

**FOCUS:** Morale and Targeting

# Exploiting the Psychological Effect of Airpower

## A Guide for the Operational Commander\*

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*Air power is, above all, a psychological weapon—and only the short-sighted soldiers, too battle-minded, underrate the importance of psychological factors in war.*

—B. H. Liddell Hart



THE PRIMARY ROLE of airpower in our nation's defense has been hotly debated since the aircraft was first introduced into combat. The ability to exploit the third dimension of the battle space is what gives combat aircraft their uniqueness and is the source of airpower's strength. It is the airman's responsibility to exploit this third dimension both to protect our own forces from attack and to directly or indirectly reduce the combat capability of the enemy forces through the proper application of airpower. A force vulnerable to attack from the air is a force with an exposed flank. Airpower's primary mission at the operational level of war is to expose that "third flank" and exploit it by all effective means to reduce or destroy the enemy force's ability to wage war.

The attempt to reduce or destroy a force's ability to wage war has two possible aspects—the physical and the psychological. The phys-

ical aspect deals with the denial, damage, or destruction of the tangible items the enemy requires to wage war. Weapons, equipment, vehicles, roads, and so forth are all viable physical targets that should be rendered useless so enemy forces cannot rely on them to wage war. The psychological aspect deals with the denial, damage, or destruction of intangible items the enemy needs to wage war. Here, the "hearts and minds" of the enemy's fighting forces are targeted, and the desired effect is to render those forces unable or unwilling to use the weapons, equipment, vehicles, roads, and so forth required to wage war. Degradation or destruction of the enemy force's will to use tangible war-making assets has the same effect on combat capability as actually degrading or destroying tangible assets. Attacking enemy critical vulnerabilities for both physical and psychological effect can produce a synergistic result on the enemy force's capacity to wage war.

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Airpower has demonstrated its capability against the physical assets of our enemies throughout history. However, its capability against the psychological assets of our enemies is often misunderstood and underutilized. An understanding of airpower's inherent strengths in the psychological dimension can return great dividends at the operational level of war. This understanding, properly applied by the operational commander and both air and ground force campaign planners, can significantly improve the efficiency of our operations and the probability of their success.

## Stress and Fear on the Battlefield

*Loss of hope, rather than loss of life, is the factor that really decides wars, battles, and even the smallest combats. The all-time experience of warfare shows that when men reach the point where they see, or feel, that further effort and sacrifice can do no more than delay the end, they commonly lose the will to spin it out and bow to the inevitable.*

—B. H. Liddell Hart

Stress and fear are inherent to any battlefield, and their effect on fighting forces is significant. During studies conducted on combatants in World War II, 68 percent of the men involved "admitted that not only had they experienced fear and anxiety at some time in combat, but also that they had experienced it at a level that prevented them from completing their duties."<sup>1</sup> This high percentage of combatants that actually admitted to at least brief impairment in mission capability in battle gives credence to the belief that no fighting man is immune from the stresses of combat and that every man has a breaking point. Of particular note is a quote from the *Marine Corps Gazette* on the subject that "there is no such person as the soldier who is dauntless under all conditions of combat. There is no such unit as the company that stays good or the company that is shockproof . . . every Marine has a breaking point if the stresses are strong enough and of long enough dura-

tion."<sup>2</sup> The fear, stress, and anxiety felt by those engaged in combat derive from many stressors present on the battlefield. A. P. N. Lambert lists 14 of these stressors in his book *The Psychology of Airpower*. Let's focus on six that are particularly applicable to the effects of airpower at the operational level of war.

### ***Claustrophobia***

The loss of personal movement amplifies the effects of the other stressors. The loss of movement on the battlefield denies the soldier his instinctive reaction to stress, increased physical activity. Accounts of soldiers' battlefield experiences also connect this personal immobility with a loss of the sense of time.<sup>3</sup>

### ***Noise***

Exposure to irregular and high levels of noise can preclude the ability to think clearly. Inexperienced troops often incorrectly correlate the level of noise a weapon produces with its expected lethality. An excellent example of purposely using noise to enhance a weapon's effect was the German use of the Stuka dive bomber early in World War II. In one instance, a British officer recounts that after one particular attack that caused relatively little physical damage, his unit was "absolutely shattered" psychologically.<sup>4</sup> The distinctive sound of a Stuka attack often generated so much fear that the noise caused more damage than the munitions the aircraft delivered.

