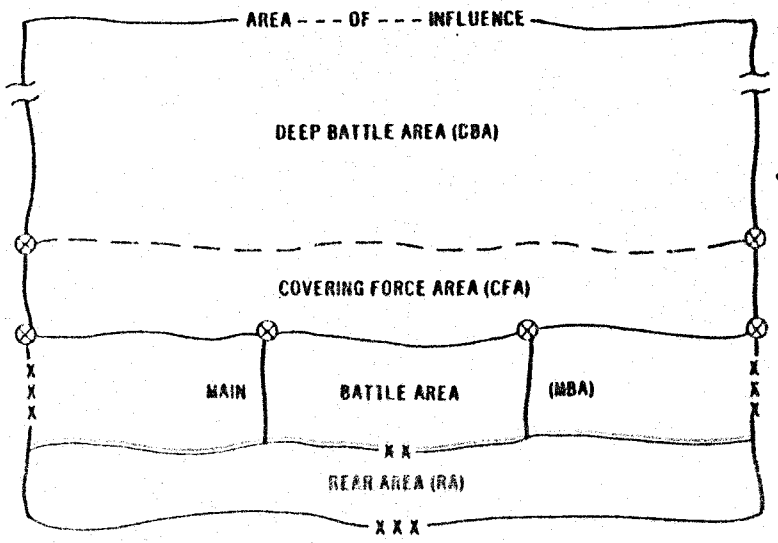
VU-GRAPH 28 OFF

VU-GRAPH 29 ON

COMBAT ACTIONS IN THE DEEP BATTLE AREA ARE DESIGNED TO SUPPORT THE COMMANDER'S OVERALL SCHEME OF MANEUVER BY DESTRUCTION, DISRUPTION AND DELAY OF ENEMY FORCES. THEIR GOAL IS TO PREVENT THE ENEMY FROM CONCENTRATING OVERWHELMING COMBAT POWER AT THE POINT AND TIME OF HIS CHOICE BY SEVERELY DELAYING AND DISRUPTING PLANNED CLOSURE TIMES OF FOLLOW-ON ELEMENTS, THEREBY CREATING OPPORTUNITIES FOR SUCCESSFUL ACTION AGAINST ASSAULT ECHELONS.

THIS VISUAL DEPICTS SEVERAL CATEGORIES OF HIGH PRIORITY TARGETS IN THE DEEP BATTLE AREA, THE DESTRUCTION OF WHICH SUBSTANTIALLY REDUCES THE ENEMY'S CAPABILITY TO MASS OVERWHELMING COMBAT POWER. THESE CATEGORIES OF TARGETS ARE ALWAYS HIGH PRIORITY, TO BE ATTACKED BY ANY AVAILABLE RESOURCE; THE PROBABILITY OF THEIR DESTRUCTION IS SIGNIFICANTLY INCREASED WHEN ATTACKED BY NUCLEAR WEAPONS.

DEEP BATTLE AREA



- NUCLEAR DELIVERY (≥BTRY)
- NUCLEAR SUPPORT UNITS
- CPs (≥DIV)
- FRONT AIR ASSETS
- MANEUVER UNITS (BN (+))
- LOGISTICS FORMATIONS

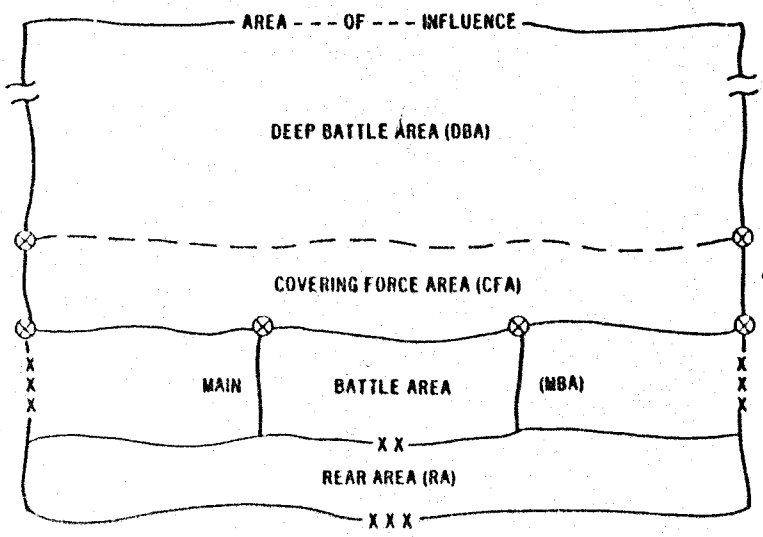
THE MEANS AVAILABLE TO CONDUCT COMBAT OPERATIONS IN THE DEEP BATTLE AREA ARE LIMITED, REQUIRING A JOINT EFFORT BY BOTH AIR AND GROUND FORCES. TACTICAL AIR RECONNAISANCE AND OTHER INTELLIGENCE COLLECTION MEANS FOCUS ON HIGH PRIORITY AREAS AND UNITS IN THE DEEP BATTLE AREA WHILE ALSO MAINTAINING A CURRENT INTELLIGENCE PICTURE OF ENEMY FORCES THROUGH THE AREA OF INTEREST. MOST ATTACKS IN THIS AREA ARE MADE BY TACTICAL AIR AND GROUND-LAUNCHED SYSTEMS. BATTLEFIELD AIR INTERDICTION PLAYS A MAJOR ROLE, BUT IT MUST BE CAREFULLY ORCHESTRATED TO ASSURE UNITY OF EFFORT WITH THE COMMANDER'S OVERALL SCHEME OF MANEUVER FOR THE DEFENSE. ACCORDINGLY, COMBAT ACTIONS IN THE DEEP BATTLE AREA ARE PLANNED AND COORDINATED BY THE BATTLE COORDINATION TEAM AT CORPS.

VU-GRAPH 29 OFF

VU-GRAPH 30 ON

COMBAT OPERATIONS IN THE COVERING FORCE AREA ARE DESIGNED TO GAIN AND MAINTAIN CONTACT WITH ATTACKING ENEMY FORCES, TO DEVELOP THE BATTLEFIELD SITUATION AND TO DEFEAT OR DELAY THE ENEMY'S ASSAULT ECHELONS. WHILE MAJOR BATTLES MAY BE FOUGHT IN THE COVERING FORCE AREA, THE PRIMARY GOAL IS TO CAUSE THE ENEMY TO PREMATURELY DISCLOSE HIS MAIN EFFORT. SUCH PREMATURE CONCENTRATION OF FORCES PROVIDES EXCELLENT TARGETS FOR ATTACK BY GROUND AND AIR DELIVERED NUCLEAR WEAPONS IMMEDIATELY RESPONSIVE TO THE COMMANDER. WITHIN THE COVERING FORCE AREA, NUCLEAR TARGETS ARE GENERALLY LIMITED TO MANEUVER FORCES, FIRE SUPPORT MEANS AND DIVISIONAL COMMAND AND

COVERING FORCE AREA



- DEVELOP SITUATION
  - DELAY ENEMY
  - IDENTIFY MAIN EFFORT
- NUCLEAR USE
  - MANEUVER
  - FIRE SUPPORT
  - DIV CPs
  - CANALIZE
- DEEP BATTLE CONTINUES
- MBA AND RA ADJUSTMENTS

CONTROL FACILITIES. OTHER POTENTIAL USES OF NUCLEAR WEAPONS INCLUDE CREATION OF OBSTACLES TO CANALIZE ENEMY FORCES INTO PREFERRED AREAS AND TO ALLOW DISENGAGEMENT OF HEAVILY COMMITTED FORCE.

