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A PIECE OF THE PUZZLE
TACTICAL AIR POWER IN OPERATIONS OTHER THAN WAR

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Joint Military Operations Department.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract of
A PIECE OF THE PUZZLE
TACTICAL AIR POWER IN OPERATIONS OTHER THAN WAR

In view of the current chaotic international climate, military pressure will continue as a vital tool in crisis response. Tactical air power, in particular, has contributed significantly to numerous recent limited operations. This essay provides a historical analysis of these *Operations Other Than War*. This perspective reveals the strengths and weaknesses of tactical air power in this narrow arena. Those very characteristics are defined through the principles governing these highly political actions. Specifically, the employment of tactical air power substantially supports the tenets of perseverance, legitimacy, balance and planning for uncertainty. To a lesser extent, air power provides limited utility in meeting the concepts of security, unity of effort and coordination. Finally, the most difficult issue satisfied through the use of tactical air power is restraint. Tactical air power's utility, in the framework of current doctrine, provides the operational commander the proper fit for this key "piece" in the "puzzle" of *Operations Other Than War*.

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A PIECE OF THE PUZZLE
TACTICAL AIR POWER IN OPERATIONS OTHER THAN WAR

CHAPTER I

INTRODUCTION

The United States emerged from the Cold War as the leader in responding to international crises. The initial reaction, "Where are the carriers?" suggests the utility of tactical air power. This response creates the view air power can exclusively provide the necessary military pressure to accomplish strategic goals. The emergence of "no-fly" zones and the reluctance to deploy U.S. ground forces further reinforces this perception. The actual utility of air power, however, must be viewed in the framework of current doctrine. Historically, air power has been a versatile tool for the operational commander. It provided effective military pressure through key principles of operations other than war. Conversely, an emphasis on restraint proved highly problematic and severely degraded its credibility.

So, where does tactical air power fit? Its contribution to various crisis situations is well documented. Current doctrine defines the governing tenets for limited military actions. This essay identifies operational principles successfully fulfilled by tactical air power. It similarly highlights air power's limitations in this narrow arena. An examination of recent conflicts of limited scope and intensity

provides a historical perspective. Specifically, this study reviews Operation El Dorado Canyon (Libya, 1986), Operation Just Cause (Panama, 1990), Operation Southern Watch (Iraq, 1992-present), Operation Restore Hope (Somalia, 1992-1993), and Operation Deny Flight (Former Yugoslavia, 1993-present). Analysis of these actions focuses on the operational contributions expected and derived from air power. A synthesis of the results forms the foundation for final conclusions.

CHAPTER II

LEVELING THE PLAYING FIELD

DEFINITIONS

The terms *tactical air power* and *Operations Other Than War (OOTW)* appear self-explanatory. In reality, the semantic distinctions demand a definition of terms.

Tactical air power is the military force provided by any aircraft (fixed or rotary winged) directing fires in support of an operation. Furthermore, this includes conventional and Special Operations aircraft.

Any definition of OOTW must begin with an understanding of the term war. As classified by the Doctrine for Joint Operations (Joint PUB 3-0), war is the final option to achieve or protect national objectives through large-scale, sustained combat operations. OOTW are simply as military operations designed to deter war and promote peace. These operations vary in level of violence and scope as illustrated in Figure 1.¹ This essay focuses on operations utilizing military presence to deter war and resolve conflicts. Specifically, it addresses *peacetime contingency operations* consisting of *strikes, raids, and peace enforcement*.

Peacetime contingency operations are diverse actions focused on specific problems, usually in a crisis environment. As a subset, **strikes** are attacks designed to damage or destroy specific, high-value targets without seizing territory.

Raids, normally small-scale operations, involve the swift accomplishment of objectives through military means.² Finally, peace enforcement is the use of external military pressure to compel a restoration of international peace.³

Figure 1.