### ***Ignorance***

The lack of knowledge provides a fertile breeding ground for all sorts of counterproductive activities. When troops are unaware or unsure of either enemy or friendly positions, movements, or intentions, their situation is ripe for the festering of fear, rumors, and panic. In *Men against Fire*, renowned combat historian S. L. A. Marshall chronicles several instances during World War II in which an unplanned, unannounced, or misunderstood movement to the rear by an individual or small group during battle led to the inad-

vertent withdrawal of a much larger group. In each case, Marshall noted that the sight of the individuals running to the rear was not the root cause of the panic. In each instance, the stimulus for panic was the lack of knowledge as to *why* that movement was happening. This panic led the uninformed troops to join in the rearward movement, in some instances believing that a command to retreat had been issued and they had somehow missed it.<sup>5</sup>

#### ***Isolation***

Forces vulnerable to attack will naturally disperse, and the soldier may find himself rather alone in a time of great danger. The soldier's fear is amplified when he is isolated without the reinforcement of his comrades enduring a shared experience. Describing being caught in a mortar attack while separated from friendly lines during the Korean War, S. L. A. Marshall admitted that the terror he felt was nearly overwhelming. To use his own words, "Be a man ever so accustomed to fire, experiencing it when he is alone and unobserved produces shock that is indescribable."<sup>6</sup>

#### ***Fatigue***

Lack of sleep and a shortage of basic personal needs (food, water, and hygiene) contribute to fatigue. The importance of providing for the basic human necessities cannot be overstated. In one telling example, a German captain confronted with a case of insubordination (refusal to man assigned positions) within one of his platoons during the battle of Stalingrad, allowed the offenders to eat and sleep at his quarters that night. In the morning, he had no trouble in convincing them to return to their posts and continue fighting.<sup>7</sup>

#### ***Helplessness***

The feeling of not being able to fight back is a major combat stressor. This often stems from a belief that the enemy's weapons are superior and one has no defense. This leads to feelings of impotence and lack of control. These feelings often lead to panic. The first use of the tank by the British in 1916 caused

extreme panic within the German trenches due to the perception that they were totally defenseless against this new and unexpected weapon.<sup>8</sup>

Airpower is well suited to deliver these stressors to the other side of the battlefield and focus them on the enemy's deployed forces. Combined, these stressors can lead to the feeling of hopelessness that, as Liddell Hart reminds us in the opening quote, is catastrophic to a fighting force. Well-planned and executed air operations can successfully increase the levels of fatigue, helplessness, noise, claustrophobia, isolation, and ignorance to a point where enemy forces are mentally unable or just plain unwilling to perform their duties effectively.

### Planning to Exploit the Stressors

*The process of linking ends and means is a crucial yet too often overlooked requirement for the aerospace strategist. The ultimate results are often psychological in nature; war is after all a human endeavor. . . . Understanding the links between cause and either physical or psychological effect is a key part of aerospace planning.*

—Air Force Doctrine Document (AFDD) 2-1, "Air Warfare" (draft)

The planning stage of an operation is where an understanding of these stressors and how best to use airpower to increase them should be integrated with the operational plan to enhance the psychological decay and defeat of the enemy. There are three major aspects of planning that I will discuss: targeting, timing, and integration of air operations with a robust psychological operations (PSYOP) plan.

#### ***Targeting***

One of the greatest controversies surrounding the use of airpower has always been what to hit, when, and how. In a nutshell, that is targeting. All too often, the planner focuses entirely on the destruction of equipment and

not on the degradation of capability. Capability is the combination of the tangible assets required to make war and the knowledge, will, and courage of the fighting forces to operate those tangible assets. Destruction is useful, but it is not the only way to degrade capability. If the planner focuses only on destruction, he limits the effects of his plan to the physical assets of the enemy. If, on the other hand, the planner focuses his efforts on the enemy's true war-fighting capacity, he leaves himself open to exploit both the physical and psychological aspects of the battlefield and may be able to reach the same operationally relevant result with much more economy of force. This is what is known as targeting for effects as opposed to targeting for destruction.<sup>9</sup> I recommend three types of targets for their potential psychological effects: air defenses, troops, and logistics. The targets themselves offer nothing new or revolutionary, as they would normally be found on any air planner's target list. What is different



A B-52 is loaded with 750-pound bombs during Operation Desert Storm.

about my recommendations is the intended effect of attacking these targets.

