Operation JUST CAUSE:
An Application of Operational Art?

A Monograph
by
Major Timothy D. Bloechl
Military Intelligence
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ABSTRACT

OPERATION JUST CAUSE: AN APPLICATION OF OPERATIONAL ART?
by Major Timothy D. Bloechl, USA, 65 pages.

This monograph describes the history of the planning and execution of Operation JUST CAUSE. It focuses on the operation's relationship to the theory and doctrine of operational art to answer the question: Was Operation JUST CAUSE an application of operational art?

This monograph first summarizes U.S. Army doctrine and selected theoretical works on operational art. Next, to understand the strategic and operational setting within which the military created plans, the paper provides an overview of the crisis in Panama. It emphasizes pre-JUST CAUSE political and military actions, and associated military planning efforts, followed by a summary of operational results. The paper then compares Operation JUST CAUSE planning and execution to doctrine and theory to determine if military planners applied operational art.

This monograph concludes that Operation JUST CAUSE was an excellent application of operational art. Its planners apparently understood existing doctrine and used the art to develop a highly effective operational plan that attained the desired strategic goals. The planners received the visionary guidance of three gifted officers, General Thurman, LTG Stiner, and LTG Foss. These officers also benefitted from having leaders in the Joint Chiefs of Staff and the Bush Administration who gave them their head and did not tinker with their plan. The result was a stunning American victory accomplished in short order with minimum casualties.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>II. Doctrine and Theory</td>
<td>5</td>
</tr>
<tr>
<td>III. Historical Background</td>
<td>14</td>
</tr>
<tr>
<td>IV. Doctrinal and Theoretical Evaluation</td>
<td>27</td>
</tr>
<tr>
<td>V. Conclusions</td>
<td>41</td>
</tr>
<tr>
<td>Appendix 1: Operation Just Cause Task Organization</td>
<td>43</td>
</tr>
<tr>
<td>Appendix 2: Map of Panama</td>
<td>44</td>
</tr>
<tr>
<td>Endnotes</td>
<td>45</td>
</tr>
<tr>
<td>Bibliography</td>
<td>58</td>
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</table>
Military theory and history serve as the chief vehicles with which to highlight and sketch the essence of operational art.¹

I. Introduction

The term operational art first appeared in the mid-1920 military writings and lectures of Soviet General-Major Alexander Andreevich Svechin. Students and practitioners of military art before Svechin’s time divided war into two distinct levels, strategy and tactics.² Strategy dealt with "the maneuver of forces to the field of battle," while tactics referred to the "management of forces on the field of battle."³ Svechin realized the nature of war had changed. The size of early 20th Century armies, the increasing lethality of weapons systems, and the vast territory encompassing the modern theater of war made it less likely that tactical battles and engagements would have an immediate impact on strategy.

Svechin studied the Russo-Japanese War (1904-1905), World War I, the Russian Civil War, and the Russo-Polish War of 1920 to understand how and why war had changed. His research, aided by the writings of Sigismund von Schlichting,⁴ led him to believe a third category of military art fell between strategy and tactics. Other military theorists had long identified operations as the physical element found between strategic planning and tactical battles.⁵ Svechin expanded on their work, producing a theory on how to plan and conduct such operations, aptly titled operational art.⁶
Later Soviet writings on the nature of operational art were consistent with Svechin's views and provide Western students of war an insight into Soviet (or Russian) definitions and applications of the term. The Soviets theorized that "operational art [was] concerned with wartime employment of operational formations (fronts and armies) . . . to accomplish the missions assigned to it [Soviet Armed Forces] by strategy." Operational art also dealt with the "preparation and conduct of marches, and the movement of operational formations over large distances." The Soviets believed three characteristics separated the operational and tactical levels of war. Military operations conducted at the operational level had a decisive aim, were broad in scope, and were of a very complex nature. Finally, Soviet operational art stressed how to conduct operations in a nuclear environment. Soviet emphasis on army and front level operations on the nuclear battlefield reflected how they would have fought a major war with NATO.

In contrast to the Soviet's longstanding nuclear-based, massive army approach to operational art, the United States military has only recently incorporated operational art into its doctrine. Using a combination of Soviet doctrine and independent Western study on the nature of war, the U.S. military developed its own version of the art.

After the debacle of Vietnam, the U.S. Army searched for a doctrine that would divert attention from its failures in the war and shore up the demoralized force. At first the Army emphasized the defense of Europe, a
more conventional type of warfare, in its 1976 version of FM 100-5. Offensive-minded critics viewed this defensively dominant publication with disdain. The manual also "brushed aside the operational level considerations" of war.11

To address the problems in its 1976 manual, the Army published a revamped FM 100-5 in 1982 that "sharpened appreciation of operational depth and maneuver to formulate a more fluid doctrine."12 The title applied to the new doctrine was *AirLand Battle*, a more balanced approach to warfighting featuring a greater integration of air power. In effect, the manual redirected the Army toward a greater understanding of operational art.13

U.S. Army doctrine continued to evolve into the 1990's. In its 1986 version of *AirLand Battle* doctrine, the Army maintained its coverage of the operational level of war. The subsequent demise of the Soviet Union, and shrinking U.S. defense funding and force structure, drove the Army to reappraise its doctrinal foundation. Today the final draft of a new version of FM 100-5, *Operations*, places even greater emphasis on infusing operational art into the Army's vocabulary, thinking, and execution of military operations.14

The presence of operational art in doctrine does not guarantee its use in planning and executing military operations. An analysis of contemporary history provides one way to find out if the Army understands and uses operational art. A recent U.S. military operation, conducted after the inclusion
of operational art in FM 100-5, offers one such subject for historical scrutiny. Operation JUST CAUSE, the 1989 invasion of Panama, was the "biggest U.S. military operation since Vietnam." Following at least seven years of exposure to doctrinal coverage of operational art, JUST CAUSE architects should have used the art to plan and execute the operation. Did they? Was Operation JUST CAUSE an application of operational art?

To answer these questions, this monograph first summarizes U.S. Army doctrine and selected theoretical works on operational art. Next, to understand the strategic and operational setting within which the military created plans, the paper provides an overview of the crisis in Panama. It emphasizes pre-JUST CAUSE political and military actions, and associated military planning efforts, followed by a summary of operational results. The paper then compares Operation JUST CAUSE planning and execution to doctrine and theory to determine if military planners applied operational art.

To summarize current thought on operational art, the next section of the monograph draws upon material from three sources: U.S. Army doctrine contained in the 1993 final draft version of FM 100-5, the theoretical works of Dr. James J. Schneider of the School of Advanced Military Studies (SAMS), and finally, the historical writings of Dr. Robert M. Epstein, also from SAMS. Later, the aspects of operational art provided in this summary serve as criteria to determine if the military applied operational art to plan and execute Operation JUST CAUSE.
II. Doctrine and Theory

Doctrine describes how an army fights. It is a distillation of military theory and history written in terms of the present, with a view toward the future. Its formulation considers the current and near-term threat environment, technology, and the political and military strategies of a nation. As such, doctrine is evolutionary and should adjust continuously to changes on the world scene. Finally, doctrine provides a common base of knowledge which members of a military force use to plan and conduct military operations.16

Today's U.S. Army doctrine reflects the reality of a quickly changing world. Communism has fallen by the wayside leaving millions of people struggling in a new world of freedom. The United States, facing a reduced threat of nuclear extinction, is free to cut its expensive military might in this quickly changing world. Yet, the U.S. wants to ensure its military remains the dominant power in an uncertain world. This places our military leaders on the horns of a dilemma—how to reduce the size and cost of the military without reducing its inherent strength.17 Army doctrine describes an answer. Based on a smaller, highly professional force aided by superior technological resources, the quest is for quick, decisive victory.17 Such victory depends largely on the application of operational art.

In keeping with Clausewitz's dictum that "war is merely the continuation of policy by other means,"18 operational art is dependent on U.S.
political aims articulated in National Command Authority (NCA) directives and national strategy documents. In turn, the Chairman, Joint Chiefs of Staff (CJCS) translates NCA policies requiring the use, or potential use, of military power into national military strategy. Subject to NCA approval, national military strategy and derivative taskings provide the basis for action by the combatant commanders of the armed forces. These commanders then formulate military strategy for their theater of responsibility. Their level of operation also represents the junction between the strategic and operational levels of war, the level at which operational art begins.  

FM 100-5, Operations, defines operational art as:

the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and execution of campaigns and major operations.

Armed with the NCA's strategic goals (specified and implied), combatant commanders are responsible for the preparation and, if directed, execution of campaign and operational plans for their respective theaters. The combatant commander may direct subunified, component, joint task force, or other commands to plan and execute campaigns and major operations. Despite this delegation, however, the combatant commander retains ultimate responsibility for execution of the mission.

The key to initiating plans at the operational level of war directly relates to the political ends desired by the NCA. The planner's job is much easier when such ends readily translate into military objectives (e.g., destroy the
enemy's military force). If, however, the desired ends fall outside the normal capabilities of military power, such as to "restore democracy in a country," military planners face a more difficult challenge. Furthermore, if the NCA does not articulate the desired ends, planners must create and revise them until they are politically acceptable. Therefore, determining the end state and translating it into military achievable objectives is a critical first step in applying operational art.  

