

odern precision firepower does not determine combat against either an entrenched enemy willing to accept losses or one skilled in camouflage, concealment, and deception. In Vietnam, the Persian Gulf, and Kosovo, liberal use of expensive precision weapons produced important results but still left the national leadership the unpalatable choice of accepting the terms of bombing alone or running up a butcher's bill by sending in troops to root out an enemy.

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The time is right for a new operational concept that blends proven strategic principles of the past with the tactical revolution advanced by precision weapons and mobility. This idea involves forcing enemies from foxholes by seizing politically and materially vital areas, thus confronting them with a choice of their own—do nothing and lose or engage superior precision firepower.

The time has come to fight with fires. This concept combines maneuver and fire warfare. Maneuver warfare puts boots on the ground to seize or threaten centers of gravity in the rear, then precision fires destroy enemy forces during the inevitable counterattack. The destabilizing effect of invasion acts as a forcing function. An

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**Report Documentation Page** 

Form Approved OMB No. 0704-0188 Jumping near Aviano air base.



F/A–18C delivering direct attack munitions.

enemy is compelled to react against an immediate threat to political control, yet it is exactly this reaction that exposes it to destruction from precisely targeted fire. Critical to strategists, fighting with fires answers the basic question of whose side time is on.

## **Harnessing the Revolution**

Operational fires, attacking targets deep inside enemy territory with airpower, missiles, and long-range artillery to support theater-wide campaign objectives, have revolutionized modern war. A century ago, battlefields were a few acres in size, and forces not engaged eye-to-eye exerted little direct influence. Today the area can be thousands of square miles, and it is routine to attempt

to win not just battles, but campaigns, by striking targets deep within an enemy's rear.

The revolution in operational fire has not led to a revolution in operational art. Operational fires have proven deadly against troops and vehicles in the open but have been nearly worthless against entrenched forces. Artillery barrages on the Somme, B–17 pickle-barrel bombing in World War II, B–52 strikes in Vietnam, and cruise missile attacks in Kosovo did not win the war against dug-in or concealed troops. Operational fires have only been slightly more effective against mobile or time sensitive targets.

Somewhat paradoxically—and in the face of contrary evidence—operational art has raised the bar for precision firepower, expecting it to compel a political result by the efficient reduction of a carefully tuned not too hot, not too cold target list. Air strikes may cut off reinforcements, and rocket barrages may keep enemy heads down, but ultimately the United States counts on firepower to break the morale of enemy populations, who theoretically and somewhat vaguely spontaneously rise up and depose their own leadership to settle the conflict.



This has not occurred since World War I. Instead, populations tend to dig in and endure. Thus the Army believes with justification that ground forces ultimately settle conflicts by territorial battles. In its view, humble infantrymen

winning control of the seas and exercising day-to-day control demand different types of ships are far from obsolete. The proponents of landpower are generally correct, but unfortunately are afflicted by specifics. Ground forces have poor strategic mobility.

Light infantry can be moved readily, but any sort of mechanized forces involve shipping large numbers of heavy armored vehicles, a sluggish process at best. Second, and more critically, ground assaults entail a high price because soldiers can't execute bloodless warfare. Policymakers fearful of losses and possible collapse of public support are unwilling to rely on ground attacks as their first option.

Future challengers to the United States will know how to counter its strength and exploit weaknesses inherent in large-scale deployment of heavy forces or precision weapons. Mobility, the humble spade, and the well-constructed decoy may have proven enough of a match for high tech weapons to convince an enemy that it might survive combat against the Armed Forces.

## **Asymmetric Responses**

The fleet-in-being principle has been adopted by small nations in confrontations with great powers. The idea of such a fleet is simple: keep a viable fighting force together and occupy enemy assets with the threat of a sortie. Since this force can choose the time and place of attack, its enemy must keep an equal or superior force in battle position continually as a counterweight. Considering the need to rest and refit this masking force, an enemy can tie up a force twice its size. This has made the fleet-in-being a favorite strategy of weak naval forces for centuries.

Recently this classic naval stratagem has been adapted to conflict on land. Enemies have learned that Americans are strong on bombing and weak in mobile logistics and the willingness to absorb casualties. They have come to realize that by avoiding bombs and preserving their assets, the United States will take months to transport strong ground forces to the theater and may never work up the will to commit that force to battle.