**Air Defense.** He who controls the airspace above the battlefield can use that space to maneuver and attack from where he wants and when he wants. Gen Erwin Rommel understood this advantage well, lamenting in his personal papers that “anyone who has to fight, even with the most modern weapons, against an enemy in complete control of the air fights like a savage against modern European troops, under the same handicap, and with the same chance of success.”<sup>10</sup> This freedom of maneuver, the ability to strike anywhere and everywhere, gives airpower the illusion of omnipotence. A perception of enemy omnipotence increases a soldier's feelings of isolation and helplessness because he has nowhere to turn for help. It restricts his movement and increases his fatigue because there is no place or time of day that he is not under the constant threat of attack. He is left to wonder, in his ignorance, why there is no defense. The objective is to make the enemy believe that he is defenseless against our airpower. In his study of US air operations from the Korean War to Desert Storm, Stephen Hosmer found compelling evidence that when aircraft were able to attack with virtual impunity, enemy forces were significantly demoralized.<sup>11</sup> The result of this demoralization was a reduced capacity to fight. Regardless of the amount of physical damage they sustain during these attacks, if the enemy perceives that we are paying little or no price for our air action, he will assume that there would be little or no reason for us to stop or reduce the intensity of that action. This sense of futility and the inability to see an “end in sight” greatly increases the enemy's perception of impotence and helplessness. The frustration of watching seemingly omnipotent coalition aircraft go unchallenged in the skies over the Kuwaiti theater of operations (KTO) was captured in an Iraqi soldier's diary. After experiencing 21 days of coalition air operations, he wrote that “the enemy planes patrol the skies bombing as if in their own skies. There is no worthy resistance except from here and there.

We don't know the secret behind that. Are they saving their resistance until the expected ground attack starts? We don't know!"<sup>12</sup> Air superiority must continue to be the primary objective of future air operations plans, not just for obvious force protection benefits but also for their exploitable psychological effects on enemy forces. Offensive counterair (OCA) and suppression of enemy air defense (SEAD) missions must have leading roles in a well-choreographed operational dance.

**Troops.** The enemy's deployed forces are also a target that should be attacked for both physical and psychological benefit. The physical benefits of destroying the enemy's equipment and killing his troops are obvious. However, the psychological benefits are more subtle and can differ depending on the types of weapons used. There are distinct differences in the effects of precision-guided munitions (PGM) and unguided munitions. The obvious benefit of using PGMs from the physical-effect aspect, is the increased probability of killing or damaging targets while decreasing the probability of collateral damage. The psychological effects of PGMs are often different between noncombatants and combatants. Due to reduced probability for collateral damage, noncombatants are much less fearful of a PGM strike than one carried out by unguided munitions. This was evidenced perfectly during the December 1998 Desert Fox strikes against Iraq. The average citizens in Baghdad paid little attention to the action and went about their normal routine. Their confidence that the US strikes would be confined to military targets led to a very low estimate of personal danger. Combatants, on the other hand, often react differently, especially when they are responsible for manning and operating those targets. If they have a similar confidence in US PGM capability and accuracy and they believe their weapons, equipment, building, installation or area to be a target, they may take measures to put some "survivability distance" between themselves and that target. While this action may have very little exploitation value in the type of static, surgical-strike police action strategy we