Given a defined end state, operational art:  

is the process by which methods are selected that determine the application and utilization of combat power—the means—to achieve [the] desired end.  

The methods and means used by the operational artist should ultimately impose our will on the enemy to achieve the desired end. Understanding the enemy is crucial in the early planning process. In operational art, the goal is to identify and defeat (or destroy) the enemy's source of power, otherwise known as his center of gravity.  

In Clausewitz's time, the center of gravity was the armed forces of a nation. But Clausewitz recognized the changing nature of war might provide other centers of gravity. These might include the industrial base of a nation or the will of the enemy populace. Clausewitz also recognized that the different levels of war may have diverse centers of gravity. For example, the enemy's political leadership could be a strategic center of gravity, while a particular element of an enemy's armed force formed the center of gravity at the
operational level. Also, Clausewitz advocated identifying one's own center of gravity to protect it against enemy attack.24

Clausewitz’s concept of "center of gravity" still holds true today and is an essential element of operational art. The operational artist must identify both enemy and friendly centers of gravity to properly apply the art.25 Once identified, however, how does the military attack the enemy center of gravity?

First, careful examination of enemy dispositions, compositions, doctrine, and other factors should lead to discovering some enemy weakness that holds the key to defeating his center of gravity. Doctrine refers to this key as a decisive point. For an armed force, a decisive point might include the enemy commander, his command and control apparatus (or cybernetic function), the will of his troops (moral factors), or some physical weakness within his force. Attacks against these decisive points may lead to the disintegration and demoralization of the enemy’s military force. Additionally, like the concept of center of gravity, more than one decisive point may exist. Planners must identify these decisive points and apply military means against them to attack the enemy’s center(s) of gravity.26

To attack decisive points and defeat the enemy’s center of gravity, the operational artist must design and organize the force.27 In other words the artist must consider the various means and ways available to plan and execute a given operation. In an unconstrained environment, the planner can use all
capabilities of an armed force in his deliberations. Such optimum conditions seldom exist, however, so the planner needs to identify available resources and organize them effectively to ease operational execution.24

Before organizing these available or unconstrained means, the planner must design the way he intends the campaign or operation to progress. The operational thought process relies heavily on geometrical concepts developed by Jomini in the nineteenth century.25 In a modern sense, these concepts include:

- identifying the base or bases of operations (those locations from which an army will provide logistical support to the force);
- determining the line or lines of operations directed toward the enemy and linked back to these bases;
- and identifying whether these lines of operation are exterior or interior and weighing the benefits and costs associated with each type.26

With these ideas in mind, the planner must then:

- decide whether to use an indirect or direct approach (or some combination of the two) to attack the enemy’s center of gravity;
- determine the order and transportation method(s) to move the force to, and throughout, the theater of operations (deployment and employment);
- decide how to sequence the actions of the force (operations, battles and/or engagements) to achieve the desired political end state.
- properly balance offensive and defensive operations according to the situation.
- determine when and/or where logistics, morale, or attrition will result in reaching a culminating point and planning an operational pause before reaching that point.
-and synchronize the means to have a synergistic impact on the enemy during operational execution.

The above factors serve as the basic elements of design for operational art.  

No matter how well a planner thinks he has designed and organized an operation, it is still subject to risk, friction, and the ever-present fog of war. Risk may result from an incorrect evaluation of the capabilities of the enemy or friendly force, the enemy’s intentions, or the impact of weather, terrain, and other factors on the operation. The element of risk also exists when the planner and his commander realize they have shortfalls in available means and ways to conduct an operation, assume success despite these shortfalls, and go forth with the plan.

Friction is synonymous with Murphy’s Law—anything that can go wrong will go wrong—and normally when least expected. At the operational level of war, friction "wastes combat power," particularly when it causes events that impede the efforts of a force to reach its end state. The fog of war "is related to" the element of friction. "Fog in war is the obscuration of reality" and it causes friction "when something untoward has occurred, it is hidden from view and so passes undetected."

No planner can overcome the effects of risk, friction and the fog of war, but the correct application of operational art can lessen their impact. By identifying the risks inherent in an operation, adding flexibility to the plan, and assessing potential branches and sequels in the wargaming process, planners can reduce the repercussions these impediments cause on the battlefield.
The aspects of operational art described above serve as criteria for assessing whether planners used the art to plan and execute Operation JUST CAUSE. Today's theorists of operational art provide additional criteria for use in this assessment.

Dr. James Schneider proposes operational art, "in its fullest expression... is manifested through several key attributes." These attributes include: the distributed operation, campaign, enemy, and deployment, as well as, operational vision, instantaneous command and control, continuous logistics, and an operationally durable formation.

Schneider claims technological advancements in weaponry created the "empty battlefield," the expansion of forces in width and depth due to the increasingly lethal effects of firepower. This condition, combined with improvements in communications and transportation, and the emergence of huge armed forces during the nineteenth century, were the prerequisites for the operational level of war, and hence, operational art. The combined effects of these factors led to a distributed battlefield—a battlefield expanded in width, depth, space, and time—today's battlefield.

Decisive battle is no longer possible. Instead, to gain victory, an army is forced to conduct deep maneuvers and a series of battles "extended in space and time"—the distributed operation. Although Schneider allows that one major operation may achieve strategic victory, the norm is a distributed campaign consisting of several distributed operations. These conditions also
require continuous mobilization, or distributed deployment, by the warring parties. As war expands in time, and nations lose their young in battle, there is a requirement to regenerate the force indefinitely.34

The distributed operation, campaign, and deployment require continuous logistics. This attribute of operational art means to sustain an armed force's "movement tempo" and "force density."35 In other words, continuous logistics is the ability to supply guns and butter to an army indefinitely, at least until one side or the other is physically or morally exhausted. Continuous logistics leads to the maintenance of an operationally durable formation; a military force capable of fighting indefinitely, dependent on the provision of trained and equipped replacement personnel.40

Additionally, the commander and his staff must have operational vision—an ability to see beyond the first battle into the future. This attribute of operational art involves planning the campaign or operation completely, anticipating the different paths the war may follow. Operational vision implies a strong "mental agility," characterized by the "ability to react to incoming information faster than it arrives."41 Inherent to this process are instantaneous communications. An army engaged in operational art must quickly receive and transmit information across the entire theater of war.42

Finally, operational art requires the existence of a distributed enemy. Schneider describes this enemy as one whom is similarly "trained, equipped, structured, and commanded as the friendly force."43 The distributed enemy,
and the preceding attributes of operational art developed by Dr. Schneider, provide further criteria for assessing the application of operational art during Operation JUST CAUSE.

Dr. Robert Epstein, while concurring with much of Schneider's thesis, articulates a slightly different view of operational art theory, one less predicated on changes in technology. Viewing war through his own unique historical lens, Epstein proposes two additional factors make operational art what it is today. First, the execution of operational art requires attaining air superiority. Although this claim is questionable when one considers the trials and tribulations of the Vietnam War (albeit including a constrained and inconsistent air campaign), it is worthy of consideration vis-a-vis Operation JUST CAUSE. Finally, Epstein believes "operational art is the means by which favorable battle situations are created." In other words, the correct application of operational art, during planning, should make operational execution a certainty.

The preceding summary is not all inclusive. It does, however, provide useful criteria for assessing whether JUST CAUSE planners applied operational art. Before conducting the assessment, this monograph provides an overview of the political and militarily significant events associated with the development of the operation. The next section places particular emphasis on the military planning activities occurring at various stages of the two and one-half year crisis. The section concludes with a summary of the execution phase of the
III. Historical Background

In June 1987, General Manuel Antonio Noriega, the head of the Panamanian Defense Forces (PDF) and de facto ruler of Panama, had a problem. A military rival, Colonel Roberto Diaz Herrera, accused Noriega of murdering a rival political contender, using Panama as a base of operations for drug smuggling, and election fraud. The U.S. government, which had a "quasi-colonial relationship with Panama dating from its [Panama's] independence in 1903," took swift action against Noriega. The U.S. discontinued military assistance to the PDF, called for the establishment of democracy in Panama, and began to pursue a policy of "unreserved opposition to Noriega."