Countering this strategy is not easy, but it can be achieved. The weakness of the fleet-inbeing is that minor fleets cannot control the seas. A nation that needs to use the seas must fight whenever it is challenged. And it is this fact, suitably transposed to the land environment, which is key. Fighting with fires is based on the simple proposition of grabbing something an enemy can't afford to lose, then annihilating its forces with operational fires when it tries to reclaim it.

Naval strategists have long acknowledged that winning control of the seas and exercising day-to-day control demand different types of ships. Winning control involves either defeating or threatening to defeat an enemy in a pitched battle. This demands large, powerful vessels—ships of the line, battleships, and carriers. On the other hand, exercising control demands smaller, more numerous forces, such as frigates and cruisers—ships able to both stop enemy shipping and defeat opposing commerce raiders, but not intended to take part in a fleet action.

The same principles apply to warfare on land. Historically, heavy units such as infantry, cavalry, and artillery fight and win battles. But it



Looking through TOW missile launcher.

is light, small units that exercise control over conquered territory: a troop of light cavalry on horseback, a regiment of light fighters, or even an infantry squad in a fighting vehicle. The *petit guerre* for exercising control remains the same.

Thus the concept of fighting with fires calls for deploying a ground force powerful enough to exercise control over land that an enemy cannot concede, yet distant enough that an enemy cannot sim-

ply turn around in its foxholes and fight but must instead redeploy its forces. When an enemy comes out and starts moving toward the ground force, it is defeated in detail.

## **Limits and Limitations**

It is worth mentioning what fighting with fires is not. First, it is not a recipe for dumping ground forces into the midst of an enemy army. The concept calls for inserting a force into an area with light defenses, with a good killing zone between the ground element and enemy main body. Like frigates in the age of sail, the fighting with fires ground force is not put in place to fight major battles. And like frigates, its primary job is taking the objective in a swift operation. It must be equipped to conduct a seizure operation, but it cannot be expected to fight an extended pitched battle in the process. But unlike frigates, the fighting with fires force is the equivalent of a ship-of-the-line in formation. With adequate communications, precision fires can be targeted at a superior enemy during an unexpected encounter.

Second, fighting with fires is not close air support operating under a different name. The latter provides air strikes on the battlefield to support ground forces engaged in a pitched battle. Fighting with fires wipes an enemy out before it closes with the land force with sufficient forces to dislodge it. This is a distinction that may be reduced in practice. The ground commander may be best placed to direct fires, so the result may use



Dismounting on assault course at Fort Hood.

a concept similar to close air support. More likely, however, a covering force will protect inserted troops while massive fire is directed by the joint force air component commander against the main enemy responses.

Third, fighting with fires is not an interdiction strategy. Classical interdiction strategy calls for taking out bridges and other transportation chokepoints to isolate the battlefield and prevent an enemy from bringing up reinforcements. Fighting with fires may use interdiction to channel the foe onto the killing ground, but the intent is cut an enemy down, not to cut an enemy off. With this approach, chokepoints are places to find targets rather than targets in themselves. However, interdiction could be achieved as a byproduct of the main operation.

## **Concepts and Criteria**

One key to fighting with fires is picking ground targets. Most nations have a handful of

several aspects of a fighting with fires approach will not work without a ground element

major cities, each of which is a high-value political and industrial target. Over the centuries laying siege to capitals has proven one of the best ways to com-

pel an enemy to fight or yield. Other potential targets for seizure are moderate-value, low-population areas, especially areas disaffected from central governments. Seizing high-traffic chokepoints is also useful. Blocking key mountain passes, stretches of rivers, or road networks might lead to economic collapse. Finally, there is the potential for flushing an enemy out into the open

not by seizing any particular objective, but simply through presence in the rear. It has long been acknowledged that movement creates doubt for one's enemies and opportunities for oneself.

No new operational art evolves without force structure implications. Several aspects of combined arms warfare for a fighting with fires approach warrant consideration. The concept will not work without a ground element. A coalition approach offers one solution. Instead of using American troops, forces of local allies, or even an internal opposition movement can be employed to seize and hold ground while the United States provides operational fires that destroy enemy combat forces, though for maximum flexibility the Nation should maintain its own ground insertion capability.