have employed against Iraq for the last eight years, it is extremely exploitable if ground action is scheduled against those targets. During Desert Storm, a tactic known as "tank plinking" was developed to increase the reliability of air-strike battle damage assessment (BDA). The basic idea was to use PGMs against Iraqi armor in the KTO at night. The F-111 and F-15E aircraft could easily detect these targets with their forward looking infrared radar (FLIR), and the GBU-12 proved itself a capable tank killer with a direct hit.<sup>13</sup> While the physical effects of 19 nights of tank plinking were significant to the subsequent ground offensive, they were minuscule when compared to the psychological effects those sorties had on the armored forces in the KTO. The effect of random tanks blowing up sporadically throughout the night drove those tank crews to seek shelter a safe distance away from their weapons. The amount of equipment the fleeing Iraqis left behind was staggering, but the truly amazing fact is just how much of that equipment had been abandoned well before it was ever directly threatened by coalition fire. A joint intelligence survey team conducting a postwar physical inspection of Iraqi armored vehicles remaining on the battlefield found that only slightly more than half of the tanks inspected had been hit by coalition fire. More significantly, in the team's estimation, only a few of those tanks actually hit by fire were occupied by the crews at the time they were hit.<sup>14</sup> A captured Iraqi general summed up the common feeling of helplessness among Iraqi tank crews by saying, "During the Iran War, my tank was my friend because I could sleep in it and know I was safe . . . none of my troops (in Desert Storm) would get near a tank at night because they kept blowing up."<sup>15</sup> By the time the ground offensive started, it was apparent that airpower had convinced a significant number of the enemy that the best tactic for survival was to separate themselves from their weapons.

PGMs are not a requirement to get a psychological bang for your buck when targeting troops. Unguided munitions bring utility to the effort as well. Along with tank plinking,

we were continuously targeting the Iraqi troops in the KTO with enormous quantities of unguided munitions as well. Gen H. Norman Schwarzkopf intended to “destroy Iraqi morale by physically annihilating one of the Republican Guard divisions” with B-52s.<sup>16</sup> His aim included exploiting the psychological dividends of airpower, but primarily through destruction. In actuality, the physical damage to the fighting equipment of these divisions was light, but the strikes still had extreme psychological effect and operational payback. The noise, intensity, and duration of the B-52 strikes made them the most feared type of attack for a significant number of Iraqi soldiers. B-52 strikes have provided significant emotional events in the lives of survivors since their first combat use in Vietnam. A Vietcong minister of justice described it as like “being caught in the Apocalypse” and explained that “one lost control of bodily functions as the mind screamed incomprehensible orders to get out.”<sup>17</sup> The strikes create a claustrophobic effect. The mind wants to run, but the incredible noise and shock from a stick of 72 Mk-82s pin the body down. While the B-52 attacks in the KTO were originally conceived as a destruction mission, the decision to continue these attacks at night was made for psychological reasons. The intent was to keep the target units awake and add fatigue to their cumulative list of stressors. To this end, the B-52 proved a very effective weapon. One senior Iraqi officer complained that he could hardly sleep more than two hours at a time and that the constant pounding shattered his men’s nerves to a point that they nearly went mad.<sup>18</sup> Surprisingly, this effect was due more to the experience of living through an attack, not the probability of being killed during one. That same Iraqi officer admitted that the B-52 raids actually produced relatively light casualties in his unit.<sup>19</sup> An amazing point gained from prisoner of war (POW) interviews after the war was that the intensity of the B-52 strikes actually had a psychological effect on the forces that were never actually attacked by the B-52s. The strikes could be felt and heard by units as far away as 40 kilome-

ters. The B-52 was so universally feared that in one instance a troop commander identified it as the sole reason he surrendered his troops to advancing coalition forces. Reminded by an interrogator that his position was never attacked by B-52s, he stated, “That is true, but I had seen one that *had* been attacked.”<sup>20</sup>

**Logistics.** In the earlier discussion of the different combat stressors, I mentioned the importance of adequate food and water to prevent fatigue. Hosmer’s analysis of the Korean and Gulf wars points out the correlation between effective supply interdiction air operations and periods of high surrender rates during combat. Over 65 percent of Chinese soldiers surrendering during the spring offensive of United Nations (UN) forces in 1951 told their interrogators that rations were inadequate, and some reported that their units were so short of food that troops were forced to eat grass and roots.<sup>21</sup> Iraqi infantry units in southern Kuwait were so drastically short of food and fresh water that some Iraqi officers believed that had the coalition ground offensive been delayed another two weeks, the Iraqi high command may have had to withdraw its frontline units to avoid logistical strangulation.<sup>22</sup> The situation in Korea was due mainly to classic interdiction operations against bridges, rail lines, and supply depots, while the Iraqis were more affected by the loss of frontline units’ rolling stock and the lack of drivers willing to risk movement to and from the depots.<sup>23</sup> The common connecting ties are that both were products of airpower and both decreased the ability and will of enemy forces to wage war.

