



## PITFALLS AND LIMITATIONS

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[Strategic attack](#) (SA) has a proven record of success, but it has also failed in application in a number of cases. Failure was generally due to poor understanding of the enemy or of the pitfalls inherent in a conceptually difficult form of force application. Success requires careful planning; thorough, sophisticated understanding of the enemy; complete knowledge of one's own capabilities, requirements, and vulnerabilities; and anticipation of the effects that problems like friction, incrementalism, poor prioritization, and restraints/constraints can have on operations.

### Friction

The workings of chance and the natural inertia that exist within any large organization, like a military force, play havoc in all forms of warfare. There are, however, elements of Clausewitz's concept of "friction" that uniquely influence very complex operations like SA. These include, but are not limited to:

- ★ **Imperfect Knowledge and Misunderstanding.** All forms of warfare may suffer from imperfect understanding of the enemy and their motivations, but SA will almost certainly fail if the enemy is seriously misjudged. Such was the case in Vietnam, where both the military and civilian authorities misunderstood the nature of the conflict and the enemy's degree of resolve. This resulted in part from "mirror-imaging," assuming that the enemy's motivations and priorities are similar to our own. Planners and commanders can guard against the dangers inherent in imperfect knowledge (but not eliminate them entirely) by trying to understand the conflict from the enemy's perspective.
- ★ A "[Target Servicing](#)" or [Attritional Mindset](#). One of the sources of friction inherent in much US warfighting has been the devolution of effects-based planning and execution into a simplistic approach focused on attrition of enemy systems or the servicing of target lists. This occurs because the latter approach is conceptually simpler and is easier to implement in practice. If enemy fielded forces are the focus of the airpower effort, such a mindset may not significantly hamper operations, even though it is fundamentally a less efficient way to approach warfighting. In SA operations, however, such an approach is almost always harmful. A robust effects-based approach to warfighting, enforced by commanders, is the best means to avoid a shift to target-servicing or attrition.

- ★ **Unintended [Direct Effects](#)—Collateral Damage.** US forces will always be directed to minimize civilian casualties and mitigate collateral damage. The US is committed to adhering to the Geneva Conventions and other international laws and customs pertaining to the way we conduct war and armed conflict. The goodwill of the populations in those countries whose ruling regimes we are fighting is often crucial, so unnecessary collateral damage should be avoided. When it does occur, it may destroy goodwill and encourage the population to stand with the regime we are fighting. It may also significantly hamper our operations, often by making commanders or national leaders more cautious.

This happened following the coalition bombing of the al Firdos [command and control](#) (C2) bunker in Baghdad during Operation DESERT STORM. As a major national military command center, this was a legitimate and legal target for SA, but the unfortunate fact that the attack killed many civilians the Iraqi regime had quartered in its top levels harmed US efforts publicly and hampered strikes on targets near the center of Baghdad for the rest of the war.

Also, while the US must fight to win, collateral damage may complicate reconstruction and stability operations efforts and diminish popular support for military operations, thus directly hampering attainment of the desired end state. Careful planning, especially for intelligence collection and communication requirements, and precise crafting of rules of engagement can mitigate some of the risks of unintended consequences and collateral damage, but cannot eliminate them entirely.

- ★ **Unintended [Indirect Effects](#).** The cause and effect chain is usually very complex in SA operations and some actions will almost certainly entail consequences that cannot be foreseen. These consequences can be good or bad from the friendly perspective, but some will inevitably hurt friendly efforts. An example of both followed in the wake of the Doolittle Raid: many indirect results of the raid were favorable and helped shorten the war, but the raid also provoked the Japanese into a major retaliatory campaign in eastern China, which cost the Allies tens of thousands of casualties.

- ★ **“Kill Chain” Considerations.** A form of friction inherent in the way US forces are organized and controlled may affect the prosecution of time-sensitive or fleeting strategic targets. Striking such targets will likely have high-level political implications and therefore may require approval from the [joint force commander](#) (JFC) or even the President. The unique political nature of SA may, of necessity, add layers and seams to the target approval process, which costs the executing commander time. Successful strikes, however, may require swift action. This essential tension has led to the escape of important fleeting targets in the past. Modern communication technology has made it possible to compress the time required to [find, fix, track, target, engage, and assess](#) such targets, but has not compressed approval time involved in attacking them. In fact, it may even lengthen the time required to obtain approval to attack politically sensitive targets. Effective operations against such targets require careful planning beforehand and thorough understanding of the risks

and consequences of ad hoc SA without careful prior coordination at all levels of command, and a shared view of the intent of commanders above the [commander, Air Force forces](#) (COMAFFOR) / [joint force air component commander's](#) (JFACC) level.