WHILE THE COVERING FORCE IS FIGHTING THE ENEMY'S ASSAULT ECHELONS, COMBAT OPERATIONS AGAINST FOLLOW-ON AND SUPPORT FORCES CONTINUE IN THE DEEP BATTLE AREA AND PREPARATION OF THE MAIN BATTLE AND REAR AREAS IS ADJUSTED TO ACCOMMODATE DEVELOPMENTS IN THE COVERING FORCE BATTLE.

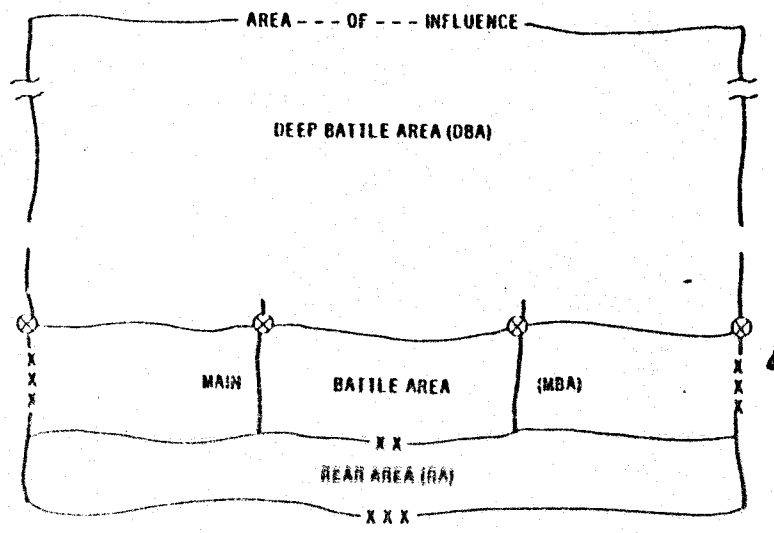
VU-GRAPH 30 OFF

VU-GRAPH 31 ON

COMBAT OPERATIONS ARE CONDUCTED IN THE MAIN BATTLE AREA TO CONTROL OR REPEL ENEMY PENETRATIONS, TO DESTROY ENEMY FORCES AND TO CREATE OPPORTUNITIES TO ATTACK AND REGAIN THE INITIATIVE. THERE IS AN ABUNDANCE OF TARGETS SUITABLE FOR ATTACK BY NUCLEAR WEAPONS; THOSE OF PRIMARY INTEREST ARE MANEUVER UNITS OF COMPANY-SIZE AND LARGER, CONCENTRATED FIRE SUPPORT MEANS AND REGIMENTAL AND HIGHER COMMAND AND CONTROL FACILITIES.

THE RANGE OF OPTIONS THAT ARE AVAILABLE IN THE MBA FALLS WITHIN A CONTINUUM OF BOTH STATIC AND DYNAMIC ACTIONS. THE STATIC END OF THE CONTINUUM IS MORE ORIENTED TOWARD CONTROL OF TERRAIN AND RELIES HEAVILY ON FIREPOWER. THE DYNAMIC FOCUSES MORE ON THE

MAIN BATTLE AREA



- CONTINUUM OF STATIC AND DYNAMIC
  - STRONG POINTS
  - MOBILE RESERVES

ENEMY AND DEPENDS ON BOTH MANEUVER AND FIREPOWER TO DESTROY ENEMY FORCES. OPTIMUM OPERATIONAL ART COMBINES THESE ACTIONS AS APPROPRIATE TO DECISIVELY DEFEAT LARGE FORMATIONS.

DEFENSES ARE GENERALLY CHARACTERIZED BY A COMBINATION OF TERRAIN-ORIENTED STRONGPOINTS AND HIGHLY MOBILE RESERVES. AIR AND GROUND-DELIVERED FIRE SUPPORT -- CONVENTIONAL, NUCLEAR AND CHEMICAL -- IS USED AS THE DECISIVE MEANS TO DESTROY ENEMY FORCES BEFORE THEY REACH THE MAIN BATTLE AREA.