Range of Military Operations			
Military Operations		General US Goal	Examples
COMBAT	War	Fight & Win	<u>Large-scale combat operations:</u> Attack Defend Blockades
	Operations Other Than War	Deter War & Resolve Conflict	Peace Enforcement NEO Strikes Raids Show of Force Counterterrorism Peacekeeping Counterinsurgency
		Promote Peace	Antiterrorism Disaster Relief Peacebuilding Nation Assistance Civil Support Counterdrug NEO

Source: Joint Chiefs of Staff, Doctrine for Joint Operations, Joint Pub 3-0 (Washington, DC: 1993), p. I-3.

CURRENT DOCTRINE

As stated above, the examination of the historical operations focuses on the principles addressed through the use of tactical air power. Existing doctrine provides the

description of those principles. A detailed discussion of each tenet listed below is found in Appendix I.

Several doctrinal publications describe principles governing Operations Other Than War. The most authoritative of these is the Doctrine for Joint Operations, Joint Pub 3-0. This manual lists six principles for OOTW: **objective, unity of effort, security, restraint, perseverance, and legitimacy.**⁴

Joint Pub 3-07, Doctrine for Joint Operations in Low Intensity Conflict supplies further guidance on specific OOTWs. In particular, this publication discusses peacetime contingency operations in detail. Characterized as politically sensitive and time critical, they aim strong psychological impact at domestic and foreign audiences.⁵ The principles for these operations are in Military Operations in Low Intensity Conflict, FM 100-20/AFP 3-20. They are **coordination, balance, and planning for uncertainty.**⁶

The proper employment of tactical air power must meet the principles for OOTW. The U.S. Air Force supplies the doctrine for this employment architecture. The tenets described in Volume I of the Basic Aerospace Doctrine of the United States Air Force follow: **centralized control/decentralized execution, flexibility/versatility, priority, synergy, balance, concentration, and persistence.*** These are the

*Persistence, as described by Air Force doctrine, is dramatically different than the principle elucidated by the Joint Chiefs of Staff (see Appendix I).

guidelines and considerations followed when utilizing aerospace power to achieve military objectives.⁷ The historical analysis discusses which of these tenets were evoked by employment of tactical air assets. The main thrust of the examination illustrates their ability to fulfill the principles of OOTW.

CHAPTER III

HISTORICAL ANALYSIS

The historical significance and integration of air power provide relevance to the following operations. The presentation of each follows the same general organization. First, the strategic objectives give an overview of the operational requirements. Next, a description of tactical air forces identifies the key players. The operational intent for their employment sets the stage for further evaluation. Finally, tactical air power's operational effectiveness, in the framework of principles of OOTW, completes each analysis.

OPERATION EL DORADO CANYON

It is easy to dismiss El Dorado Canyon as an aberration -a unique, interesting, but ultimately unimportant episode, particularly in light of the much larger Desert Storm. But it can be argued that the future holds more El Dorado Canyons than Desert Storms.¹

The selection of this operation may be seen as another in a long line of essays on a very unique situation. However, as noted above, it serves as an important starting point in the analysis of the joint operational use of tactical air power.

In the early morning of 15 April 1986, a joint U.S. Air Force-U.S. Navy air strike hit select targets in Libya. President Reagan ordered the strike specifically to deter state-sponsored terrorism.² This use of military force was designed to clearly demonstrate the national resolve to

eliminate the threat of international terrorism.³

Operationally, five specific targets were approved to achieve these strategic goals. They were located within two geographically separate cities of Tripoli and Benghazi.⁴

The final plan consisted of two nearly independent actions. Tactical air forces of the U.S. Air Force and U.S. Navy accomplished the complex strike. U.S. Air Forces, Europe (USAFE) supplied F-111's from Lakenheath, United Kingdom, as the main attack element against the Tripoli targets. Task Force 60, consisting of the USS America (CV 66) and USS Coral Sea (CV 43) battle groups, supplied the assets to destroy the targets in the Benghazi area. The Navy also provided vital support for the Tripoli raid.⁵

From a purely tactical point of view, air power amassed sufficient concentration of forces to inflict the required damage.⁶ To a large extent, the versatility of tactical air power was key to the operation. In conjunction with other elements, electronic jamming and missile-suppression furnished by tactical air forces directly contributed to the success of El Dorado Canyon.⁷ It should be noted, the size of the strike was much larger than that dictated by normal Navy doctrine. This was necessary to gain the required synergistic effect and balance. Finally, the designed separation of tactical command for this single strike undermined the tenet of centralized control.⁸