General Frederick Woerner, the Commander-in-Chief, United States Southern Command (USCINCSO), realized the Panamanian crisis meant a drastic change in U.S. military strategy toward Panama. The existing U.S.-Panamanian joint military plan designed to protect the Panama Canal, Operation Plan (OPLAN) 6000-86, was obsolete. Woerner directed his staff to rework OPLAN 6000-86 assuming "a hostile, rather than a neutral or friendly, PDF." Southern Command (SOUTHCOM) dubbed the new plan ELABORATE MAZE, thus beginning the planning process that would lead to
Operation JUST CAUSE two and one-half years later.10

Faced with mounting internal and external pressure, Noriega, whom
Woerner called the "world’s master in . . . the judicious use of intimidation,"11
avoided provocative actions and the initial crisis subsided. In February 1988,
however, the uneasy calm in Panama was suddenly broken. Two U.S. federal
grand juries unexpectedly indicted Noriega on drug trafficking charges.
Panamanian and U.S. citizens called for Noriega’s ouster. In answer to their
pleas, Eric Delvalle, the nominal President of Panama, attempted to fire
Noriega, but instead, lost his own position. President Reagan countered by
imposing selected economic sanctions, while the U.S. Congress and State
Department pressed for further action against Noriega. In March, several
members of the PDF attempted a coup, but Noriega swiftly regained control
and purged the PDF of those considered disloyal. Noriega’s opponents
organized street demonstrations and a general strike, but again he ruthlessly
restored order, this time with PDF intervention.12

The growing unrest in Panama forced President Reagan to increase
pressure on Noriega. He imposed greater economic sanctions and ordered the
deployment of an additional 1,300 military personnel to Panama to bolster
security in the country. Using the additional force as a bargaining chip, he
offered to remove the drug charges against Noriega if the Panamanian stepped
down. Negotiations failed and the U.S. Senate blocked an attempt by Reagan
to use covert action against Noriega. With presidential elections approaching
in the fall, Reagan opted to take no further action and the crisis became a stalemate.3

U.S. military activity intensified during this crisis period. Per JCS directives in February and March, "SOUTHCOM and its components began contingency planning in a crisis action mode."34 Planners reworked ELABORATE MAZE into a new set of plans called the PRAYER BOOK. Woerner activated a Joint Special Operations Task Force (JSOTF) at Hurlburt Field, Florida. Additionally, as his staff was too small to carry the extra planning load, Woerner activated Joint Task Force-Panama (JTF-P) out of U.S. Army South resources to "coordinate security operations, engage in [tactical] contingency planning and manage day-to-day tactical aspects of the crisis."35

The PRAYER BOOK series of plans gave policymakers four different military options. ELDER STATESMAN (later POST TIME) provided for the defense of the Panama Canal and U.S. military installations and civilians. In case of an increased threat to U.S. citizens in Panama, the military could conduct a noncombatant evacuation operation, code-named KLONDIKE KEY. BLUE SPOON was an offensive operation, while KRISTAL BALL (renamed BLIND LOGIC) provided ways to restore the Panamanian government should it collapse. SOUTHCOM retained the planning lead for BLIND LOGIC, while tasking JTF-P to plan the other operations.36
PRAYER BOOK’s key plan was BLUE SPOON. It called for the gradual, massive buildup of U.S. forces in Panama. The aim of the plan was to escalate the pressure on the PDF to the point where they would feel compelled to overthrow Noriega. The plan would use elements of: the 7th Infantry Division (Light) based at Fort Ord, California; a Marine Expeditionary Brigade from Camp Pendleton, California; an aircraft carrier battle group off each coast of Panama; and the 82nd Airborne Division from Fort Bragg, North Carolina, the force reserve. Woerner, and then CJCS Admiral William Crowe, decided to use the force buildup option. They felt the large presence of U.S. citizens in Panama ruled out a quick, surprise attack. Furthermore, Woerner believed coordinated interagency efforts by Washington against the Noriega regime would end the crisis without use of force.

LTG John W. Foss, the commander of XVIII Airborne Corps at Fort Bragg, lacked confidence in SOUTHCOM’s plan. His corps was the U.S. Army’s rapid response contingency force, yet he had only a coordination role in the planning effort. Foss and his staff felt the plan had many weaknesses. Primarily, it allowed the PDF time to build up defenses or move to the jungle to prolong any potential fight. Additionally, corps planners felt the JTF-P staff was too undermanned to plan and execute the operation, the force deployment was too unwieldy, and the plan’s objectives were unclear. They also believed the plan lacked a joint flavor, particularly in its lack of airspace management.
Furthermore, corps personnel thought the plan too detailed, allowed little flexibility to subordinate commanders, and had too many targets (40-50). Because of these concerns, Foss ordered his staff to quietly prepare its own plan for offensive operations in Panama.  

Tensions in Panama eased throughout the remainder of 1988 and into the winter of 1989. The newly elected U.S. President, George Bush, continued to hold a hard line against Noriega, but took no further concerted action against him. Hopeful that Panamanian elections scheduled for May 1989 would lead to a government able to control Noriega, the U.S. government let political and diplomatic sanctions work their course.  

The elections in May triggered another eruption of the crisis. Before the elections, the Bush Administration, wary of possible election manipulation by Noriega, announced "it would consider new diplomatic, intelligence, and military options" if fraudulent elections occurred. Noriega failed to heed the U.S. warning. Not only did he attempt to rig the elections, but he also declared the elections invalid when his opponents managed to win. Subsequent demonstrations by members of the opposition turned violent. Noriega unleashed elements of his paramilitary Dignity Battalions and Doberman Riot Police on the crowd. Noriega's thugs injured the opposition presidential candidate and one of his running mates in the melee.  

Angered by Noriega's disregard for the democratic process, and concerned for the lives of U.S. citizens in Panama, President Bush responded
quickly. He recalled the Ambassador to Panama, cut the embassy staff, and called upon the Organization of American States (OAS) to place pressure on Noriega and negotiate his resignation. Additionally, he authorized execution of Operation BLADE JEWEL. This operation moved "all U.S. employees and their dependents to safe housing," and reduced the number of these dependents in Panama. Furthermore, he ordered execution of Operation NIMROD DANCER, an emergency deployment of 2,000 additional combat forces to Panama, including U.S. marines and elements of two U.S. Army divisions. This force constituted partial execution of the SOUTHCOM POST TIME plan.

Military planning actions again intensified. Commanders and staffs conducted crisis reevaluation of the PRAYER BOOK plans expecting immediate execution of many, if not all the plans. XVIII Airborne Corps planners continued to question the feasibility of BLUE SPOON and were beginning to gain support from JTF-P, SOUTHCOM, and JCS. As tensions began to subside by the end of May, JTF-P integrated NIMROD DANCER units into BLUE SPOON, and planners concentrated on refining the offensive plan.

Noriega disregarded the military posturing around him and intensified his psychological attacks on U.S. personnel in Panama. SOUTHCOM noted an increase in Panamanian violations of U.S.-Panamanian treaties and harassment of American personnel. Clearly sanctions were not working.
Noriega was simply turning to others, such as the drug cartels and Cuba, for support. In Washington, "there was unanimity of opinion that Noriega was contrary not only to Panamanians interests, but also [U.S.] interests." The problem was that the Departments of State and Defense could not agree on the appropriate course of action to take. State favored military intervention while Defense argued for continued political and economic sanctions. As each of the latter measures failed to work, the U.S. moved toward military action.

The tempo of U.S. military activity increased during the summer. The U.S. initiated tactical show-the-flag operations, called SAND FLEA's, designed to exercise U.S. treaty rights. In reality, these operations also prepared units for their specific combat roles under BLUE SPOON, while desensitizing the PDF to U.S. activities, and exercising command and control procedures and systems. Additionally, JTF-P initiated joint exercises, code-named PURPLE STORM's, to improve Army, Air Force, and Marine coordination under the plan. Furthermore, BLUE SPOON faced drastic revision. Apparently displeased with General Woerner, the Bush Administration announced his "retirement" on July 22, 1989 and named his replacement, General Maxwell Thurman. By the time he took command in October, Thurman had made sweeping changes to the way U.S. forces would intervene in Panama later in 1989.

Before he took command, Thurman made it clear to XVIII Airborne Corps planners that they would lead planning and execution of BLUE SPOON.
He also stressed that he did not like the present plan. The XVIII Airborne Corps plan, OPLAN 90-1, held in abeyance under the Woerner regime, suddenly came to the forefront. Gone was the requirement to use U.S. Navy aircraft carriers and a Marine Expeditionary Brigade. Also dropped was the long buildup of forces required by BLUE SPOON. In its place was a plan designed to put massive force on the ground in Panama virtually overnight. This required the use of America's most rapid contingency force, the 82d Airborne Division. The 7th Infantry Division (Light) was subsequently dropped as the primary BLUE SPOON force; however, it did remain in the plan for use in subsequent operations.67

Other problems with BLUE SPOON disappeared. A new aviation task force consolidated Army helicopter assets, thus decreasing airspace coordination difficulties. Coordination increased between the corps and Air Force planners to jointly unite air efforts and decrease airspace problems even further. LTG Carl W. Stiner, now the Commander, XVIII Airborne Corps, facilitated integration of special operations plans into OPLAN 90-1. Stiner, as a former commander of the Joint Special Operations Command (JSOC), knew special operations doctrine and the players involved in these types of operations. He was just the right man to pull the conventional and unconventional forces together in the plan. As OPLAN 90-1 neared completion in early October 1989, events in Panama would change it again.68
General Thurman and General Colin Powell took their new posts as CINCSO and CICS respectively on October 1st. Two days later, on October 3d, a PDF Major attempted another coup to topple Noriega. While Thurman and Powell pondered what to do, troops loyal to Noriega squelched the ill-fated attempt. Congress chastised the American generals for not vigorously aiding the coup plotters, although both military leaders doubted the coup would have succeeded, even with U.S. help. The coup attempt did serve to clarify the enemy situation in Panama for BLUE SPOON planners. Quick responses by some PDF units, and a lack of response by others, changed the intelligence picture. OPLAN 90-1 and BLUE SPOON target priorities changed accordingly.