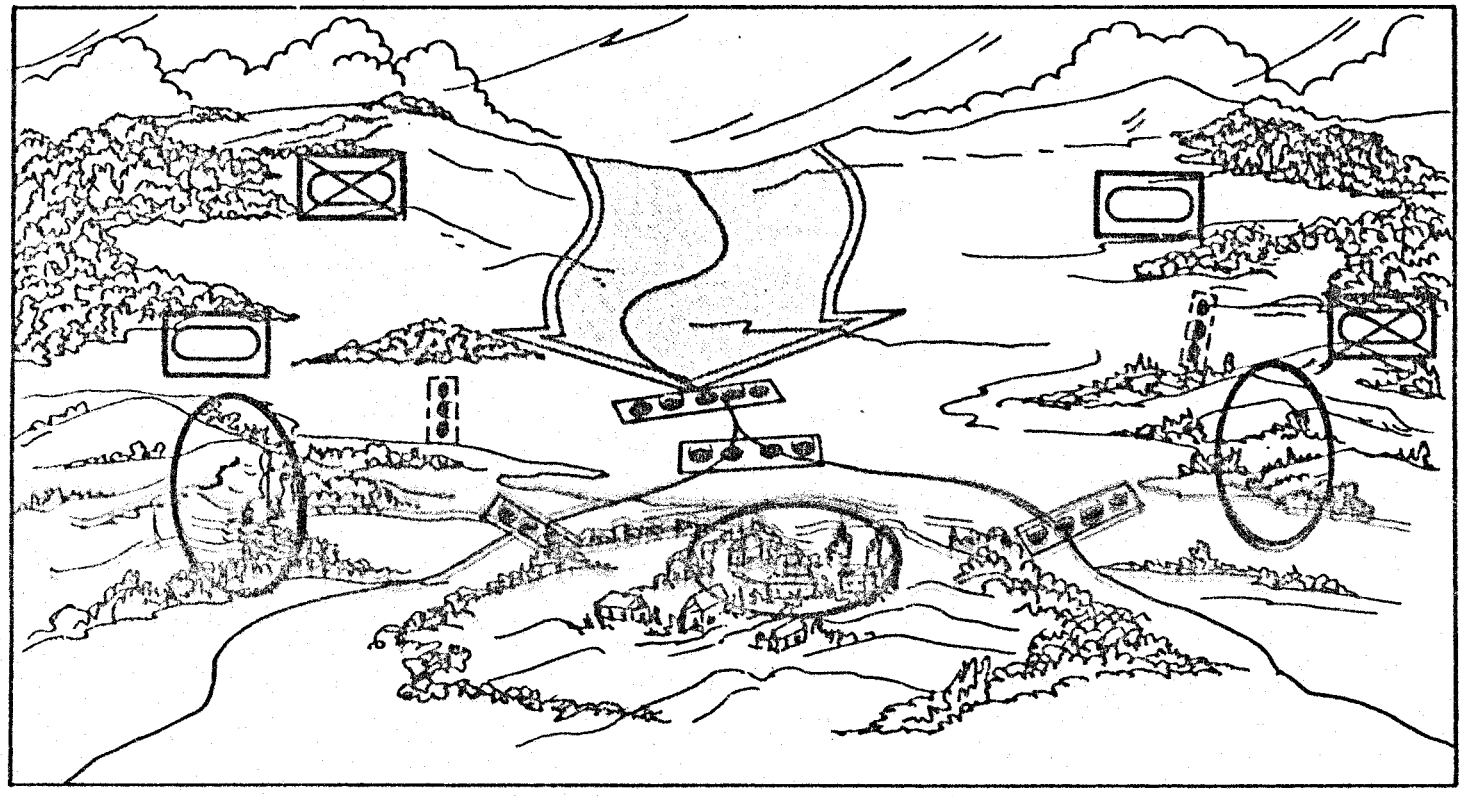
VU-GRAPH 31 OFF

VII-GRAPH 32 ON

STRONGPOINTS ARE ORGANIZED THROUGHOUT THE DEPTH OF THE MBA. THEIR SIZE AND DISPOSITION ARE HIGHLY DEPENDENT ON THE NATURE OF THE TERRAIN AND TOPOGRAPHY, OPPOSING FORCES AND THEIR MISSION OR PURPOSE. THEY ARE ORGANIZED WITH MINIMUM ESSENTIAL FORCES TO BE MUTUALLY SUPPORTING AND REINFORCED BY FIRE SUPPORT MEANS. PROTECTION AND SURPRISE ARE ENHANCED BY CONCEALMENT, PHYSICAL PREPARATION AND TIMELY OCCUPATION. STRONGPOINTS ARE USED TO DELAY THE ENEMY, TO CONTROL AND CANALIZE HIM INTO AREAS WHERE HE MAY BE NEUTRALIZED OR DESTROYED AND TO CREATE OPPORTUNITIES FOR AGGRESSIVE COUNTERATTACKS.

VU-GRAPH 32 OFF

STRONGPOINT



VU-GRAPH 33 ON (WITH FLIP)

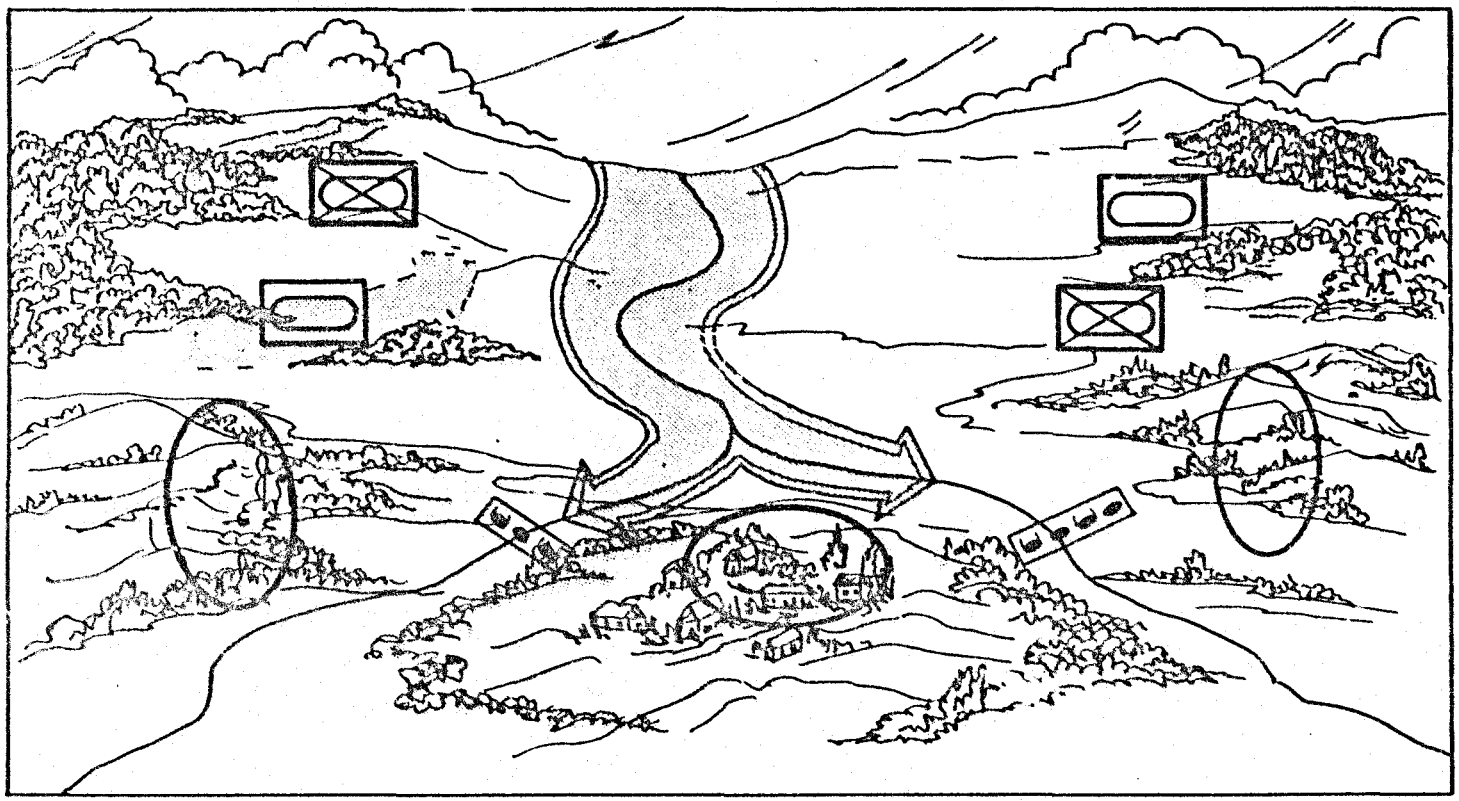
THE DECISIVE COMPONENT OF THE OVERALL DEFENSE IS A HIGHLY MOBILE, HARD HITTING RESERVE TO CONDUCT SPOILING ATTACKS AND TO COUNTER-ATTACK ENEMY FORCES AT A DECISIVE TIME AND PLACE. (PAUSE)