#### **Timing**

The timing of air operations is equally important to targeting. The question of when to strike is as critical as what to strike. In order to exploit the psychological effects of airpower, the operational commander must plan for air operations that are sustained and closely integrated with ground operations.

**Sustained Operations.** One of the most enlightening results of Hosmer’s analysis of air operations in Korea, Vietnam, and Desert

Storm is the difference in the psychological success of the operations compared to their duration and intensity. During periods of both the Korean War and Desert Storm when large numbers of enemy combatants surrendered, the troops had been subjected to sustained air attacks over a significant period of time. During both the 1950 and 1951 routs, the Chinese forces had been on the offensive for several months and had been constantly under attack by UN air forces. The Iraqis in the KTO had been continuously under attack (or the threat of imminent attack) for 38 straight days without respite. By contrast, the communist forces in Vietnam, while often attacked violently, were never brought under sustained air attack. Communist forces would engage in brief battles and then withdraw to rear areas where they were able to rest and reconstitute.<sup>24</sup> Around-the-clock operations will be necessary to deprive the enemy troops of sleep. Along with food and water, adequate sleep is an integral part of preempting fatigue. If people are totally deprived of sleep for 24 hours, their efficiency is reduced; for 48 hours their efficiency is severely restricted; and after 72 hours it is nonexistent.<sup>25</sup> Any break in the air operations could be extremely counterproductive to exploiting any previously gained psychological benefits because a soldier's reconstitution time can be rather short. In the instance cited earlier, the German soldiers at Stalingrad were able to return to their posts after one night's decent rest and one meal. In a separate example from the battle for Monte Cassino during World War II, German officers were able to send soldiers back (without coercion) to the very posts they had run away from after approximately two hours' worth of rest and food in a rear area secured from air and artillery attack.<sup>26</sup>

**The Importance of Coordinated Ground Operations.** Airpower is very capable of delivering and increasing the psychological stressors that reduce a force's combat capability, but it is not very good at cashing in on the rewards. This strikes at the heart of airpower's responsibility to prepare the operational battlefield. A reduction of enemy ground force combat



*A military headquarters and barracks used by Iraqi troops during the occupation of Kuwait. They were attacked by coalition aircraft prior to the retreat of Iraqi forces from Kuwait during Operation Desert Storm.*

capability does not necessarily mean a blue-force victory. Enemy forces convinced that resistance is futile may continue to man their posts until confronted by our ground forces on the offensive. In both the Korean instances cited above and during Desert Storm, the enemy was presented with UN or coalition forces on the attack. The presence of our units maneuvering on the battlefield provided the enemy troops with two things. First, it forced them to make (sometimes very quickly) a decision whether to continue the fight or surrender, and second, it gave them someone to surrender to. In marked contrast to the two periods of the Korean War and Desert Storm, when enemy forces surrendered in abundance was the November 1951 to July 1953 period of the Korean War. This period, marked by the adoption of an "active defense" policy by the UN forces, produced some of the highest close support sortie rates and some of the fiercest fighting of the entire war but a minuscule amount of enemy surrenders. One of the major factors in this difference in the psychological health of the enemy soldiers and the resultant lack of surrenders was the lack of offensive pressure by UN ground forces. Even though communist forces suffered an enormous amount of casualties (an estimated 250,000) during the last 15 months of the war, the UN's decision to adopt a defensive strategy made it possible for the enemy to control the initiative and more easily reconstitute their forces' morale between battles.<sup>27</sup>