Planning and preparations for executing the BLUE SPOON plan intensified following the coup attempt. Generals Thurman and Stiner, and their staffs, held several coordination meetings to iron out planning details. By November 3d, XVIII Airborne Corps had rewritten OPLAN 90-1, renamed OPLAN 90-2, and had obtained SOUTHCOM and JCS approval of the document. USSOUTHCOM updated the BLUE SPOON plan, USCINCSO Operations Order (OPORD) 1-90, accordingly. The new plan assumed the PDF would react to an American intervention in a way similar to that seen during the coup. Additionally, the JSOTF, since its activation as a separate command under USCINCSO, now fell under Stiner's control.
To execute OPLAN 90-2, XVIII Airborne Corps, renamed Joint Task Force-South (JTFSO) by the plan, would control numerous forces from Panama and CONUS. U.S. Army South, the 82d Airborne Division, and the 7th Infantry Division (Light), formed the core of U.S. Army assets under JTFSO control. This ground force also included U.S. Marine elements stationed in Panama. Elements of 12th Air Force, with assets scattered throughout CONUS, would provide air support to the operation. Additionally, Panama-based air assets, JSOTF AC-130 gunships, and Military Airlift Command (MAC) units, rounded out the OPLAN 90-2 support force. Finally, JSOTF, using the 75th Ranger Regiment, U.S. Navy SEAL teams, U.S. Army Special Operations assets, and elements of the secretive Joint Special Operations Command, would contribute to both conventional and unconventional operations. (See Appendix 1 for a partial JTFSO Task Organization).

JTFSO would face PDF units vastly inferior in training, equipment, strength, and general military capabilities, yet, the Panamanian force represented a potential long-term threat. The PDF consisted of approximately 19,600 personnel, of which 6,000 were in the active force. Its army consisted of two infantry battalions, ten separate infantry companies, a cavalry squadron, and a special forces antiterrorist unit called the UESAT (Unidad Especial de Seguridad Antiterror). Major equipment in the army inventory included armored cars and 60mm mortars, but no tanks. The PDF air force had only
400 personnel, 38 fixed-wing aircraft and 17 helicopters (all unarmed), and an assortment of air defense guns. The force was rounded off with a brown-water navy that had a few patrol craft. Besides this meager force, Noriega had developed an unknown number of Dignity Battalions, nicknamed Digbats by the U.S. troops. Ill-equipped and ill-led, this rabble of criminals and thugs, loyal to Noriega for the money he gave them, posed an unpredictable threat to both U.S. military and civilian personnel.7

Despite their seemingly inferior state, PDF and Digbat capabilities greatly concerned U.S. military planners. The so-called PLANAMONTANA called for the PDF "to take to the mountains to conduct guerrilla warfare"73 against the Americans. Should the PDF do so, planners envisioned a longer, more difficult operation to root them out of the dense Panamanian jungle. Other PDF plans, code-named GENESIS and EXODUS, dealt with UESAT and Digbat schemes to kidnap Americans and hold them hostage in the interior of the country.74 Finally, as OPLAN 90-2 assumed a minimal air defense threat to U.S. forces, there was some concern that the PDF had acquired SA-7 missile systems.75 If true, this weapon posed a significant threat to the plethora of U.S. aircraft planned for the operation.

With these "worst case" scenarios in mind, OPLAN 90-2 forces readied themselves for combat throughout November and early December 1989. Stateside Army, Air Force, and JSOTF units conducted many exercises built around OPLAN 90-2. Military units in Panama conducted an increased
number of SAND FLEA and PURPLE STORM exercises tied to the new plan. Additionally, a bomb threat in Panama in mid-November led to the premature activation of JTFSO. As a result, JTFSO and SOUTHCOM practiced communications procedures, conducted detailed Command Post Exercises (CPXs), and increased intelligence coverage of the enemy. Finally, SOUTHCOM prepositioned several combat systems in Panama including M-551 Sheridan tanks, AH-64 Apache helicopters, and selected JSOTF assets. U.S. forces were ready for action. All they required was an execution order.\textsuperscript{76}

In mid-December 1989, the U.S.-Panama crisis reached its climax. On the 15th, the Panamanian National Assembly, in a televised session, declared Noriega "maximum leader of national liberation," named him "chief of government," and added that "the Republic of Panama is declared to be in a state of war while the aggression [by the U.S.] lasts."\textsuperscript{77} Events quickly went out of control. On the 17th, a U.S. Marine lieutenant was shot and killed at a PDF roadblock. The PDF arrested, interrogated, and roughed up a U.S. Navy lieutenant and his wife who had witnessed the shooting.\textsuperscript{78}

Concerned for the safety of U.S. citizens, who had been subjected to over 2,000 incidents of PDF harassment in the preceding two years,\textsuperscript{79} and aware of possible planned attacks by Dignity Battalion elements against U.S. housing areas, President Bush decided to act. On Sunday, December 18, 1989, the NCA ordered execution of USCINCSO OPORD 1-90 (BLUE SPOON), and its subordinate OPLAN 90-2. JCS set H-Hour for 0100 hours,
Eastern Standard Time, December 20, 1989. The operation was renamed JUST CAUSE.10

With a revised H-Hour of 0045, U.S. forces invaded Panama from within and without on the 20th. In a massive, joint assault involving Rangers, airborne units, special operations elements, Air Force airlift and strike aircraft, and a host of other forces, American units struck 27 targets during the night. By mid-afternoon, it was clear the operation was a major success. The PDF ceased to exist as a cohesive fighting force, its leader was on the run, and a new, democratic government emerged in Panama.11

Over the next few days, the Americans restored law and order within Panama City and Colón, rescued Americans taken hostage by small numbers of PDF and Dignity Battalion forces, and began combat operations into the remainder of the country. While these operations continued until early February 1990, no significant resistance challenged U.S. military might. On the 24th, Noriega sought refuge in the Vatican Embassy in Panama City. Later, when Noriega left the building, U.S. authorities arrested him and sent him to jail in the United States. Eventually peace returned to Panama and, on January 31, 1990, the JCS declared an end to Operation JUST CAUSE.12

Almost immediately, the U.S. military began nation-building operations in Panama. A dusted-off version of OPORD BLIND LOGIC, pulled from the original PRAYER BOOK series of plans, provided the basis for these operations, now code-named PROMOTE LIBERTY. Conducted
simultaneously with JUST CAUSE, PROMOTE LIBERTY seemed
disorganized and ineffective at first. For example, command and control of
the effort did not stabilize until January 23d when the U.S. Military Support
Group-Panama took control of the operation. Eventually the operation helped
the Panamanian people in their quest to restore democracy in their country—an
effort that continues today.15

Having reviewed the background of the planning and execution of
Operation JUST CAUSE, this monograph returns to the central question: Was
Operation JUST CAUSE an application of operational art? The next section
compares the doctrinal and theoretical criteria established in Section II to the
history of the operation to find the answer.

IV. Doctrinal and Theoretical Evaluation

To determine if JUST CAUSE was an application of operational art,
this section begins by comparing the operation to the doctrinal definition of
operational art. It then addresses the design and organization of the operation
in terms of the criteria identified in Section II. Finally, this section concludes
by evaluating JUST CAUSE against Schneider’s attributes of operational art
and Epstein’s view of the art today.

The doctrinal definition of operational art requires planners to design,
organize, and execute campaigns and major operations to attain strategic
goals. For JUST CAUSE to be an application of operational art it follows that the operation must be a campaign or major operation tied to strategic goals.

At a minimum, Operation JUST CAUSE was a major military operation. It required the use of approximately 12,000 troops based in Panama and an additional 14,000 within the first 24 hours. This force included elements of all U.S. military services and involved the support of five Unified & Specified Commands during its execution, as well as assistance from several U.S. governmental departments and Department of Defense agencies. In effect, JUST CAUSE was an invasion by U.S. forces into the territory of a sovereign nation, without that nation's initial consent, to impose U.S. will on its people.

Despite previously ambiguous policy toward Panama, U.S. political and military objectives for Operation JUST CAUSE were clear and consistent from the strategic to the tactical levels of war. The Bush Administration stated four goals for the operation:

- to protect American lives, restore the democratic process [in Panama], preserve the integrity of the Panama Canal treaties and apprehend Manuel Noriega.