The final accounting of El Dorado Canyon in meeting the strategic goals reveals mixed results. The strike delivered an unequivocal message of the United States' resolve in combatting terrorism. Air power clearly fulfilled the principle of unity of effort for OOTW. The use of tactical air power limited the scope and duration of military intrusion. This created less of a problem in maintaining legitimacy. Also, it implied operational restraint. The scale enhanced the balance of the operation, as well. Lastly, minimizing the forces and striking from extreme distance strengthened the principle of security.⁹

Reports show this single strike did not have a decisive effect on deterring Libyan sponsored terrorism.¹⁰ The requirement for extensive assets as the underlying reason for not executing similar counter-terrorist operations is debatable. Most probably, the lack of restraint represented by successive strikes precluded continued use of tactical air power. In any case, this negatively affected the principle of perseverance.

OPERATION JUST CAUSE

In December of 1989, the situation in Panama reached a critical stage. After numerous incidents over the previous six months, Panamanian President Noriega declared war on the United States. In short succession, Panamanian Defense Forces (PDF) killed a Marine lieutenant and illegally detained a Navy

officer and his wife. Finally, on 17 December 1989, President Bush directed the execution of Operation Just Cause. Secretary of Defense Cheney later set H-hour for the early morning of 20 December.¹¹

The operational objectives for Just Cause were extremely clear. The first goal dictated the protection of American lives and installations. The second directed the seizure of key sites to ensure the security of the Panama Canal. Thirdly, the operation was designed to destroy the combat capability (not necessarily the personnel) of the PDF. Noriega's apprehension and extradition to the United States was the final objective.¹²

The operational concept for Just Cause required overwhelming concentration of force, surprise (simultaneous attacks) and maneuver of friendly fires.¹³ Tactical air power was an integral portion of the operation's plan. The actual forces consisted of U.S. Army gunship helicopters (AH-1's and AH-64's), Special Operations combat aircraft (AC-130's), U.S. Air Force fighters (F-117's and, if required, A-7's) and observation aircraft (OA-37's). The missions assigned to tactical air power were numerous: fire-support, reconnaissance and observation, maneuver of fires, offensive shock, and surprise.¹⁴

Perhaps the most important tenet of employment exercised by tactical air power was synergy. The reliance on airborne fire-support dramatically enhanced mobility of friendly

forces. Timely, accurate support throughout the theater substantially reduced requirements for heavy, less maneuverable, ground artillery.¹⁵ Lessons of the operation illustrated the superior concentration of fires and versatility afforded by tactical air power. Numerous reports noted that the superb fire-support provided by AC-130's and AH-64's also limited collateral damage. Furthermore, as planned, aviation assets provided all major units night reconnaissance.¹⁶

Air power also proved an extremely effective shock asset. It provided both offensive surprise and psychological firepower in order to reduce PDF casualties. A prime example was the preplanned delivery of 2000 pound bombs by F-117's to shock and surprise, not kill, troops. Utilized immediately prior to the Rio Hato airbase assault, this tactic worked nearly perfectly.¹⁷ Similarly, the mere presence of AC-130 gunships influenced the surrender of other PDF elements.¹⁸

Tactical air power satisfied principles critical to the success of Operation Just Cause. Colonel Noris Lyn McCall, USMC, noted, "...air power's contributions to the operation in Panama were outstanding and significant to the outcome."¹⁹ Specifically, it directly and positively impacted the principle of security for the operation. Similarly, two distinct actions underscored the concept of restraint: innovative psychological warfare and precise fire-support. Lastly, reducing the need for heavy artillery enhanced the

legitimacy of the operation by limiting the "offensive" nature of the ground forces.