Fighting with fires also has consequences for research, development, and procurement. Major requirements include:

Lighter ground forces. Some progress has been made in this arena over the last few years, but much of the focus has been on trying to equip rapidly deployed American troops to fight in urban environments. Opponents of lighter forces have noted that while light infantry equipped with light armored vehicles may be fine for peacekeeping or counterinsurgency, they will not last long against armored forces. The number one priority must be to find the right balance between organic firepower and mobility for ground forces.

All-weather operational fire capability. The United States can deliver operational fires at night or in poor weather. But the challenge is introducing this capability across the joint force.

Saturation reconnaissance capabilities. Fighting with fires requires that an enemy be both detected and destroyed before it can engage friendly ground forces. This implies reconnaissance systems with a genuine saturation capability. Continuous support is essential. Systems like the RQ-4 Global Hawk UAV can provide such coverage and will be needed in future operations.

Fire management. Fighting with fires demands not only fast reconnaissance, but flexible operational firepower. And this depends on fire management, the ability to put ordnance on the right target at the precise moment that an attack will achieve maximum effect. The Armed Forces have the capability to send mobile target locations to strike aircraft in flight, and tests show that imagery can be sent with target coordinates. Unmanned weapons such as Tactical Tomahawk will have a similar real-time update capability in the near future.

Target management. Solving this problem is the greatest need and hinges on eliminating intelligence stovepipes and ensuring real-time retasking of operational fire assets. Procedures involve



extensive imagery analysis to support strike planning cells for the joint force air component commander, which plugs targets into the air tasking order for the next day. Such a process is not sufficiently responsive for new operational concepts. A new system is needed in which imagery (by saturation reconnaissance) is fed to fire controllers, who can quickly call on ready operational fires. Future campaigns will demand artillery-like timelines for operational fire support.

High-speed logistics. Rapid insertion of a ground force will demand a lot of logistical support preferably not shackled to airfields. This may require special transport. Perhaps the true answer is an amphibious transport aircraft, capable of exploiting rivers and lakes as runways to deliver equipment where it is most needed.

Overload suppression of enemy air defense and electronic warfare capability. Logistics are quite likely to be conducted over an air bridge. The supply effort must be resilient in the face of

enemy air defenses. In Kosovo, the Serbs adopted a fleet-in-being strategy with an air defense net, never turning the whole thing on at one time and thus preserving their assets to fight another day. It worked, so the U.S. military is likely to see this approach again. As a counter, an air and electronic blockade capability is needed. Instead of launching a handful of planes to fly defense suppression and jamming missions for the few minutes of an air strike, a joint task force will need platforms that can loiter over the battlefield until enemy defense radars are either turned on or fire surface-to-air missiles—and then instantly reply with jamming, antiradiation weapons, and fire missions. Unmanned combat aerial vehicles may be part of the solution.

Air supremacy. Logistic and firepower support must not be vulnerable to air intercept. The future airspace is going to be hostile with sensitive netted defenses and highly lethal fighters. Fighting with fires puts a premium on dominating the skies. The F–22 program is the only effort to combine necessary qualities in a single platform which can ensure air dominance.

Non-lethal weapons. Various non-lethal capabilities will be required to minimize collateral damage and civilian casualties. This will allow commanders to focus on military forces and reduce concerns over the civilian populace.

Redundant secure communications. To the fighting with fires force, physical encirclement is far less threatening than interdicting communication. Without communications, operations will become extremely high risk.

Extraction. The fighting with fires force must disengage and withdraw as effectively as it is inserted. Under no circumstances must the force be left hostage to an enemy.

Joint concept of operations. Forces can come from the Army or Marine Corps, depending on the circumstances. Firepower can come from any service. Communications, terminology, and fire procedures must be transparent. Jointness is essential. No service can provide the capabilities to ensure effective employment. Not only is a multiservice approach crucial, but the integration of systems will have to be fully operational from the opening moment of the campaign.

Precision warfare is an inadequate basis for the future. Simply dropping more bombs will not solve the problem. Fighting with fires provides a new operational dimension that can stymie potential asymmetric responses such as the fleetin-being strategy. But to realize this concept the Nation must make investments to place a more agile and lethal force on the battlefield.