VU-GRAPH 33 OFF

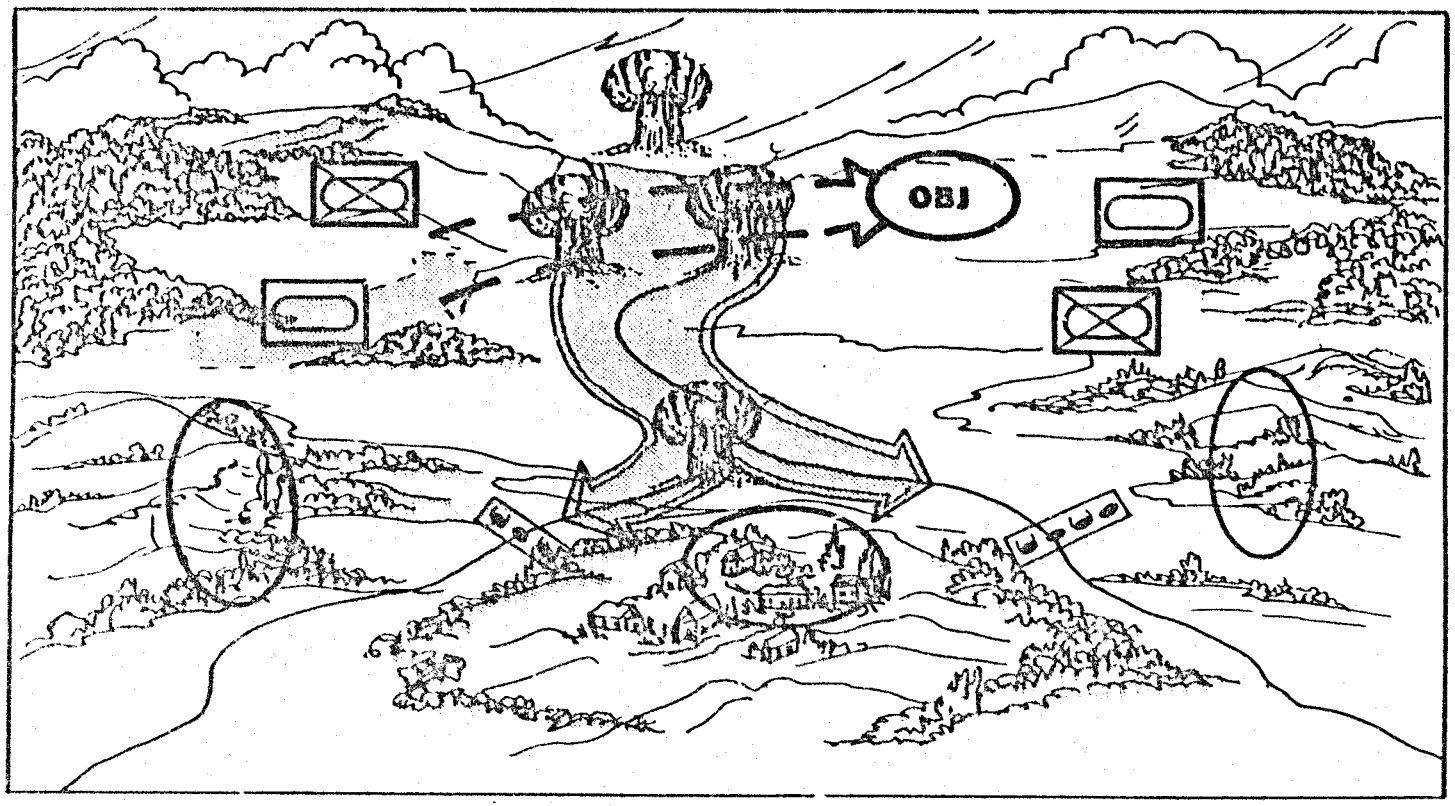
VU-GRAPH 34 ON

NUCLEAR WEAPONS, AND OTHER FIRES, CREATE OPPORTUNITIES FOR THE COUNTERATTACK IN A NUMBER OF WAYS. THEY BLUNT OR STOP THE PENETRATION, SEAL THE BASE OF THE PENETRATION AND ISOLATE ASSAULT ECHELONS. NUCLEAR WEAPONS ARE ALSO USED TO CREATE GAPS IN THE PENETRATION THROUGH WHICH MANEUVER FORCES COUNTERATTACK. HOWEVER, AS A GENERAL RULE COUNTERATTACK AGAINST INHERENT ENEMY WEAKNESSES SUCH AS AN EXPOSED FLANK OFFERS THE BEST OPPORTUNITY FOR SUCCESS. DURING THE ACTUAL COUNTERATTACK NUCLEAR WEAPONS, AND OTHER FIRE SUPPORT MEANS, ARE USED TO DESTROY MASSED FORMATIONS WITHIN THE PENETRATION; PROTECT FLANKS FROM COUNTERATTACK BY DESTRUCTION OF ENEMY FORCES OR BY CREATION OF OBSTACLES; DESTROY BY-PASSED FORMATIONS; CREATE FURTHER OPPORTUNITIES FOR EXPLOITATION; AND DENY THE ENEMY USE OF CRITICAL AREAS. NUCLEAR WEAPONS ARE ALSO USED AS HIGHLY FLEXIBLE RESERVES, AS AN ECONOMY OF FORCE MEASURE TO CREATE SUFFICIENTLY LARGE RESERVES TO DECISIVELY DEFEAT THE ENEMY AND TO PROVIDE THE CAPABILITY THAT ALLOWS SMALLER MANEUVER FORCES TO DEFEAT LARGER COMBAT FORMATIONS.

MOBILE RESERVES

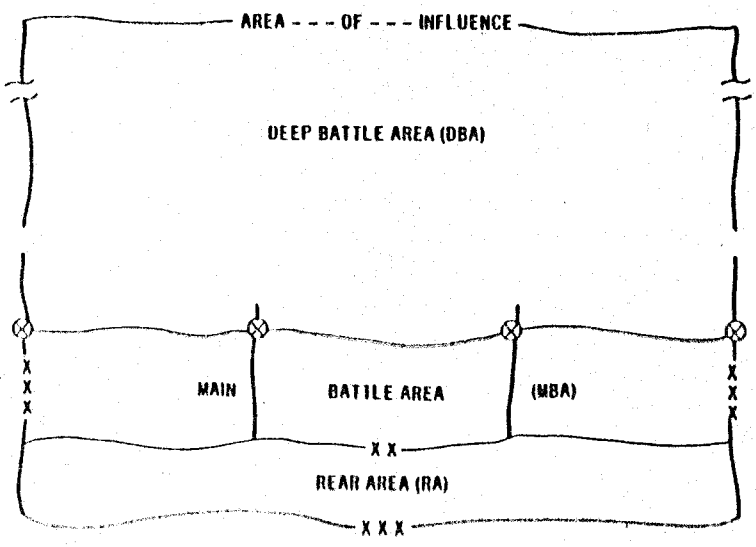


MOBILE RESERVES



33 w/ FLIP

MAIN BATTLE AREA



- CONTINUUM OF STATIC AND DYNAMIC
  - STRONGPOINTS
  - MOBILE RESERVES
- NUCLEAR USE
  - AGAINST PENETRATION
  - FLANK PROTECTION
  - CONTROL TERRAIN
  - RESERVES
  - ECONOMY OF FORCE
- DEEP BATTLE CONTINUES
- RA ADJUSTMENTS

DURING THE MBA BATTLE, COMBAT OPERATIONS IN THE DEEP BATTLE AREA CONCENTRATE ON FOLLOW-ON AND SUPPORT FORCES SUSTAINING THE ENEMY'S MAIN ATTACK. FORCES IN THE REAR AREA REACT TO DEVELOPMENTS IN THE MBA BY REDIRECTING PRIORITY OF SUPPORT AND CONCURRENTLY PLANNING FOR THE DEFENSE OF THE REAR AREA.