OPERATION SOUTHERN WATCH

On August 26, 1992, President Bush announced the United States' decision to enforce the "no-fly" zone covering all of Iraq south of the 32nd parallel. The operation's goal demanded Iraq comply with U.N. Gulf War cease-fire orders forbidding the oppression of minorities. In particular, Operation Southern Watch would shield dissident Shiite Moslems from Iraqi air attacks. On a larger scale, the U.S. applied one more element of pressure in seeking Saddam Hussein's compliance with all U.N. resolutions.²⁰

Exclusively executed by air forces, Southern Watch is a combined peace enforcement operation including U.S., French, British, Saudi, and Kuwaiti aircraft. The designed scope of the operation allows reconnaissance of Iraqi ground units, as well as air space surveillance. Specific missions also include electronic warfare and suppression of enemy air defenses.²¹ The assigned forces permit massing of offensive firepower, security of friendly forces, and a show of resolve.

The tactical execution of Southern Watch closely follows the tenets for employment of air power. Most notably, the operation has highlighted the concepts of concentration, synergy, and balance. The highly successful air strike of

13 January 1993 in southern Iraq clearly demonstrated these principles.²²

The ongoing nature of Southern Watch prevents discrimination of the military pressure from those of diplomatic and economic sanctions. However, air power's contributions up to this point allow some conclusions.

Most obviously, tactical air power fulfills the OOTW principles of perseverance and unity of effort. The forces continue to sustain a military presence over a large geographic area after more than two years. Perhaps as significant, the sole utilization of air power particularly supports the concepts of coordination and security. In the former case, this eliminates a tangible battlefield for the media. Arguably, this allows easy management of sensitive information for dissemination. In the latter case, both increasing the separation of support forces from hostilities, and reducing the number of personnel involved greatly diminishes overall risk.

Finally, the principle of restraint limits the credibility of the military pressure. The actions in January 1993 apparently put more of an edge on the sword. Iraq's recent compliance with U.N. resolutions seems to provide a slight measure of success.²³ Most likely, the continuous presence of credible tactical air power contributed to these positive developments.

OPERATION RESTORE HOPE

The tragedy of Somalia came before the world community in the form of the United Nations Security Council Resolution 794. This resolution authorized the use of all necessary means to ensure the security of humanitarian efforts for thousands of starving Somalis. In reaction, President Bush ordered the execution of Operation Restore Hope, deploying over 25,000 US personnel to support this effort.²⁴

The operation had four objectives. The first delineated securing the major air and seaports in order to establish food distribution points. The next directed the task force to ensure free passage of relief supplies. The third goal further instructed the task force to provide security for convoys and relief supplies. Finally, the fourth mission directed all available assistance for U.N. and nongovernmental humanitarian relief organizations.²⁵

Tactical air forces played a supporting role throughout the operation. The types of aircraft included U.S. Navy fighters from the USS Ranger (CV 61) and USS Kitty Hawk (CV 63) battle groups, and U.S. Marine Corps gunship helicopters.²⁶ The design for these forces ensured direct fire-support (if required), reconnaissance, and psychological offensive shock. The battle group's "fast-movers" did not participate after the initial stages of the operation. Higher priority requirements necessitated their presence in the Persian Gulf.²⁷

As in Operation Just Cause, tactical air power support of ground forces represented the tenet of synergy. The highly mobile firepower of air forces allowed the employment of extremely maneuverable, light infantry troops. The operation also utilized the flexibility and versatility of tactical air power. Airborne reconnaissance provided timely coverage of interior lines of communications anywhere in the theater. On several occasions, the intimidation of low flying jet aircraft deterred armed rebels without inflicting casualties. This tactic, also, significantly decreased the risk to ground forces.²⁸

Tactical air power had limited impact on Operation Restore Hope. It primarily supported the axioms of security and restraint. Once again, air power limited the psychological impact of more "offensive" heavy ground troops. This employment of tactical air forces bolstered U.N. legitimacy and maintained a correct operational balance. On the other hand, the number of assets prevented a sustained presence by all the players which weakened the concept of perseverance.