*Integration with PSYOP*

An operational commander's PSYOP plan involves much more than just his air operations plan, but integrating the two plans is absolutely essential in order to fully exploit the psychological effects of airpower. Besides the major effort of trying to convince the enemy that resistance is futile and explaining how to surrender and whom to surrender to, an effective PSYOP plan can exploit enemy perceptions created by air operations, and an effective air operations plan can enhance the credibility of the PSYOP message. Some of the best examples of that cooperation come from Desert Storm. The coalition had an intense PSYOP effort to convince Iraqi forces to abandon their equipment during the ground phase of the operation. Leaflets and messages explained that the soldiers would not be attacked if they disassociated from their vehicles and weapons. Iraqis believed this message because of the conditioning they had received during the 38 days of air strikes.<sup>28</sup> In effect, the PSYOP message took something the Iraqis had already learned from coalition air assets and successfully associated it with coalition ground forces. In another effort, PSYOP messages were used to give notice to Iraqi troops in the KTO that certain divisions would be attacked with B-52s on certain days. The fact that those specific divisions were attacked as advertised not only added to the Iraqi perception that our airpower was omnipotent, but actually established our PSYOP messages as a credible source of information.<sup>29</sup> This in turn enhanced the effectiveness of other, unrelated, PSYOP efforts.

### Assessing the Psychological Success of Your Air Operations

*In war, the morale is to the material as three is to one.*

—Napoléon

BDA of the physical effects of airpower is difficult enough, but there is no tougher task than assessing your enemy's will to fight be-

fore he is actually forced into the fight. The psychological effects of airpower cannot be assessed by satellite or FLIR imagery. Perhaps the difficulty in evaluating how much our efforts have damaged an enemy's intangible fighting assets is the very reason those assets are so often ignored to begin with. The best window we have to the enemy fighting man's psyche is interrogation of those that surrender or are captured. Unfortunately, air operations planners do not historically involve themselves in enemy prisoner of war (EPW) interrogations. If the operational commander is serious about exploiting the psychological effects of his airpower, this is a paradigm that must shift. Essential elements of information (EEI) pertinent to the effects the air operations are having on enemy forces are not necessarily known by US Army EPW interrogators. As a minimum, air operations specialists should request specific information from EPW interrogations dealing with enemy force morale, adequacy of sleep, food and water, ease/fear of movement, frequency of contact with superiors, and enemy perceptions of the air operations to date. Ideally, air operations specialists could audit actual interrogations to personally assess the level of the six combat stressors the enemy is experiencing and how the air operations are best contributing to the exploitation of those stressors. Human intelligence (HUMINT) and signals intelligence (SIGINT) are also valuable tools for establishing a psychological profile of the enemy's troops. Air planners should be ready to exploit unexpected windfall opportunities to assess the psychological impact of their operations as well. An example of this was the unexpected mass surrender of over four hundred Iraqi infantrymen at Thaqb al Hajj four days before the ground offensive started. Stumbled upon by 101st Airborne helicopters during a reconnaissance of the intended invasion route and attacked by Apaches and A-10s for four hours, an entire enemy battalion was more than happy to surrender to one US company and a three-man PSYOP team.<sup>30</sup> Although not completely appreciated at the time, this event provided a

great deal of foreshadowing for the operations to come.

### Possible Views of Others

*When we speak of destroying the enemy's forces we must emphasize that nothing obliges us to limit this idea to physical forces: the moral element must also be considered.*

—Clausewitz

Possibly the most prolific argument against expending effort on the intangible assets of the enemy is that it is ineffectual on “real” troops. Critics will tend to write off the Desert Storm experience as an anomaly, a “gift” from a cooperative enemy. Admittedly, it is quite possible that we may never again see the degree of wholesale collapse we witnessed during Desert Storm. While combat stressors will continue to saturate the battlefields of the future, an enemy force's ability to handle those stressors and our ability to exploit them will vary depending on the quality and experience of those forces. However, it is important to stress that collapse of the enemy fighting force is not required to make our efforts worthwhile. Any degradation in the enemy force's capacity to wage war increases the probability of our forces' success during ground operations.