VU-GRAPH 34 OFF

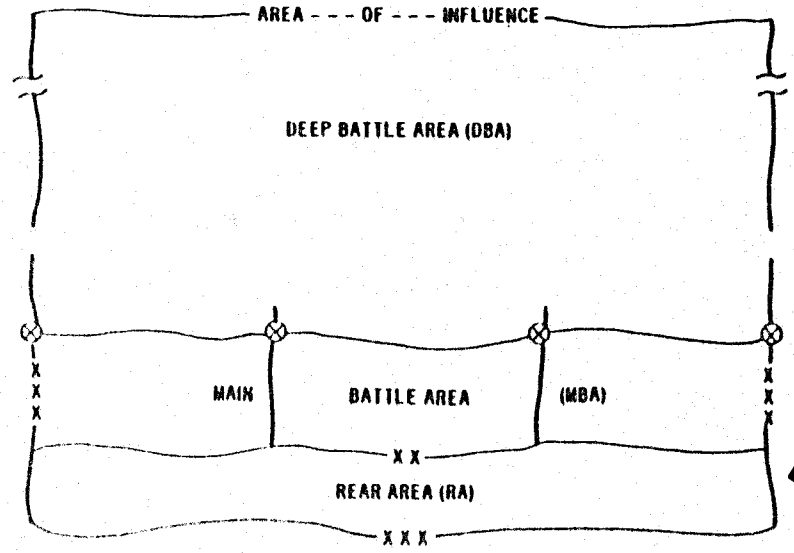
VU-GRAPH 35 ON

THE REAR AREA IS AN EQUAL COMPONENT OF THE OVERALL DEFENSIVE BATTLE. THE THREAT TO THE REAR AREA RANGES FROM SINGLE AGENTS, SABOTEURS AND TERRORISTS TO AIRBORNE, AIRMOBILE AND AMPHIBIOUS FORCES AS LARGE AS DIVISIONS. WHILE THE COMMANDER MUST SUSTAIN HIS MAIN DEFENSIVE EFFORT, HE CANNOT IGNORE THESE THREATS TO HIS REAR AREA. AIRMOBILE FORCES, ATTACK HELICOPTERS AND AIR CAVALRY UNITS, CLOSE AIR SUPPORT AND MECHANIZED FORCES ARE PARTICULARLY WELL-SUITED FOR REAR AREA COMBAT OPERATIONS. THERE MAY ALSO BE OPPORTUNITIES TO USE LOW-YIELD NUCLEAR WEAPONS TO ELIMINATE MASSED FORMATIONS IN THE REAR, PARTICULARLY WITHIN AIRHEADS AND LANDING ZONES ESTABLISHED BY ENEMY FORCES.

VU-GRAPH 35 OFF

VU-GRAPH 36 ON

REAR AREA



- THREAT
  - SINGLE AGENTS
  - DIVISION FORMATIONS
- DEFENDING FORCES
  - HIGHLY MOBILE REACTIONARY FORCES
  - NUCLEAR WEAPONS - - AIRHEADS AND LZs

NUCLEAR WEAPONS EMPLOYMENT-DEFENSE

- DESTROY ASSAULT FORCES AND FOLLOW-ON ECHELONS
- DESTROY OR DISRUPT LOGISTICS SUPPORT
- CREATE OBSTACLES AND CANALIZE ENEMY FORCES
- BLUNT OR STOP PENETRATIONS
- CONTROL TERRAIN
- DESTROY FORCES IN PENETRATIONS
- ECONOMY OF FORCE
- CREATE OFFENSIVE OPPORTUNITIES
- PROTECT FORCES DURING COUNTERATTACKS
- HIGHLY FLEXIBLE RESERVES

PLACE ENEMY AT RISK THROUGHOUT AREA OF INFLUENCE

IN SUM, DEFENSE IS A TEMPORARY EXPEDIENT. OFFENSIVE ACTIONS MUST PREVAIL - EVEN DURING THE DEFENSE - TO OVERCOME SOVIET-STYLE OPERATIONS. NUCLEAR WEAPONS MAY BE USED IN A NUMBER OF WAYS TO ASSURE SUCCESS.

VU-GRAPH 36 OFF

VU-GRAPH 37 ON

IN A NUCLEAR ENVIRONMENT, SURVIVABILITY MEASURES AND PRACTICES TAKE ON ADDED IMPORTANCE AND BECOME EQUAL PARTNERS TO THE INTERRELATED PRINCIPLES, BASIC TENETS AND IMPERATIVES OF CONTEMPORARY WARFARE. THE SPECIFIC APPLICATION OF PROTECTIVE MEASURES IS DICTATED BY THE MISSION OF EACH ORGANIZATION AND THE THREAT TO THE ORGANIZATION. FURTHER, IT MUST BE RECOGNIZED THAT RISK IS INHERENT IN WAR AND IS INVOLVED IN EVERY MISSION. IT IS COMMON TO BOTH ACTION AND INACTION, BUT INACTION DOES NOT WIN BATTLES. RISKS ARE ALSO RELATED TO GAIN, NORMALLY, GREATER GAINS REQUIRE TAKING GREATER RISKS. AT TIMES, LESS THAN OPTIMAL FORCE SECURITY AND PROTECTION MAY BE NECESSARY DUE TO CALCULATED RISKS INHERENT IN BOLD AND DECISIVE MILITARY OPERATIONS.

SURVIVABILITY IN ANY BATTLEFIELD ENVIRONMENT RESULTS FROM THE COMBINED APPLICATION OF SOUND PROTECTIVE MEASURES AND OPERATIONAL PRACTICES THAT REDUCES VULNERABILITY TO DETECTION, TO ATTACK IF DETECTED AND TO DESTRUCTION IF ATTACKED. HOWEVER, IT MUST BE RECOGNIZED THAT MEASURES TO REDUCE VULNERABILITY TO ONE FORM OF

SURVIVABILITY

- RISK
  - OPERATIONS SECURITY
    - CONCEALMENT
      - DISPERSION
        - SHIELDING
          - INTERLOCKING

ATTACK MAY INCREASE VULNERABILITY TO OTHER FORMS OF ATTACK AND MAY DETRACT FROM THE OVERALL EFFECTIVENESS OF THE FORCE. FOR EXAMPLE, DISPERSION MAY REDUCE VULNERABILITY FROM NUCLEAR ATTACKS, BUT IT INCREASES VULNERABILITY TO INFILTRATION AND POSSIBLE DEFEAT IN DETAIL. MOBILITY, OFFENSIVE MANEUVERS AND OTHER MEASURES ARE EFFECTIVE IN REDUCING VULNERABILITY. AGGRESSIVE INTELLIGENCE GATHERING KEEPS THE COMMANDER INFORMED OF THE ENEMY, PERMITS TIMELY AND EFFECTIVE COUNTERMEASURES AND PREVENTS PREMATURE CONCENTRATION OF FORCES. IT IS PARTICULARLY IMPORTANT TO ORIENT THE INTELLIGENCE SYSTEM TOWARD IDENTIFYING WEAKNESSES IN THE ENEMY'S NUCLEAR STOCKPILE-TO-TARGET SEQUENCE.