## Failure of Analysis

- ✦ Sometimes the intelligence preparation process is simply wrong in choosing COGs or their critical vulnerabilities. Among the more famous examples is the case of Allied operations analysts during WWII choosing the German ball bearing factories as a focus for attack. For purposes of analysis, Allied analysts assumed German industry was a static and unreactive system. This was not the case; the Germans adapted through numerous workarounds and the subsequent Allied attacks on ball bearings were costly and largely ineffective. Assuming a static, unreactive enemy is often the cause of analysis failures. Strategists should never lose sight of the fact that the enemy is a thinking, adaptive agent and that war is fundamentally a contest of wills. Wargaming friendly [courses of action](#) (COA) against the gamut of potential enemy COAs, a process built into the joint planning construct, is the best way to avoid such failures, but no method is foolproof. Planners should expect that the enemy will aggressively attempt to defeat US SA efforts by continually adapting its defensive strategies.
- ✦ History has shown that one of the most powerful methods of defeating an enemy is to impose shock upon them. In many cases, the most efficient use of SA is to impose shock directly upon enemy leadership or upon an entire enemy system at the strategic level. Such a strategy may not be appropriate for all conflicts. Nonetheless, in those cases where it is possible and appropriate, there may be pressure on commanders to employ force incrementally or sequentially, in ways that prevent the imposition of system-wide shock and dislocation (“gradualism”). This may arise from a lack of understanding of the nature of armed conflict on the part of higher-level leadership (as was the case with President Johnson and Secretary of Defense McNamara during Vietnam). It may also arise if the military personnel prosecuting a conflict devolve into a “target-servicing” or attritional mindset. The first problem may be intractable from the COMAFFOR’s perspective (although commanders should make the effort to convince those “up the chain” of the correct course of action), but the second can be combated with thorough planning and conscious maintenance of an effects-based approach throughout a conflict.
- ✦ Technical or physical limitations may also force incremental or sequential operations, as the limitations of existing weapon systems did during WW II and Vietnam. Lack of available resources may do so as well. Planners and commanders must be flexible and adaptive, always prepared to seek the highest “payoff” for the least “cost” in operations. The increasing sophistication of the planning tools used for SA may help ameliorate some of these considerations.

## Poor Prioritization

The prioritization of SA missions versus others may create dilemmas for the JFACC as well as the JFC. Airpower is immensely flexible and capable and will always be pulled in different directions by competing demands. Since SA represents the highest potential payoff, commanders should avoid the temptation to divert resources from it to service the operational- or tactical-level fight, unless it is necessary in the JFC's view to affect. Near-term parts of the fight may be more urgent, but they are not necessarily more important. The temptation to divert resources may be exacerbated by the fact that it is sometimes difficult to perceive progress toward SA's objectives until they are met. As a general rule, SA should constitute an operation's highest priority unless the JFC deems other efforts essential for attainment of the operation's objectives or survival of some part of the joint force is threatened.

## Restraints and Constraints

Commanders operate within political, legal, and diplomatic restraints and constraints that may force less than optimal uses of military power and should consider them during planning and employment. Restraints prohibit certain actions; constraints compel them. Commanders should realize that political considerations may limit or meter the pace of a campaign, and may even dictate incremental or sequential air operations. During Operation ALLIED FORCE (OAF), an early gradual approach to the campaign was a political necessity until consensus developed among NATO allies that stronger military force would be necessary to prevail. Some research suggests that this benefited the NATO effort by affording escalation dominance. In other cases, however, restrictions may hamper even combined SA and diplomatic efforts and prevent effective coercion, as happened during ROLLING THUNDER.

In conducting SA, commanders are constrained under the law of war by their obligation to minimize enemy civilian casualties. Their need to minimize friendly combatant casualties is another necessary constraint. Additionally, commanders are restrained from striking targets of special cultural, religious, or humanitarian significance, as these objects are protected under the law of war (see the [Department of Defense Law of War Manual](#), paragraph 5.8, for appropriate guidance). Commanders are constrained to minimize friendly combatant and enemy civilian casualties. Restraint and constraint challenges include:

- ✦ Proactively articulating how SA operations can achieve the [combatant commander's](#) objectives for the existing political and diplomatic situation. It may help to point out that SA often offers the least expensive alternative in terms of physical destruction.
- ✦ Monitoring the political and diplomatic situation to anticipate events and circumstances that affect SA operations.
- ✦ Developing and implementing proactive strategic communication operations to establish and maintain the credibility and legitimacy of SA options within the information environment.

- ✦ Developing alternative plan branches and sequels based on probable changes in the political and diplomatic environment.

### **Failure of Assessment**

[Assessment](#) failures can degrade effectiveness, cause unnecessary expenditure of resources, or even cause SA operations to fail. Such problems most often result from a lack of assessment planning. In Operation DESERT STORM, almost no assessment planning was done and all echelons in the process lacked trained personnel and other resources. As a result, many important targets, like [weapons of mass destruction](#) storage facilities and electrical system components, were struck again and again, long after initial precision strikes had destroyed them. While this did not cause operations to fail, it did divert scarce resources from other priorities and place flyers at risk over well-defended targets. Robust assessment and intelligence, surveillance and reconnaissance collection planning are the best preventive measures.

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