OPERATION DENY FLIGHT

In October 1992, the United Nations imposed a "no-fly" zone over portions of the former Yugoslavia. Ostensibly, the move was an effort to stop the ongoing civil war. By April 1993, it became obvious Serbian aircraft were ignoring the

mandate. Their effrontery forced the U.N. to call on NATO's military muscle for enforcement.²⁹ Within four months, the mission expanded to ensure the safety of U.N. peacekeeping troops in Bosnia.³⁰

The tactical air forces employed by the NATO commander perform the missions of reconnaissance, direct fire-support (if required), and air space denial.³¹ These diverse requirements evoke air power's innate versatility and flexibility. Once again, the main objective in the employment of air power is to provide synergy for the operation. This design should allow U.N. peacekeeping forces to be outfitted with minimal offensive weaponry. The presence of airborne firepower, in theory, furnishes necessary security. This plan generally enhances the peacekeeping mission effectiveness.

The success air power achieved in meeting operational goals is difficult to ascertain. Again, the ongoing nature of the operation hampers definitive analysis. However, the trends render some insight for further evaluation.

While tactical air forces have sustained a presence for nearly a year, the situation in Yugoslavia has changed very little. Tactical air power's inability to fulfill the desired degree of restraint appears to render it impotent. This drastically undermines the principle of perseverance. Air power's presence seems to strengthen the maxims of unity of effort and balance for this operation. Experts contend that the presence of tactical air power contributed significantly

in pressuring parties to negotiate. Similarly, the record characterizes air power's enforcement of the "no-fly" zone as successful. Unfortunately, the former Yugoslavia's problems still remain despite the operation's efforts.³²

CHAPTER IV

CONCLUSIONS

For the purposes of this essay, the issue comes down to one question. What are the operationally significant contributions of tactical air power in OOTW? Where does it fit? While current joint doctrine relates general principles and factors for the commander's consideration, the actual utility of air power is not codified. The evidence presented indicates that there has been extensive employment of air power in OOTW. In fact, tactical air power contributed significantly through the principles of legitimacy, planning for uncertainty, perseverance, and balance. To a lesser extent, tactical air power furnished limited support to the concepts of security, unity of effort, and coordination. Its offensive nature made the issue of restraint extremely problematic. Occasionally, this dilemma resulted in a significant lack of credibility for tactical air power.

The principle of objective is not affected by employment of particular forces. This holds true for tactical air power. The ability to meet the assigned mission acts as a qualifier for force selection. The types of forces do not drive operational goals.

As with any type of military force, the application of air power in support of an organization (i.e., the U.N.) enhances the concept of legitimacy. Furthermore, the synergy

produced by air forces can dramatically diminish the "intrusiveness" of ground troops. In the politically sensitive environment of OOTW, this effect also promotes operational legitimacy, albeit, to a lesser extent.

Tactical air power easily reinforces the concept of **planning for uncertainty**. The mobility and flexibility inherent to air power allows quick reaction in highly uncertain circumstances. This is particularly highlighted when air forces operate in concert with ground troops.

Clearly, air power can sustain a presence for a long period of time. This capability provides the foundation for the principle of **perseverance**. It remains one of tactical air power's greatest strengths. Unfortunately, any lack of credibility severely undermines this stamina. In such a case, tactical air forces become no more than interested observers in the eyes of the belligerents. The presence of air power still provides diplomatic leverage, but becomes nearly impotent as a deterrent.

Proper employment of tactical air power reduces the scale of an operation while maintaining its security. This characteristic affects two principles of OOTW, **balance** and **coordination**, to varying degrees. Air power's low profile and force multiplication properties add key ingredients for the concept of balance. operation that primarily utilizes air forces limits the media's exposure to an actual battlefield.

This, in turn, eases the management of sensitive matters that is critical to the issue of coordination.

Due to its very nature, tactical air power upholds the concept of unity of effort as an instrument for demonstrating national resolve. Credibility, however, is the foundation of its effectiveness to this issue. A priority on restraint hampers the military pressure and visibility achieved by air power. Unity of effort is severely degraded without these elements.