THE ENEMY HAS A SOPHISTICATED INTELLIGENCE SYSTEM THAT INCLUDES RESOURCES TO MONITOR COMMUNICATIONS, LOCATE EMITTERS, CONTROL AGENTS LOCATED DEEP IN REAR AREAS AND SEE THE BATTLEFIELD FROM OVERHEAD. COUNTERMEASURES TO THE ENEMY INTELLIGENCE COLLECTION EFFORT ARE DERIVED FROM THE FOUR MAIN PARTS OF OPERATIONS SECURITY; DECEPTION, INFORMATION SECURITY, PHYSICAL SECURITY AND SIGNAL SECURITY. IN PARTICULAR, OPERATIONS SECURITY MUST PREVENT DISCLOSURE OF PLANNED NUCLEAR USE TO PRECLUDE PREEMPTION.

OTHER COUNTERMEAURES INCLUDE CONCEALMENT OF SIGNATURES, PROFILES AND PATTERNS. SIGNATURES DERIVE FROM PHYSICAL PRESENCE, PROFILES DERIVE FROM UNIT ACTIVITY AND PATTERNS DERIVE FROM DOING THINGS THE SAME WAY EACH AND EVERY TIME.

IT WILL NEITHER BE POSSIBLE NOR DESIRABLE TO ATTAIN A DEGREE OF DISPERSION THAT IS DIRECTLY PROPORTIONAL TO THE THREAT NUMBERS AND YIELDS OF NUCLEAR WEAPONS. FORMATIONS TOO DISPERSED INVITE DEFEAT IN DETAIL. THERE IS NO MATHEMATICAL "RULE OF THUMB" THAT IS UNIVERSALLY APPLICABLE TO DISPERSION. THE DEGREE OF DISPERSION POSSIBLE IS THAT WHICH PERMITS MISSION ACCOMPLISHMENT WHILE NOT SUBJECTING THE FORCE TO UNACCEPTABLE RISK. CONSIDERATION OF PHYSICAL SEPARATION DISTANCES - IN ISOLATION - IS MEANINGLESS.

IN MANY INSTANCES, THE SAME MEASURES THAT PROVIDE SECURITY AGAINST DETECTION ALSO PROVIDE A DEGREE OF PROTECTION AGAINST ATTACK, OR MINIMIZE THE EFFECTS OF BEING ATTACKED. TERRAIN SHIELDING NOT ONLY MINIMIZES THE RISKS OF DETECTION, BUT ALSO REDUCES THE EXTENT AND DEGREE OF WEAPONS EFFECTS. ANY COVER, TO INCLUDE NATURAL VEGETATION, REDUCES THERMAL RADIATION SIGNIFICANTLY AND MAY EVEN DIMINISH THE INTENSITY OF NUCLEAR RADIATION. NATURAL AND MANMADE TERRAIN FEATURES MODIFY BLAST WAVES AND, PARTICULARLY ON REVERSE SLOPES, DIMINISH THE INTENSITY OF THE SHOCK FRONT. STANDARD PROTECTION PRACTICES SUCH AS DIGGING IN, FOXHOLES WITH OVERHEAD COVER AND BUTTONING UP ARMORED VEHICLES ATTENUATE ALL NUCLEAR EFFECTS.

IT IS ALSO POSSIBLE TO PROVIDE SURVIVABILITY AGAINST NUCLEAR ATTACK, AT LEAST TO FORWARD ELEMENTS OF CLOSE COMBAT FORCES, BY CLOSING WITH THE ENEMY. COMMANDERS ARE ADVISED TO EMPLOY AGGRESSIVE MANEUVER AND OFFENSIVE ACTIONS THAT CONTRIBUTE BOTH TO THE

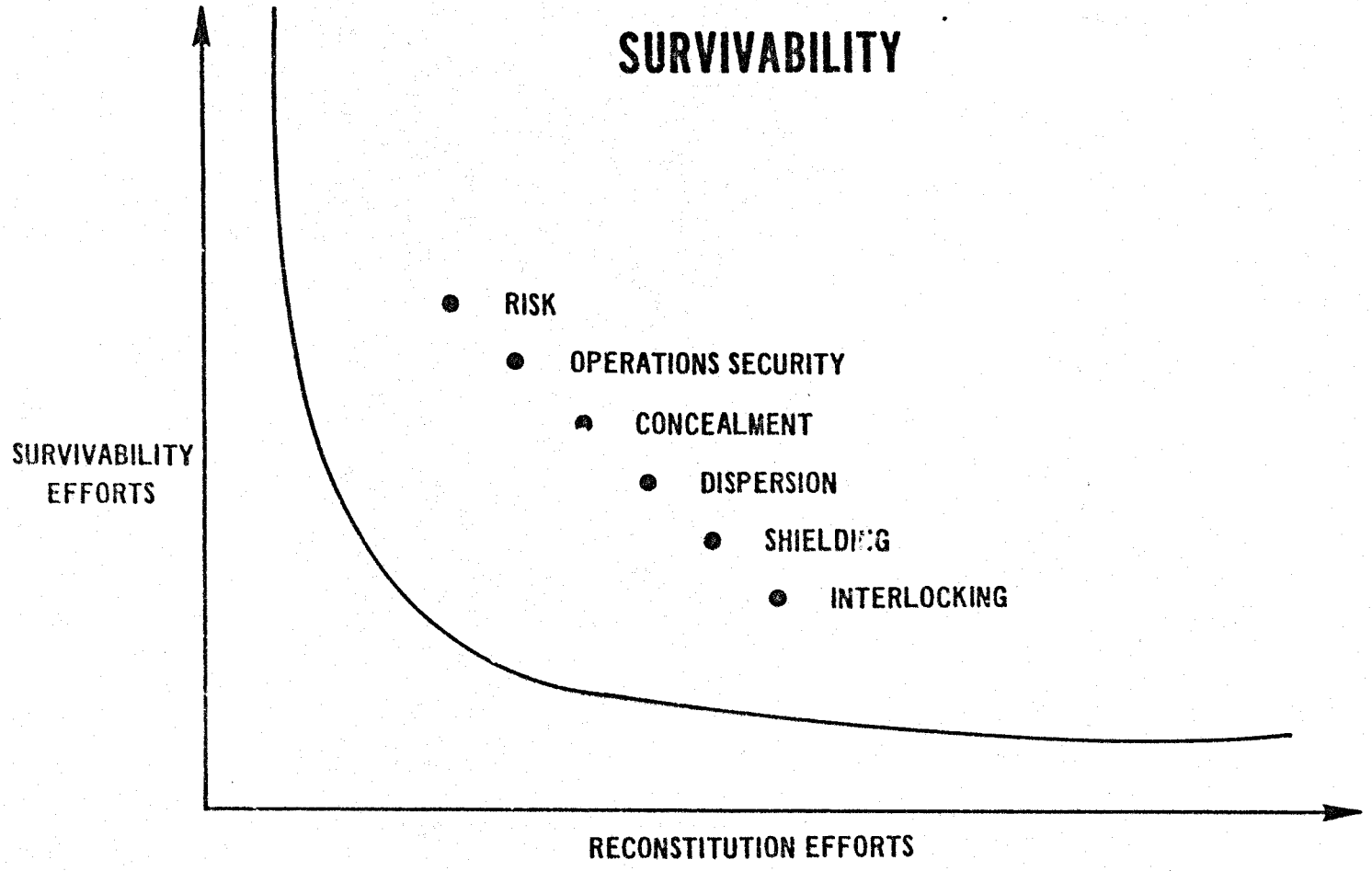
OBJECTIVE OF THE OVERALL OPERATION AND TO OVERALL FORCE SURVIVABILITY. THESE ARE BEST ACCOMPLISHED BY INFILTRATNG AT MULTIPLE POINTS, CONDUCTING SPOILING ATTACKS AND OTHERWISE INTERLOCKING WITH THE ENEMY.