To attain these political goals, the USSOUTHCOM BLUE SPOON plan translated them into the following broad strategic military objectives:

The removal of Noriega from power and Panama, the removal of Noriega's cronies and accomplices from office, the creation of a PDF responsive to and supportive of an emergent democratic government of Panama [GOP], and a freely elected GOP which is allowed to govern.
USSOUTHCOM planners then linked these objectives (ends) to general operational missions (ways) by stating:

To accomplish these objectives U.S. forces must: protect U.S. lives and property; exercise U.S. treaty rights and responsibilities; defend the canal; be prepared to support Panamanian initiatives with military operations; and be prepared on order to capture Noriega, capture key Noriega accomplices, fix the PDF, and neutralize the PDF. Additionally, U.S. forces must be prepared to rescue any USCITs [U.S. citizens] detained by the PDF and to conduct restoration of law and order operations. U.S. forces must be prepared to conduct all missions simultaneously and to assist the emergent government of Panama in stabilization operations on the completion of combat operations.⁹⁰

BLUE SPOON also allocated responsibility for planning and executing these operational missions. The plan tasked JTF-South, along with the JSOTF and other component commands, to perform combat-related activities. These included the capture of Noriega and other PDF leaders, the neutralization of the PDF, and the defense of U.S. citizens, U.S. installations, and the Panama Canal. Absent from these taskings was the requirement to conduct "stabilization operations." The plan simply referred its readers to the BLIND LOGIC plan for further information.⁹¹

While BLUE SPOON translated political and strategic military objectives into operational missions, JTF-South OPLAN 90-2 served to link these missions to tactical military actions. The plan’s mission statement read:

When directed, XVIII Abn Corps, as JTF SOUTH (JTFSO), conducts operations in the JOA [Joint Operations Area] to protect U.S. lives, secure key sites/facilities, and neutralize the PDF; prepares to restore law and order, and support installation of a U.S.-recognized government in Panama. On order, redeploy as directed.⁹²

The plan tasked JSOTF to capture Noriega and other key PDF leaders, to
rescue any persons detained by the PDF, and to conduct other direct action and special reconnaissance missions. Other combat missions, such as neutralizing the PDF and defending U.S. installations and key Panamanian facilities, fell to conventional forces. Having established that JUST CAUSE was a major operation designed to attain strategic objectives, this paper next assesses the operation in terms of its design and organization using the criteria listed in Section II.

While BLUE SPOON and OPLAN 90-2 do not specifically use the term center of gravity, commanders and planners clearly identified enemy centers of gravity in the planning process. General Thurman saw Noriega as the strategic enemy center of gravity. As long as the PDF leader remained in power, he could still serve as a "rallying point" for the Panamanian military and the Dignity Battalions. General Stiner agreed with the CINC's assessment. He believed most of the Panamanian people wanted democracy. Noriega and his PDF stood in their way. Therefore, he felt U.S. forces had to go "for the head of the snake [Noriega] at the same time you go for his power base [the PDF]." In this regard, in purely Clausewitzian terms, the enemy armed forces became the operational center of gravity.

Although the source documents do not mention friendly centers of gravity, one can derive a potential friendly center of gravity by considering the main concerns of JUST CAUSE authors. As long as the PDF stayed out of the jungle, it was felt U.S. forces could quickly neutralize them. If, however,
the PDF executed their so-called PLANAMONTANA, planners feared a longer and more costly fight would follow. Additionally, planners were concerned that the PDF would take American citizens hostage. Confronted with a potential war in the jungle and the possible kidnapping of U.S. civilians, one can surmise that Americans might criticize the operation. As U.S. deaths mounted, images of Vietnam might surface among the American people. Therefore, if there was a friendly center of gravity during Operation JUST CAUSE, it was the will of the American people. To protect this center of gravity, U.S. forces had to attack quickly and violently to fix and neutralize the PDF and minimize the threat to Americans in Panama.

To devise a plan to accomplish this, planners analyzed the enemy centers of gravity to identify appropriate decisive points to attack. At the strategic level, Noriega was both the decisive point and center of gravity. His capture and removal from Panama was the overall key to success. At the operational level, selected units of the PDF, based on activity observed during the October 1989 coup attempt, rose in importance as they appeared critical to any attempts by the opposition to thwart a U.S. invasion. Targeting these forces was an essential part of the attack plan, but another way existed to keep them out of the fight. Planners determined that the PDF command and control (C2) system was the decisive point to attack the operational center of gravity. Disabling PDF C2 would allow U.S. forces to face an essentially leaderless foe.
The next planning step was to identify the forces required to do the job. General Stiner's superiors did not constrain him in developing the force structure (or means) to accomplish the mission. The U.S. was not involved in any other major military operations during this period, and the quest to topple Noriega was clearly at the top of the Bush Administration's agenda. These factors, coupled with the support of USSOUTHCOM and JCS, gave Stiner virtually a free hand in designing his command."

Stiner and his planners did face two limitations in deploying and employing any selected force. Strategic and theater airlift was not unconstrained. Stiner's staff had to tailor the CONUS-based force package to varying estimates of aircraft availability and sortie generation rates. Additionally, the USSOUTHCOM helicopter fleet was small. This necessitated infiltrating Army aviation assets to Panama, constrained by existing hangar space at Howard Air Force Base."

The other key factor that limited Stiner's employment of combat forces was the desire to minimize casualties, both civilian and military. Most of the Panamanian population was pro-U.S., but extensive civilian casualties during an invasion might quickly erode their support. Additionally, the large number of U.S. citizens in Panama, although reduced during Operation BLADE JEWEL, further restricted the amount of force the military could use. Planners also realized that the PDF was the police force in Panama and controlled most of the government's bureaucracy. Destruction of the PDF meant eradicating
"the only real national institution in Panama." A future democratic Panamanian government would depend on using members of the former PDF to keep the nation running, therefore, neutralizing the enemy was preferred to defeating or destroying him.101

Because of the desire to minimize casualties, planners had to devise highly restrictive rules of engagement (ROE).102 For example, unobserved fire was severely limited and use of indirect fire weapons in built-up areas required the "approval of the ground commander in grade O-5 (Lieutenant Colonel) or above."103 OPLAN 90-2 provided a nine-page appendix on ROE to cover the initial combat phase of the operation, and modifications occurred continuously as the U.S. force transitioned from combat to stability operations.104

Despite restrictive ROE and limited airlift, planners were blessed with the existence of multiple, U.S. controlled bases of operation in Panama, and added another for good measure. The U.S. occupied several major facilities in Panama on both the Pacific and Atlantic sides of the Panama Canal. Among them, USSOUTHCOM Headquarters, at Quarry Heights, offered a commanding view of the PDF headquarters complex, the Commandancia. Additionally, U.S. forces shared several installations with elements of the PDF. Of principal concern to JTF-South planners was Howard Air Force Base. This C-5 capable air base was vulnerable to PDF mortar fire from the surrounding jungle. To provide a secondary airfield for the invading force, planners decided seizure of Torrijos International Airport (located east of
Panama City) was necessary. This target provided an additional benefit to the U.S. force. Seizing Torrijos also required securing the adjacent Tocumen Airfield, the largest PDF air base. 

BLUE SPOON and OPLAN 90-2 also required deployment of CONUS-based units from several locations in the United States. Staging areas included: Fort Bragg, Fort Lewis, Fort Benning, Fort Stewart, Fort Polk, and Fort Ord. Aerial ports of debarkation included the following U.S. Air Force bases: Pope (next to Fort Bragg), Charleston, Hurlburt Field, and Travis. Additionally, forces deployed from Hunter Army Airfield and a civilian airfield in Monterey, California.

Using this wide variety of CONUS and Panamanian bases of operation, and means limited only by available airlift, planners were free to develop a highly complex plan. They used both interior and exterior lines of operation to plan attacks against a total of 27 H-Hour targets. For example, Ranger battalions deployed from the U.S. on exterior lines would conduct airborne assaults to attack Torrijos Airport and a PDF installation at Rio Hato in western Panama. Elements of the 193d Infantry Brigade, on the other hand, were to road-march from Fort Clayton, Panama on interior lines to attack targets in western Panama City.

The number and variety of U.S. forces designated for the initial H-Hour strikes allowed for execution of both offensive and defensive missions. The plan earmarked some forces to attack PDF C2 facilities, unit garrisons,
and air and naval sites. Other U.S. elements were tasked to block road intersections, secure key bridges and sites along the Panama Canal, and defend U.S. installations and housing areas. Planners selected units to execute these tasks by matching force capabilities with mission requirements.  

Stiner's staff used both direct and indirect approaches to neutralize the enemy in the plan. Planned surgical attacks against known Noriega residences were clearly examples of using a direct approach. In hindsight, as Noriega eluded capture until December 24, 1989, attacks against these locations indirectly stymied his movements. "JSOTF conducted more than forty operations across Panama aimed at snatching Noriega" before he surfaced on the 24th. Direct attacks against forces at the Commandancia and the PDF garrison on Fort Amador also served as indirect attacks against the PDF as a whole. These two facilities were Noriega's principal C2 nodes for controlling the PDF. As such, these targets together formed the decisive point to attack the enemy's operational center of gravity—the PDF. Additionally, JTF-South planned electronic warfare and psychological operations throughout the operation to reduce the PDF's will to resist and bolster Panamanian public opinion toward the U.S.  

The simultaneous attack by U.S. forces against the 27 H-Hour targets was designed to produce a synergistic impact upon the PDF. Attacking at night, surprising the enemy, and using a combination of firepower, maneuver, and psychological operations, JTF-South hoped to "lay on top of them [the
PDF] with overwhelming combat power so that they [couldn't] run away [to] fight another day. As the operation unfolded, it was clear General Stiner and his planners achieved the desired effect. Within the first 24 hours of Operation JUST CAUSE the PDF lost cohesion, was demoralized, and quickly disintegrated as a functional fighting force.