Two situationally dependent variables govern tactical air power's ability to enhance security of an operation. The two factors are emphasis on restraint and threat level. If the requirement for restraint dramatically restricts the use of force, air power has little leverage. However, when the situation maintains the credibility of military force, tactical air power is only limited by the threat. Given a low threat, it can provide excellent security for all forces. Similarly, the exclusive use of air power results in a decrease of overall risk. This circumstance yields significant contributions to the concept of security.

Obviously, the principle of restraint is the "long pole" in the "tent" of air power's effectiveness in OOTW. In these operations, political ramifications normally preclude excessive or unrestrained violence. Unfortunately, air power has little control over the level of violence produced by its payload. This fact dilutes air power's credibility and

effectiveness in actions that emphasize restraint.

Furthermore, a reduction in credibility negatively affects several other principles.

The operational commander must possess a keen understanding of the dynamics between tactical air power's capabilities and the principles of OOTW. The highly political agenda of Operations Other Than War does not seem well suited to offensive tactical air forces. This is particularly true when a premium is placed on restraint. On the other hand, historical analysis proves air power can effectively support many of the other tenets of OOTW. This versatile military asset provides the operational level planner a valuable tool. The exceptional flexibility of this key "piece" allows its proper placement in the "puzzle" of Operations Other Than War.

APPENDIX I

DETAILED DISCUSSION OF PRINCIPLES AND TENETS

Principles for Joint Operations Other Than War

Source: Joint Chiefs of Staff, Doctrine for Joint Operations, Joint Pub 3-0, (Washington, DC: 1993), pages V-2 to V-4.

Objective

Direct every military operation toward a clearly defined, decisive, and attainable objective.

This principle of war applies also to operations other than war. A clearly defined and attainable objective--with a precise understanding of what constitutes success--is critical when the United States is involved in operations other than war. Military commanders should also understand what specific conditions could result in mission termination as well as those that yield failure. JFCs [*Joint Force Commanders; au*] must understand the strategic aims, set appropriate objectives, and ensure that these aims and objectives contribute to unity of effort with other agencies.

Unity of Effort

Seek unity of effort in every operation.

The principle of unity of command in war also applies to operations other than war; but, in operations other than war, this principle may be more difficult to attain. In these operations, other government agencies may often have the lead.

Commanders may answer to civilian chief, such as an ambassador, or may themselves employ the resources of a civilian agency. Command arrangements may often be only loosely defined and many times will not involve command authority as understood within the military. This arrangement may cause commanders to seek an atmosphere of cooperation to achieve objectives by unity of effort. Military commanders need to consider how their actions contribute to initiatives that are also diplomatic, economic, and informational in nature. Because operations other than war will often be conducted at the small unit level, it is important that all levels understand the military-civilian relationship to avoid unnecessary and counter-productive friction.

Security

Never permit hostile factions to acquire an unexpected advantage.

In joint operations other than war, security deals principally with force protection against virtually any person, element, or group hostile to our interests. These could include a terrorist, a group opposed to the operation, and even looters after a natural disaster. JFCs also should be ready constantly to counter activity that could bring significant harm to units or jeopardize mission accomplishment. JFCs should not be lulled into believing that the nonhostile intent of their mission does not put the force at risk. Inherent in this responsibility is the need to be

capable of rapid transition from a peaceful to a combat posture should the need arise. The inherent right of self-defense from the unit to the individual level applies to all operations.

Restraint

Apply appropriate military capability prudently.

The actions of military personnel and units are framed by the disciplined application of force, including specific ROE [*Rules of Engagement*; au]. In operations other than war, these ROE will often be more restrictive, detailed, and sensitive to political concerns than in war. Moreover, these rules may change frequently during operations. Restraints on weaponry, tactics, and levels of violence characterize the environment. The use of excessive force could adversely affect efforts to gain or maintain legitimacy and impede the attainment of both short- and long-term goals. This concept does not preclude the application of overwhelming force, when appropriate, to display US resolve and commitment. The reasons for the restraint often need to be understood by the individual Service member because a single act could cause critical political consequences.

Perseverance

Prepare for the measured, protracted application of military capability in support of strategic aims.