VU-GRAPH 37 OFF

VU-GRAPH 38 ON

REGARDLESS OF MEASURES TAKEN TO ENHANCE FORCE SURVIVABILITY, CLOSE COMBAT FORCES CANNOT OPERATE WITH TOTAL IMPUNITY ON THE MODERN BATTLEFIELD. IN PARTICULAR, THE NUCLEAR ENVIRONMENT DOES NOT ALLOW THE LUXURY OF LONG PERSONNEL AND MATERIEL PIPELINES AND WITHDRAWAL AND REHABILITATION OF UNITS. REORGANIZATION, RECONSTITUTION AND RESTORATION WILL BE ACCOMPLISHED, AT LEAST INITIALLY, FROM RESIDUAL ASSETS. IN ADDITION TO THE ACTIVE AND PASSIVE MEASURES TO PHYSICALLY REDUCE VULNERABILITY, TRAINING AND PRUDENT TASK ORGANIZATION ASSIST IN MAINTAINING OR REGENERATING COMBAT POWER. PSYCHOLOGICAL PREPARATION AND CROSS TRAINING IN INDIVIDUAL TECHNICAL SKILLS FACILITATE UNINTERRUPTED PERFORMANCE OF CRITICAL CONTROL FUNCTIONS AND KEY COMBAT TASKS. FURTHER, CLOSE COMBAT FORCES NOT ONLY MUST BE COMPOSED OF COMBINED ARMS ELEMENTS, THEY MUST ALSO CONTAIN SUFFICIENT SUPPORT FORCES TO SIMPLIFY THE RECONSTITUTION OF TEAMS, CREWS AND UNITS. IN THE FINAL ANALYSIS, THE MORE SURVIVABLE AND THE BETTER PREPARED THE UNIT IS TO ABSORB A NUCLEAR ATTACK, THE LESS EFFORT REQUIRED TO MAINTAIN AND REGENERATE COMBAT POWER.

SURVIVABILITY



A-78

VU-GRAPH 38 OFF

VU-GRAPH 39 ON

IT IS FUNDAMENTAL TO THE SUCCESS OF CONTEMPORARY OPERATIONS AND TACTICS THAT ALL AIRLAND FORCES ARE EMPLOYED IN A COORDINATED, INTEGRATED AND SYNCHRONIZED MANNER TO ATTAIN OVERALL OBJECTIVES. AIR FORCES ARE AN EQUAL PARTNER, AS ARE THE FUNCTIONAL AREAS OF GROUND COMBAT POWER. THE FOREGOING AND BRIEF OUTLINE OF THE REQUIREMENTS FOR EACH OF THE FUNCTIONAL AREAS PROVIDES AN UMBRELLA AND SETS THE STAGE FOR PROPONENTS TO DEVELOP DETAINED DOCTRINE, TACTICS AND PROCEDURES FOR OPERATIONS IN A NUCLEAR ENVIRONMENT. FOR REASONS OF TIME, I WILL DISCUSS ONLY TWO OF THE FUNCTIONAL AREAS - CLOSE COMBAT AND COMBAT SERVICE SUPPORT.

VU-GRAPH 39 OFF

VU-GRAPH 40 ON

CLOSE COMBAT ELEMENTS ARE NORMALLY COMBINED ARMS TEAMS WHICH INCLUDE INFANTRY, ARMOR, ARTILLERY AND COMBAT ENGINEERS AS APPROPRIATE TO MISSION AND OPERATIONAL ENVIRONMENT, WITH EXTERNAL SUPPORT PROVIDED ON AN AS-NEEDED BASIS. IN A NUCLEAR ENVIRONMENT, COMBINED ARMS TEAMS MUST HAVE THE AGILITY TO REPETITIVELY GENERATE DECISIVE COMBAT POWER TO ACCOMPLISH A VARIETY OF TASKS AND MISSIONS WITHOUT THE NEED TO EFFECT MAJOR CHANGES IN TASK ORGANIZATION. THESE TEAMS MUST BE CAPABLE OF SEMI-INDEPENDENT

FUNCTIONAL AREAS

- CLOSE COMBAT
- COMMAND AND CONTROL
- AIR SUPPORT
- FIRE SUPPORT
- AIR DEFENSE
- COMMUNICATIONS
- INTELLIGENCE AND ELECTRONIC WARFARE
- ENGINEER AND MINE WARFARE
- COMBAT SERVICE SUPPORT

CLOSE COMBAT

- COMBINED ARMS TEAMS
  - RELATIVELY STABLE TASK ORGANIZATION
    - SEMI-INDEPENDENT OPERATIONS
      - SELF-SUFFICIENT
        - HIGHLY MOBILE
          - SIMPLE, REDUNDANT COMMAND AND CONTROL
            - DISPERSION
              - PROTECTION

ORGANIZE AND TRAIN IN PEACE AS THEY WILL FIGHT IN WAR

A-81

OPERATIONS FOR PROLONGED PERIODS WITHOUT EXTENSIVE EXTERNAL SUPPORT; THIS REQUIRES A HIGH DEGREE OF SELF-SUFFICIENCY. IN SHORT, THE FULL SPECTRUM OF COMBAT, COMBAT SUPPORT AND COMBAT SERVICE SUPPORT PERSONNEL, SKILLS AND CAPABILITIES MUST BE INTRINSIC TO THE COMBINED ARMS TEAMS. ALL ELEMENTS OF THE COMBINED ARMS TEAM MUST BE ABLE TO TRAVERSE LARGE AREAS OF THE BATTLEFIELD RAPIDLY TO TAKE ON NEW MISSIONS. THEY MUST HAVE SUFFICIENT MOBILITY AND COMMAND AND CONTROL MEANS TO OPERATE AS A TEAM IN DISPERSED AREAS, RAPIDLY MASS AT CRITICAL TIMES AND PLACES AND REDISPERSE BEFORE THE ENEMY CAN REACT. DISPERSION MUST PROVIDE A DEGREE OF SEPARATION BETWEEN COMBINED ARMS TEAMS AND WITHIN TEAMS. THE COMBINED ARMS TEAMS MUST HAVE COMPLEMENTARY CAPABILITIES TO PROVIDE PROTECTION AND SECURITY. THESE INCLUDE GROUND AND AIR INTELLIGENCE COLLECTION MEANS. CONCEALMENT AND DECEPTION MEANS AND ANTI-PERSONNEL, ANTI-ARMOR AND ANTI-AIRCRAFT FIRES. PERHAPS MOST IMPORTANT, EFFECTIVE EMPLOYMENT OF THESE DIVERSE ASSETS IN A SYNCHRONIZED MANNER REQUIRES THAT COMBINED ARMS TEAMS ORGANIZE AND TRAIN IN PEACE AS THEY WILL FIGHT IN WAR.