Stiner and his charges did accept some risk with OPLAN 90-2. They planned for no operational pause, believing the PDF incapable of forcing the U.S. force to a culminating point. (They did plan for branches and sequels, and issued daily frag nentary orders (FRAGORDs) to adjust the plan to the changing situation.) JTF-South couldn't possibly protect all U.S. citizens at the start of the operation; thus, the risk of the PDF seizing hostages remained high. Operational surprise was also a critical factor in the plan. Increased activity at Howard Air Force Base in the days before H-Hour, speculation concerning a possible invasion on U.S. television broadcasts, and other violations of operational security risked exposing the operation before it began. These factors aside, American commanders had confidence in the plan and judged the risks small.

In retrospect, friction and the fog of war had some impact on U.S. execution of the plan. The PDF learned of the attack and began mobilizing forces before the invasion began, prompting Stiner to revise H-Hour. Elements of the 82d Airborne Division missed their drop zone and landed in a swamp. As a result, scheduled attacks by this force against their H-Hour

36
targets were pushed back into daylight hours, possibly adding to the unit's casualties. U.S. forces tracking Noriega lost his trail just before the invasion, resulting in days of search operations and diversion of combat forces until he surfaced on 24 December. Despite these and other miscues, a robust U.S. C2 network (discussed later) enabled JTF-South to significantly reduce the fog of war.

In summary, the planning and execution of Operation JUST CAUSE meets the definition of operational art contained in FM 100-5. Planners used the elements of operational design described in Section II to meet strategic objectives with a major U.S. military operation. This paper next turns to the theory of operational art to determine if Schneider’s and Epstein’s criteria were met as well.

The U.S. military conducted operations in Panama on a distributed battlefield. The PDF could not concentrate or scatter to the jungle. Instead, a massive U.S. force struck multiple targets, spread throughout Panama, on a single night. Subsequent operations throughout Panama into February 1990, and concurrent stability and nation-building operations, combine to depict JUST CAUSE as a distributed operation.

Operation JUST CAUSE was a major, U.S. contingency operation and therefore is an example of the exception Schneider allowed for when defining the distributed campaign. Despite distributed operations into Panama’s interior, the Americans essentially neutralized the PDF within the first few
days of the operation. The stability phase of the operation, and the simultaneous execution of Operation PROMOTE LIBERTY, might lead one to view these operations in total as a campaign. Such a view is debatable, however, due to the disjointed execution of these operations and the lack of planning for them by JTF-South."

Although the scale of JUST CAUSE does not compare with many of America's major wars, the military did enjoy continuous logistics and mobilization, even if on a reduced scale. Units benefitted from in-country logistics stocks and daily resupply flights from CONUS. One commander claimed, "if we asked for it, we got it [and] we got it quickly." The size of the operation did not warrant major mobilization efforts, however, additional military police, combat units, and civil affairs personnel quickly joined the D-Day force. In all, over 300 airlift missions from CONUS supported the deployed force in its first ten days, not including the 51 aircraft used to deliver initial combat forces to the theater at H-Hour.

JUST CAUSE units also benefitted from a tremendously robust C2 system. Instantaneous communications were available at all times. Using a combination of satellite, landline, and radio systems, commanders often experienced 100% reliable communications. Facsimile machines and computer word processing systems allowed for unprecedented exchange of orders and messages between units. In the early stages of the operation, commanders had as many as four redundant communications systems available.
to control the operation. Additionally, the first use of a Joint Communications Electronics Operating Instructions (JCEOI) codebook allowed for secure communications across the joint arena.\textsuperscript{125}

Obtaining air superiority was never a doubt for the U.S. force as the enemy could not muster a credible threat. Initial concerns that the PDF had obtained SA-7 missiles proved invalid. Known PDF anti-air gun systems were quickly knocked out during the initial fighting, leaving the enemy with only small arms to combat the massive U.S. air machine employed. Despite their air defense weakness, the PDF did inflict considerable damage on U.S. aircraft, but casualties and combat losses were low.\textsuperscript{126}

The U.S. force achieved its combat-related objectives in fifteen days.\textsuperscript{127} As a result, JUST CAUSE never really tested the operational durability of U.S. formations. The force did not need an operational pause, nor did it lack for supplies and manpower. Had the PDF gone to the jungle to fight, the Americans may have faced a more difficult time. It is doubtful, however, that the third-rate PDF could have tested the durability of any U.S. combat unit.

The PDF was a marginally distributed enemy. Although equipped with some modern weapons of war, and trained and organized to engage in modern combat, it was largely an internal police force with no real ability to engage in combined arms operations. Yet, despite its weaknesses, the fighting spirit of some PDF soldiers and noncommissioned officers surprised some American commanders. The PDF leadership, however, was a tremendously weak link,
deserting its soldiers at the first signs of trouble."

In contrast to the poor leaders in the PDF, the American command was blessed with commanders of operational vision. Generals Thurman, Stiner, Foss, and others realized the inadequacies of the early BLUE SPOON plan, and revised it in line with the doctrine of operational art. They developed a synchronized and intricately detailed operational plan and, despite its complexity, saw its execution through with speed, precision, and minimal loss of life. They knew their enemy, found his weaknesses, and struck him with such sureness of purpose that they eliminated his will to fight.

Finally, Epstein asserts that operational art should create favorable conditions for the execution of tactical operations. In the execution of Operation JUST CAUSE we see a fight that was over before it began. The planning, rehearsals, and leadership of this operational masterpiece clearly attained asymmetric conditions over the PDF above and beyond that required to defeat them. The application of operational art, meeting the theoretical criteria examined above, made Operation JUST CAUSE a quick, decisive victory.

V. Conclusions

Operation JUST CAUSE was an excellent application of operational art. Its planners apparently understood existing doctrine and used the art to develop
a highly effective operational plan that attained the desired strategic goals. The planners received the visionary guidance of three gifted officers, General Thurman, LTG Stiner, and LTG Foss. These officers also benefitted from having leaders in the Joint Chiefs of Staff and the Bush Administration who gave them their head and did not tinker with their plan. The result was a stunning American victory accomplished in short order with minimum casualties.

Despite their success, the designers of the operation did make mistakes. Clearly the slow, disjointed start of Operation PROMOTE LIBERTY reveals a weakness in the application of operational art. USSOUTHCOM did retain the responsibility for this nation building phase of operations in Panama, but surely there were those who realized the planning had not proceeded far enough and should have corrected the situation.

We must not fall into a sense of complacency by this success, for the U.S. military held almost all the cards in the venture. Blessed with Panama-based units, facilities, communications, and, most important, a host population friendly to our cause, success was virtually assured. Additionally, the enemy U.S. military men and women faced was third-rate and hardly capable of defending itself against the sudden, swift strike by an asymmetrically superior American force.

In any event, Operation JUST CAUSE "was clearly a success, even a masterpiece, of operational art." In an era of declining defense dollars,
uncertain enemies, and global turmoil, we must remember this operation's
lessons well. The force we face tomorrow may not be the pushover we faced
on December 20, 1989. As the American military decreases in size, it must
not lose its fighting edge, and it must not forget the value of applying
operational art in its future endeavors.
Appendix 1 - Operation Just Cause Task Organization

**USSOUTHCOM**

**JOINT TASK FORCE SOUTH**

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<tr>
<th>Task Force Pacific</th>
<th>Task Force Atlantic</th>
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<td>82nd Airborne Division</td>
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<td>5-21st Inf</td>
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<tr>
<td>1st Bde</td>
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<td>1-9th Inf</td>
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<td>96th CA Bn (-)</td>
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<td>470th MI Bde</td>
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<td><strong>Joint Psychological Ops TF</strong></td>
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<td>1-4th Psyop Grp (+)</td>
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<td>536th Eng Bn</td>
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<td>16th MP Bde</td>
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<td>1st COSCOM</td>
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**Task Force Bayonet**

| 193d Infantry Bde (L)                            | 5-87th Inf                                   |
| 1-508th Inf (ABN)                                | 4-6th Inf (M) 5th Inf Div (M)                |
| 92d MP Bn (Prov)                                 |                                               |

**JTF**

| SOCSOUTH                                         |                                               |
| 3-7th SF Bn                                      |                                               |
| A/1-7th SF Bn                                    |                                               |
| 75th Ranger Regt                                 |                                               |
| 1-75th Rgr Regt                                  |                                               |
| 2-75th Rgr Regt                                  |                                               |
| 3-75th Rgr Regt                                  |                                               |
| **7th SF GRP**                                   |                                               |
| 1-7th SF Bn                                      |                                               |
| 2-7th SF Bn                                      |                                               |
| 160th Spec Ops Avn GP                            |                                               |

**Task Force Aviation**

| 7th Avn Bde (-)                                  |                                               |
| 18th Avn Bde (-)                                 |                                               |
| 1-82d Avn (-)                                    |                                               |
| 1-228th Avn                                      |                                               |
| 1-123d Avn (-)                                   |                                               |
| 3-123d Avn                                       |                                               |

Appendix 2 - Map of Panama

ENDNOTES


2. Summarized from an introductory essay by Jacob W. Kipp entitled "General-Major A. A. Svechin and Modern Warfare: Military History and Military Theory" as found in: Aleksandr A. Svechin, Strategy, Edited by Kent D. Lee. (Minneapolis, Minnesota: East View Publications, 1992), 23 (operational art coined and first application of the term) and 37-38 (lectures and writings on operational art).