Another common counterargument is that without a way to effectively measure the intangible capacities of an enemy, there is no effective way to measure the success of any effort to damage his morale and will. Without a measurement of success, any effort in the psychological realm can appear as wasted effort. The flaw in this argument is that, to a large degree, psychological effects are free. For example, tank plinking was a mission designed for physical effects. The added psychological dividends came at no additional cost. Had the potential intangible benefits been identified earlier in the planning phase, those missions could have started earlier in the operation and been better coordinated with a complementary PSYOP campaign.



*Iraqi soldiers surrender to advancing elements of the 1st Marine Division during the third day of the ground-offensive phase of Operation Desert Storm.*

A third likely critique of this work is that the focus on the enemy's fielded forces is misdirected, and airpower assets are more effectively utilized against the enemy's true center of gravity, his national will. This article's intentional focus on the operational level of war should not be viewed as an affront to the importance of strategic air operations. The effectiveness of airpower in support of strategic objectives is well documented and widely accepted. This paper is directed at a less glamorous yet equally important application of airpower, those operations in support of the operational commander's battlefield preparation plan.

### Conclusion and Recommendations

*The psychological effects of airpower can have a significant role in achieving the overall campaign objectives.*

—AFDD 2-1.3, *Counterland*, 27 August 1999

Operational commanders and their planning staffs need to have an appreciation for airpower's capability against both the tangible and intangible assets of the enemy. The aim of the commander's operational plans should be to maximize the effects of the air assets under his control across both spectrums. We lack a quantitative method to account for the psychological effects of air operations. How-

ever, that should not dissuade the commander from making the demoralization of the enemy forces a stated objective of his air operations plan. Specifically, I recommend future air operations be designed to convince the enemy forces of four truths:

1. *Their defenses are useless.* Air superiority over the battlefield must be established early and remain well protected with a robust OCA and SEAD plan.
2. *If they move, operate, or remain with their equipment and/or weapons, they will be targeted and killed.* Tell the enemy that you will target their specific weapons and equipment and then demonstrate that capability.
3. *They will receive no rest from the bombing.* Attack the enemy's capacity for rest and regeneration (wherever that may be) with around-the-clock operations. Do not undervalue nonprecision munitions for this task.
4. *The worst is yet to come.* Demonstrate the capability and will to continue to constrict the flow of supplies to the enemy's

deployed forces. Combine air operations with offensive ground operations.

Additionally, the commander must ensure that his air, ground, and PSYOP operations plans are fully integrated and focused on exploiting the psychological vulnerabilities inherent to the modern battlefield and that the planners are actively seeking feedback from all available sources to continually assess the psychological health of the enemy force. Finally, targeting should focus on effects, not necessarily destruction. Air strikes should be conducted with an appreciation of how airpower's perceived omnipotence can influence the combat stressors weighing heavily upon the enemy troops. If done effectively, the cumulative and synergistic effect of these actions may produce an enemy so focused on getting out of the fight that he is willing to abandon his weapons and seek a personal peace instead of performing his combat duties. If we can persuade the enemy to abandon his weapons and duties, we are one giant step closer to winning the war. □

#### Notes

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14. Hosmer, 156.
15. Andrews, 117.
16. Thomas A. Keane and Eliot A. Cohen, *Gulf War Airpower Survey*, vol. 2, *Operations and Effectiveness* (Washington, D.C.: Government Printing Office, 1993), 268.
17. Nhu Tang Truong, *A Vietcong Memoir* (San Diego: Harcourt Brace Jovanovich, 1985), 168.
18. Hosmer, 164.
19. *Ibid.* The officer estimated perhaps one hundred killed and 150 wounded. Not knowing the size of his unit, we are left with only his impression that these casualty numbers were light.
20. Andrews, 117.
21. Clay Blair, *The Forgotten War: America in Korea, 1950-1953* (New York: Times Books, 1988), 901.
22. Hosmer, 169.
23. *Ibid.*, 185.
24. *Ibid.*, 182-83.
25. Dinter, 29.
26. *Ibid.*, 31.
27. Hosmer, 119.
28. *Ibid.*, 202.
29. *Ibid.*, 201.
30. Rick Atkinson, *Crusade: The Untold Story of the Persian Gulf War* (Boston: Houghton Mifflin, 1993), 337.