VU-GRAPH 40 OFF

VU-GRAPH 41 ON

COMBAT SERVICE SUPPORT IS THE LIFE-LINE OF AIRLAND FORCES. IT INCLUDES THE PROVISION OF SUPPLIES, MAINTENANCE, SERVICES, ENERGY, MEDICAL, TRANSPORTATION AND PERSONNEL ADMINISTRATION SUPPORT. COMBAT SERVICE SUPPORT MUST BE ECHELONED ORGANIZATIONALLY

COMBAT SERVICE SUPPORT

- ECHELONED ORGANIZATIONALLY AND GEOGRAPHICALLY
- SMALL, SPECIALLY TAILORED TEAMS – MULTIPLE FUNCTIONS
- ESSENTIAL COMMODITIES ABOVE AUTHORIZED LEVELS
- CACHES OF ESSENTIAL COMMODITIES
- PUSH PACKAGES
- AERIAL DELIVERY
- TIMELY TREATMENT OF MASS CASUALTIES
- RAPID RECONSTITUTION

"ROUTINE, BUSINESS AS USUAL" COMBAT SERVICE SUPPORT IN A NUCLEAR ENVIRONMENT IS AN INVITATION FOR DISASTER.

THROUGHOUT THE FORCE STRUCTURE AND GEOGRAPHICALLY THROUGHOUT THE AREA OF OPERATIONS, TO INCLUDE MAXIMUM USE OF SMALL, SPECIALLY TAILORED TEAMS TO ACCOMPLISH MULTIPLE FUNCTIONS WELL FORWARD.

MEASURES MUST BE TAKEN TO ASSURE AVAILABILITY OF ESSENTIAL COMMODITIES WHERE AND WHEN NEEDED DURING PERIODS CHARACTERIZED BY EXTREME VIOLENCE, STRESS AND CONFUSION. CLOSE COMBAT FORCES MUST MAINTAIN ESSENTIAL COMMODITIES AT OR ABOVE AUTHORIZED LEVELS, ESPECIALLY WHEN STARTING NEW OPERATIONS OR BATTLES. CACHES OF ESSENTIAL COMMODITIES MUST BE POSITIONED THROUGHOUT THE MAIN BATTLE AREA, AND PERHAPS THE COVERING FORCE AREA, WHERE THEY ARE IMMEDIATELY AVAILABLE TO THE COMBINED ARMS TEAMS. THESE CACHES MUST BE REPLENISHED, ABANDONED OR DESTROYED AS THE SITUATION DICTATES AND NEW ONES ESTABLISHED TO SUPPORT THE SCHEME OF MANEUVER. "PUSH PACKAGES" OF ESSENTIAL CONSUMABLES MUST BE DELIVERED TO DEPLOYED FORCES ON A ROUTINE AND SCHEDULED BASIS. AERIAL DELIVERY MAY BE THE ONLY MEANS AVAILABLE TO ACCOMPLISH THIS MISSION. RESUPPLY MUST TAKE PLACE DURING THE HOURS OF DARKNESS AND PERIODS OF REDUCED VISIBILITY.

MEDICAL TRIAGE, TREATMENT AND EVACUATION OF CASUALTIES MUST BE ACCOMPLISHED RAPIDLY AND ON A LARGE SCALE. RECONSTITUTION OF BOTH COMBINED ARMS AND COMBAT SERVICE SUPPORT CAPABILITIES MUST BE ACCOMPLISHED RAPIDLY TO MAINTAIN EFFECTIVE FIGHTING FORCES.

IN SUM, "ROUTINE, BUSINESS AS USUAL" COMBAT SERVICE SUPPORT IN A NUCLEAR ENVIRONMENT IS AN INVITATION TO DISASTER.

VU-GRAPH 41 OFF

VU-GRAPH 42 ON

BY WAY OF SUMMARY, THIS CONCEPT PRESCRIBES THE GENERAL WAY IN WHICH CORPS AND BELOW CONDUCT OPERATIONS IN THE NUCLEAR ENVIRONMENT. IT ADDRESSES THE EFFECTIVE EMPLOYMENT OF NUCLEAR WEAPONS AND, EQUALLY IMPORTANT, THE NEED FOR STRINGENT SURVIVABILITY AND RECONSTITUTION MEASURES. IT IS COMPLEMENTARY TO AND SUPPORTIVE OF CURRENT AND EVOLVING OPERATIONAL CONCEPTS. IT PROVIDES THE UMBRELLA FOR PROPONENTS TO DEVELOP SUPPORTING DOCTRINE, MATERIEL, FORCE STRUCTURES, TACTICS AND TRAINING DIRECTED TOWARD A DEMONSTRATED CAPABILITY TO CONDUCT SUCCESSFUL MILITARY OPERATIONS IN SUCH AN ENVIRONMENT. THE CONCEPT ACKNOWLEDGES DRAMATIC CHANGES IN THE FACE OF THE BATTLEFIELD; HOWEVER, THESE CHANGES CREATE OPPORTUNITIES FOR THE CONDUCT OF SUCCESSFUL OPERATIONS IN DEPTH. SUCH SUCCESS IS DEPENDENT ON RAPID RECOGNITION OF THESE OPPORTUNITIES AND THE TIMELY APPLICATION OF FIRE AND MANEUVER FORCES. THE U.S. ARMY WITH ITS GREATER DECENTRALIZATION OF CONTROL AND UNIT INITIATIVE IS BETTER ABLE THAN SOVIET STYLE FORCES TO SUCCEED IN THIS ENVIRONMENT.

SUMMARY

- NUCLEAR ENVIRONMENT – VIOLENCE, STRESS, CONFUSION, OPPORTUNITY
- TWO ELEMENTS TO UNDERSTAND AND MASTER
  - EFFECTIVE EMPLOYMENT OF NUCLEAR WEAPONS
  - SURVIVABILITY AND RECONSTITUTION
- THIS CONCEPT
  - PRESCRIBES GENERAL WAY CORPS AND BELOW FIGHT
  - COMPLEMENTARY TO AND SUPPORTIVE OF OTHER CONCEPTS
  - PROVIDES UMBRELLA FOR PROPONENTS TO DEVELOP
    - DOCTRINE
    - MATERIEL
    - FORCE STRUCTURES
    - TACTICS
    - TRAINING

VU-GRAPH 42 OFF

( ) THIS CONCLUDES MY PRESENTATION. WE ASK THAT YOU APPROVE THIS CONCEPT FOR PRESENTATION TO ( ).

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