3. From Kipp essay found in Svechin, 26.

4. Sigismund von Schlichting is a noted German military theorist who developed "mission-oriented tactics," as found in Kipp essay in Svechin, 27. Von Schlichting's influence on Svechin is summarized in Kipp essay in Svechin, 27-29.


7. Wardak, 16-17.

8. Wardak, 17.


10. Summary of material contained in Wardak, Chapter One, 15-49. This chapter stresses the impact of nuclear warfare throughout its discussion of the Soviet view of operational art.

12. FM 100-5, Operations (Final Draft) (HQ, Department of the Army: August 21, 1992), 1.

13. Summarized from FM 100-5, Operations (Final Draft), 1.


16. Summarized and paraphrased from FM 100-5, Operations (Final Draft), 1-1 to 1-3.

17. FM 100-5, Operations (Final Draft), 2-5.


19. Summary of information contained in FM 100-5, Operations (Final Draft), 5-2; and AFSC Pub 1, The Joint Staff Officer’s Guide 1991 (Norfolk, Virginia: National Defense University, October 1991), 5-6 to 5-10 and 6-7 to 6-8.

20. FM 100-5, Operations (Final Draft), 5-2.

21. Summarized from FM 100-5, Operations (Final Draft), 5-2 and 5-3.

22. Summarized from FM 100-5, Operations (Final Draft), 5-2 and 7-2.


25. See FM 100-5, Operations (Final Draft), 7-9 to 7-10 for current doctrinal interpretations of the concept of center of gravity.
26. For a discussion of the physical, cybernetic, and moral domains of war, and the corresponding implications for maintaining cohesion in the military, see Schneider, "The Theory of Operational Art," 6-7 and figure 2. For a doctrinal summary on decisive points, see FM 100-5, Operations (Final Draft), 7-10 to 7-11.

27. Note the word "military" is intentionally excluded before the word "force." The organization of forces to accomplish the mission may well include other elements of a nation's power, such as economic, political, or social. This implies that operational art includes the use of interagency efforts in the conduct of campaigns and major operations.

28. Paraphrased from Robert M. Epstein, "Course Commentary: The Historical Practice of Operational Art," Paper for Course 4, Phase II (Fort Leavenworth, Kansas, School of Advanced Military Studies, 1992), 4-11-1; and Schneider, "The Theory of Operational Art," 18.


30. Concepts summarized in part from FM 100-5, Operations (Final Draft), 7-9 to 7-10; and Jomini, 464-478.


34. Schneider, "Vulcan's Anvil," 38.

35. Attributes found in Schneider, "Vulcan's Anvil," 38-67.
36. Summarized and paraphrased from Schneider, "Vulcan’s Anvil," 2-11 and 18.

37. Schneider, "Vulcan’s Anvil," 39.

38. Summarized and paraphrased from Schneider, "Vulcan’s Anvil," 39-40 and 63.


40. Summarized and paraphrased from Schneider, "Vulcan’s Anvil," 45-46 and 55-58.

41. Schneider, "Vulcan’s Anvil," 59.

42. Summary of Schneider, "Vulcan’s Anvil," 52.

43. Schneider, "Vulcan’s Anvil," 66.

44. Epstein, "Course Commentary," Course 4, Phase II, 4-14/15-4.

45. Epstein, "Course Commentary," Course 4, Phase I, 3.

46. Author’s interpretation of Epstein, "Course Commentary," Course 4, Phase I, 3 and 9; and Epstein, "Course Commentary," Course 4, Phase II, 4-11-1 and 4-14/15-4.


58. Summary of information contained in Roosma interview, 6 and 11-12; G-3 Plans Section, XVIII Airborne Corps, group interview by Dr. Robert K. Wright, Jr., Fort Bragg, North Carolina, March 30, 1990, 2-3 and 11; COL(P) Thomas H. Needham, J3, Joint Task Force-South, interview by Dr. Robert K. Wright, Jr., Fort Bragg, North Carolina, March 6, 1990, 1; and LTC Timothy McMahon, Director of Plans, XVIII Airborne Corps and Joint Task Force-South, interview by Dr. Lawrence A. Yates, handwritten notes, Fort Clayton, Panama, December 20-21, 1989, 1.

59. Horwitz article in Watson, 53.

60. Summary of Horwitz article in Watson, 53.

61. Horwitz article in Watson, 53.
62. Summarized from Yates, "Joint Task Force Panama," 66; Ramshaw, 6 and 69; Horwitz article in Watson, 53; LTG Carl W. Stiner, Commander, Joint Task Force-South, interview by Dr. Robert K. Wright, Jr., Fort Bragg, North Carolina, March 2, 7, and 27, and June 1, 1990, 2; and U.S. Congress, House, Committee on Foreign Affairs, Post-Invasion Panama: Status of Democracy and the Civilian Casualties Controversy (102nd Cong., 1st sess., Committee Hearing, July 17 and 30, 1991), 105.

63. Summary of information found in Stiner interview, 2; G-3 Plans Section group interview, 5; Yates, "Joint Task Force Panama," 69; and MAJ David Huntoon, G-3/J-3 Plans Officer, XVIII Airborne Corps and Joint Task Force-South, telephone interview by Dr. Lawrence A. Yates, handwritten notes, June 27, 1990, 3-4.

64. GEN Frederick Woerner (USA, Ret), "U.S.-Panama Policy," Part 2 of 2, Military (April 1990): 23.


66. Summary and paraphrase of information found in Yates, "Joint Task Force Panama," 67-68; Ramshaw, 59-60; and COL Michael G. Snell, Commander, 193d Infantry Brigade, interview by Dr. Robert K. Wright, Jr., Fort Clayton, Panama, January 1, 1990, 1.

67. Summary of information contained in Yates, "Planning," in Spiller, 202; Donnelly, 55; Huntoon interview, 4; McMahon interview, 2; Roosma interview, 3; and Yates, "Joint Task Force Panama," 69.

68. Summarized from Yates, "Planning," in Spiller, 210; Huntoon interview, 2 and 4; and G-3 Plans Section group interview, 18.

69. Summary of the following: For information pertaining to the coup attempt, see Snell interview, 1 and 10; Horwitz article in Watson, 54; G-3 Plans Section group interview, 7-8; Stiner interview, 5; and Ramshaw, 12 and 31. For information concerning the impact of the coup on planning see the same references, plus McMahon interview, 2; and Huntoon interview, 9.

70. Summarized from McMahon interview, 2-4; Stiner interview, 6; Huntoon interview, 2 and 4; and Ramshaw, 12. Also see Headquarters, United States Southern Command, "USCINCSO OPORD 1-90 (BLUE SPOON)," declassified operations order, Quarry Heights, Panama, October 31, 1989, 1. (Hereafter referred to as}
"BLUE SPOON").


72. PDF organizational data is a composite summary of the following sources: Donnelly, 75; Crowell article in Watson, 70; Roosma interview, 14; and U.S. Congress, Post Invasion Panama, 106.

73. Headquarters, United States Southern Command, "Command Briefing on Operation Just Cause," paper briefing slides and narrative, undated, 11. (Hereafter referred to as "JUST CAUSE Command Briefing").

74. JUST CAUSE Command Briefing, 11; and Stiner interview, 79.

75. Stiner interview, 35.

76. Summarized and paraphrased from the following sources: Huntoon interview, 5 (JSOTF exercise and SAND FLEA's revised per OPLAN 90-2); Snell interview, 1, and Horwitz article in Watson, 54 (bomb threat); McMahon interview, 4, and Huntoon interview, 4-5 (JTFSO preparations for war); Stiner interview, 5, 7, and 9 (improvements in intelligence and exercises conducted); and MG James H. Johnson, Jr., Commander, 82d Airborne Division, interview by Dr. Robert K. Wright, Jr., Fort Bragg, North Carolina, March 5, 1990, 3 and 11 (on 82d Airborne Division exercises and helicopter prepositioning).

77. Horwitz article in Watson, 55.

78. Donnelly, 94-95.

79. There were 1,599 treaty violations and 906 other incidents recorded by USSOUTHCOM in 1988-1989, per Headquarters, United States Southern Command, "Operation Just Cause: Rebirth of a Nation," paper briefing slides, undated, 6.
80. Most JUST CAUSE-related bibliographic sources cover events during this timeframe. Sources summarized and paraphrased in this paragraph include: Stiner interview, 21; Donnelly, 101; U.S. Congress, *Post Invasion Panama*, 160; and U.S. Congress, Senate, Committee on Armed Services and the Select Committee on Intelligence, *1989 Events in Panama* (101st Cong., 1st sess., Joint Committee Hearing, October 6 and 17, 1989 and December 22, 1989), 138.