Some operations other than war may be short, others protracted. Peacetime operations may require years to achieve the desired effects. Underlying causes of confrontation and conflict rarely have a clear beginning or a decisive resolution. It is important to assess crisis response options against their contribution to long-term strategic objectives. This assessment does not preclude decisive military action but does require careful, informed analysis to choose the right time and place for such action. Commanders balance their desire to attain objectives quickly with a sensitivity for the long-term strategic aims and the restraints place on operations. Therefore, the patient, resolute, and persistent pursuit of national goals and objective, for as long as necessary to achieve them, is often the requirement for success.

Legitimacy

Sustain the willing acceptance by the people of the right of the government to govern or of a group or agency to make and carry out decisions.

This principle focuses on internationally sanctioned standards as well as the perception that authority of a government to govern is genuine, effective, and uses proper agencies for reasonable purposes. Joint force operations need to sustain the legitimacy of the operation and of the host government. During operations where a government does not exist, extreme caution should be used when dealing with

individuals and organizations to avoid inadvertently legitimizing them. PSYOP [Psychological Operations; au] can enhance both domestic and international perceptions of the legitimacy of an operation.

Principles for Peacetime Contingency Operations

Source: Departments of the Army and the Air Force, Military Operations in Low Intensity Conflict, FM 100-20/AFP 3-20 (Washington, DC: 1990), pages 5-1 to 5-2.

Coordination

The military forces cooperate with other government and private agencies to manage sensitive situations. For example, the military provides advice to other participating agencies on the capabilities and limitations of its resources. Military public affairs officers provide background briefings to the new media. They arrange for journalist pools, explain operational security requirements and encourage cooperation with them.

Balance

Military commanders must consider both the combat readiness of their troops and the volatile environment in which they function. This requires a balance of required and specialized training of forces and political awareness within the chain of command. The commander must provide for the security of his force within the constraints of the unique ROE and the political sensitivity of each situation. Since

national policy goals determine military force composition, the commander requires clearly stated objectives and operational parameters in order to balance his security needs with national policies. A balance must be struck between political goals and the scale, intensity, and nature of military operations supporting those goals.

Planning for Uncertainty

Situations filled with uncertainty require detailed but flexible planning, incorporating the principles of coordination and balance. This requires a full awareness of the political and social realities of the area in dispute. In such cases, logistic and intelligence support planning must be comprehensive.

Tenets of Aerospace Power

Source: Headquarters, Department of the Air Force, Basic Doctrine of the United States Air Force, AFM 1-1 (Washington, DC: 1992), Figure 2-2, page 8.

Centralized Control/Decentralized Execution

Aerospace forces should be centrally controlled by an airman to achieve advantageous synergies, establish effective priorities, capitalize on unique strategic and operational flexibilities, ensure unity of purpose, and minimize the potential for conflicting objectives. Execution of aerospace missions should be decentralized to achieve effective spans of control, responsiveness, and tactical flexibility.

Flexibility/Versatility

The unique flexibility and versatility of aerospace power should be fully used and not compromised. The ability to concentrate force anywhere and attack any facet of the enemy's power is the outstanding strength of aerospace power.

Priority

Effective priorities for the use of aerospace forces flow from an informed dialogue between the joint or combined commander and the air component commander. The air commander should assess the possible uses as to their importance to (1) the war, (2) the campaign, and (3) the battle. Air commanders should be alert for the potential diversion of aerospace forces to missions of marginal importance.

Synergy

Internally, the missions of aerospace power, when applied in comprehensive and mutually supportive air campaigns, produce effects well beyond the proportion of each mission's individual contribution to the campaign. Externally, aerospace operations can be applied in coordinated joint campaigns with surface forces, either to enhance or be enhanced by surface forces.

Balance

The air commander should balance combat opportunity, necessity, effectiveness, and efficiency against the

associated risk to friendly aerospace resources.

Technologically sophisticated aerospace assets are not available in vast numbers and cannot be produced quickly.

Concentration

Aerospace power is most effective when it is focused in purpose and not needlessly dispersed.

Persistence

Aerospace power should be applied persistently. Destroyed targets may be rebuilt by resourceful enemies. Air commanders should plan for restrikes against important targets.

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