81. Summarized and paraphrased from Stiner interview, 46 and 79; Johnson interview, 27; Donnelly, 105-213, and U.S. Congress, House, Committee on Foreign Affairs, *Deployment of United States Forces to Panama* (101st Cong., 2nd sess., December 21, 1989 communication from the President of the United States to the Speaker of the House of Representatives, January 23, 1990), 2.

82. Summarized from the following sources: Snell interview, 5 (operations after D+1); U.S. Congress, *1989 Events in Panama*, 119 (hostage incidents) and 126 (combat summary); and U.S. Army Command and General Staff College, "Low Intensity Conflict Imperatives and Operations in Panama: May 89 - Jan 91," unpublished, draft briefing prepared by Low Intensity Conflict Proponencies Directorate, U.S. Army Combined Arms Center, Fort Leavenworth, Kansas, undated, 16 (JUST CAUSE completed). Other sources of note concerning this period include: Headquarters, 193d Infantry Brigade, "Summary - Operation Just Cause - 193d Infantry Brigade (Light) (Task Force Bayonet)," typed after action review, with tabs, Fort Clayton, Panama, undated, 7; U.S. Congress, *Post Invasion Panama*, 13-14; and LTG Carmen Cavezza, former CG, 7th Infantry Division (Light), interview by Dr. Lawrence A. Yates, Dr. Robert K. Wright, Jr., and Mr. Joe D. Huddleston, Fort Lewis, Washington, April 30, 1992, 17. A good summary of the entire period after D+1 is found in Chapter 16 of Donnelly, 350-379.

83. Reference problems experienced at the start of PROMOTE LIBERTY: OPLAN 90-2 assumed "extended civil-military operations (CMO) will require mobilization of reserve component civil affairs personnel." Only individual mobilization occurred. The plan also stated "during the conduct of military operations in the JOA [joint operating area] every effort will be made to minimize commitment of US efforts to support CA operations." Thus, JTFSO did not plan to play a major role in nation-building operations. Instead, they believed SOUTHCOM would take complete responsibility for the effort. Finally, the BLIND LOGIC plan was not
mentioned as a reference to the basic plan. See "OPLAN 90-2," 2, G-1, and G-3.

Command and control of the Civil Military Operations Task Force (CMOTF) changed four times after D-Day. From December 26, 1989, to January 1, 1990, JTFSO commanded the CMOTF. From the 2d to the 15th of January, the J5, USSOUTHCOM controlled CMOTF operations. Then, until the 23d, Joint Task Force-Panama retained command. Finally, on January 23d, the newly formed U.S. Military Support Group-Panama controlled the CMOTF until the end of Operation PROMOTE LIBERTY. As found in: Headquarters, United States Special Operations Command, "Organization of Nation Building Forces," memorandum and paper briefing slides, MacDill AFB, Florida, January 8, 1990, 32.

Other sources summarized include: U.S. Congress, Post-Invasion Panama, 113; COL Tom Braaten, Vice J3, and BG William Hartzog, J3, U.S. Southern Command, group interview by Dr. Larry Yates, Quarry Heights, Panama, June 29, 1990. 34; and John T. Fishel, "The Fog of Peace: Planning and Executing the Restoration of Panama," study for the Strategic Studies Institute, Carlisle Barracks, Pennsylvania, U.S. Army War College, April 15, 1992, 32. Fishel's study is the best overall source on PROMOTE LIBERTY nation building planning and execution.

84. Paraphrase of FM 100-5, Operations (Final Draft), 5-2.
85. Ramshaw, 71.
86. Stiner interview, 79.
87. Per BLUE SPOON, 2-3, supporting Unified & Specified Commands included Special Operations Command, Atlantic Command, Forces Command, Transportation Command, and Strategic Air Command. Other departments and agencies tasked to support the operation included, but were not limited to, the Department of State, the National Security Agency, the U.S. Information Agency, the Central Intelligence Agency, the Defense Communications Agency, the Defense Logistics Agency, the Defense Mapping Agency, and the Defense Intelligence Agency.
88. Ramshaw, 1. President Bush, in his initial communication to Congress about the operation, stated JUST CAUSE was initiated "to protect American lives, to defend democracy in Panama, to apprehend Noriega and bring him to trial on the drug-related charges for
which he was indicted in 1988, and to ensure the integrity of the Panama Canal Treaties," as found in U.S. Congress, Deployment of United States Forces to Panama, 1.

89. BLUE SPOON, 4. Additionally, the CJCS Execute Order to USOUTHCOM, dated 182325ZDEC89, ordered the command to "conduct joint offensive operations to neutralize the PDF and other combatants, as required, so as to protect U.S. lives, property, and interests in Panama, and to assume full exercise of rights accorded by international law and the U.S./Panama treaties," as found in Headquarters, United States Southern Command, "Operation JUST CAUSE: Rebirth of a Nation," 19.

90. BLUE SPOON, 4. This paragraph clearly reflects U.S. modifications to BLUE SPOON following the October 1989 coup attempt. The mission to "be prepared to support Panamanian initiatives with military operations" shows the desire of military leaders to use future coup attempts as a basis for U.S. action (in part to avoid further Congressional criticisms of military operations in Panama). Also the desire to "fix" the PDF relates to keeping those units that supported Noriega during the coup out of the fight, while "neutralize the PDF" refers to Panamanian forces as a whole. Finally, U.S. knowledge of PDF plans GENESIS and EXODUS serve as a basis for the "be prepared" mission to "rescue any USCITs detained by the PDF." Undoubtedly, previous PDF harassment of Americans, including episodes of short-term detention of U.S. military and civilian personnel, lent credibility to these plans.

91. Summarized from BLUE SPOON, 7-10 (Specific Taskings) and 12 (Civil Affairs).

92. OPLAN 90-2, 3.

93. Summarized from OPLAN 90-2, 5-11; and COMJSOTF OPORD 1-90, 39-50.


95. Stiner interview, 3.

96. Summarized from G-3 Plans Section, group interview, 25; McMahon interview, 3; Johnson interview, 2; and Stiner interview, 3.

54
97. Summary of information contained in Stiner interview, 3 and 18; Johnson interview, 32; Needham interview, 14; Roosma interview, 18, and G-3 Plans Section, group interview, 25, 29, and 32.

98. Stiner stated, "I was not constrained," when asked to describe the constraints he was operating under in planning the operation. See Stiner interview, 10.

99. Summarized from Stiner interview, 6-7; Johnson interview, 11; and G-3 Plans Section, group interview, 18.

100. David Ignatius, "Panama: This Mop-up Could Take Us Years," Washington Post (December 24, 1989), C1.

101. For an interesting account of the post-invasion requirements for using former PDF members in the new government, see Headquarters, Joint Task Force-South, [Meeting Notes - 251030 DEC 1989], typed notes from a meeting between Commander, Joint Task Force-South, and Panamanian Vice President (Dr.) Arias Calderon, et al., Fort Clayton, Panama, December 25, 1989.

102. "The commanders of Operation JUST CAUSE took extensive measures to minimize Panamanian casualties ... in many cases these measures placed U.S. lives at risk. From the beginning of planning, a guiding principle was the safety of non-combatants." From a statement by BG James R. Harding, Director, Inter-American Region, Office of the Assistant Secretary of Defense, Inter-American Affairs on July 30, 1991, as found in U.S. Congress, Post-Invasion Panama, 147.

103. OPLAN 90-2, C-7-5 and C-7-6.


105. Summarized from Stiner interview, 13; and Needham interview, 2.

106. Summarized from Matz interview, 11; Stiner interview, 26-27; and Ramshaw, 70.

107. Stiner interview, 79.

108. Johnson interview, 2; Snell interview, 2.
109. Paraphrase of G-3 Plans Section, group interview, 10. For a listing of offensive and defensive missions assigned to various JTFSO units, see OPLAN 90-2, 6-10, and Annex C, Appendix 1.

110. Donnelly, 105.

111. Summary and author's interpretation of G-3 Plans Section, group interview, 29-30; and Stiner interview, 3 and 42-43.

112. G-3 Plans Section, group interview, 25.

113. Summarized from Stiner interview, 46; Snell interview, 4; and Johnson interview, 27.

114. G-3 Plans Section, group interview, 42-46.

115. Stiner interview, 28-30.


117. McMahon interview, 6.

118. Trainor, 13.

119. See note 83.


121. Snell interview, 11.

122. Ramshaw, 76.

123. Johnson interview, 16.

124. MG Roosma claimed he had "100% communications" with the force. He also added, "In thirty-one years of service I have never, ever had that." Roosma interview, 29.

125. Summary of information found in Stiner interview, 12 and 28; G-3 Plans Section, group interview, 14 and 26; Ramshaw, 96-97; and Needham interview, 10.


127. Noriega surrendered to U.S. forces on January 3, 1990, thus completing the last major operational objective of JTFSO forces. Watson, 219.
128. Summarized and paraphrased from Johnson interview, 32; Snell interview, 14; Stiner interview, 34 and 36; and Donnelly, 401.

129. Donnelly, 398.
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