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LESSONS APPLIED FROM GRENADA LEAD TO SUCCESS IN THE GULF

By

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ABSTRACT

In the euphoria of the Gulf war victory, numerous articles and books attributed the Coalition success to Coalition technology and poor Iraqi training. This paper contends that a more profound complexity of issues were at play. Using Stephen Biddle's book, ***Victory Misunderstood*** as a backdrop, this paper argues that the application of doctrinal lessons learned by the American Forces in Grenada also played a important role Coalition success in the Gulf.

LESSONS APPLIED FROM GRENADA
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Background

In the 1970s and early 1980s growing Soviet influence in the Caribbean became a serious security concern for the United States. The early eighties brought reports that the Soviets were using Cuba as a conduit through which to arm their neighbors in Grenada. This caused fears of another Soviet buildup in America's back yard. Confirmation that Grenada was receiving Cuban assistance in the construction of a major airfield deemed suitable to accommodate Soviet long-range aircraft exacerbated this fear. In the summer of 1983, the situation worsened. The Marxist rebels overthrew the Grenadian Prime Minister and assassinated him and five of his faithful ministers. The rebels also closed the Grenadian airports, effectively detaining hundreds of American and other foreign nationals. Most of these were American students whom the rebels restricted to their university dormitories. These pressures led President Reagan to order an U.S. invasion of this island country. On 25 October 1983, OPERATION URGENT FURY commenced. American joint forces invaded Grenada.[1]

Eight days after the American troops assaulted this island country, the fighting phase of OPERATION URGENT FURRY ended. The Americans extracted the majority of the invasion force, and administration and policing of the island became the responsibility of an American sponsored Coalition of Caribbean nations. The American Joint Chiefs of Staff were quick to declare OPERATION URGENT FURY a success. They professed that they had applied the lessons from the disastrous Iranian hostage rescue attempt (OPERATION DESERT ONE) to realize this achievement. Congress did not agree. Their analysis criticized the services for their inability to operate as a joint force. The seriousness Congress attributed to this failure was a major influencing factor in the passing into law of the Goldwater – Nichols Act of 1986; it mandated increased cooperation and interoperability among the services. [2]

In 1990, Iraqi forces invaded the neighboring state of Kuwait, eventually declaring it an Iraqi province. These actions, combined with uncertainty over Sadam Hussien's intentions in this oil rich region, led to the creation of an international military Coalition. In 1991, after an intensive air campaign, this American led Coalition invaded Iraq. The overwhelming success earned immediate praise as a model in joint and combined operations. This paper argues that the doctrinal lessons learned by the American forces in Grenada played an important role in Coalition success in the Gulf.

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[1] Dunn, Peter M, etal; American Intervention in Grenada: The Implications of OPERATION URGENT FURY. PP35-72.
[2] Cole, Ronald H, Operation Urgent Fury, P1-7.

To facilitate this aim, a few considerations must be acknowledged. The first is the definition of *success* as it relates to the Gulf war. Some argue success was not achieved because Sadam Hussein remained in command of a formidable military force in the Persian Gulf region. This paper accepts U.N. resolution 678 (29 Nov 1990) as the strategic end state, as this was the legal authority for the offensive intervention into Kuwait and Iraq. Resolution 678 authorized U.N. members to use "*all necessary means to enforce previous U.N. Council resolutions if Iraq had not left Kuwait by 15 January 1991"*[3]. The most relevant of the referenced resolutions is U.N. resolution 660 (2 Aug 1990), which condemned the Iraqi aggression and demanded an immediate Iraqi withdraw from Kuwait.[4] Therefore, this paper identifies the eviction of Iraqi forces from Kuwait as the measurement of success. Since this was realized, so was success.

The second consideration requiring acknowledgement is the status of joint/combined doctrine between the two conflicts. During the Grenada invasion, no U.S. joint/combined doctrine existed. In the intervening years, a growing awareness on the necessity of joint/combined doctrine did evolve. Although not a major theme in this paper, it will demonstrate this awareness grew from both the Grenada shortfalls and the Goldwater – Nichols Act (1986). The first U.S. joint doctrine manual, resulting from this transition, was not published until January 1990. Therefore, it can be argued that this was too late to have an impact on the outcome of the Gulf War. However, the age of the doctrine is less relevant to the aim of this paper than demonstrating the joint lessons from Grenada played an important role in Coalition success in the Gulf. To expand slightly on this thought, there was no joint doctrine during the Grenada invasion, but there were joint lessons. Whether joint/combined doctrine existed or not during the Gulf War is moot. The issue is whether the applicable joint lessons from Grenada were advantageously applied in the Gulf. This paper argues they were. Therefore, this paper will utilize the six operational considerations identified in the U.S. Joint Force Planning Guidance and Procedures publication (1999) as the means of measuring the applicability of these lessons. The considerations are; intelligence, planning, logistics, command and control, manpower and personnel, and multinational considerations.

Finally, many writers profess the Coalition success in the Gulf is attributed to superior Coalition technology and poor Iraqi training. This under states both, the important role of the joint lessons from Grenada, and other strategic and operational factors on the war's outcome. These two lines of argument are complementary. The correct answer lies not in one or the other, but in a blend of all factors. It is the combination of all these which caused the synergistic results. To appreciate how the sum of these factors combined to exceed the sum of the individual parts requires an understanding of not only the joint and combined lessons, but also an appreciation of the influence of technology and Iraqi training. Therefore, before embarking on the stated aim, it is appropriate to first place the influence of technology and the state of Iraqi training in context. Failure to do so could lead to misinterpretation of the findings and the development of false lessons from both Grenada and the Gulf conflicts.

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[3] Summers, Colonel Harry, Jr. A *Critical Analysis of the Gulf War.p197.*
[4] Ibid, P172.

Maintaining Context

Numerous articles and books, written in the euphoria of the Gulf War victory, attribute the Coalition success to Coalition technology and poor Iraqi training. Stephen Biddle argues that this logic is flawed.[5] Biddle professes that Iraqi error combined with Coalition technology and training had a synergistic effect on the outcome of the war. Biddle convincingly argues, through analysis of selected Gulf War battles and computer simulation models, that had the Iraqis made fewer mistakes, the Coalition would have suffered considerably more casualties. As evidence, Biddle evaluates the armored Battle of 73 Eastings, in which the Iraqi was decisively defeated, with disproportionate losses in relation to Coalition losses.

In this battle, Biddle suggests the Iraqi mistakes contributed to their poor performance. Specifically, Biddle contends that the frequent Coalition air attacks conditioned the Iraqi response. Since they knew that such attacks were targeting armored vehicles, the Iraqi reduced crews and vacated some vehicles to acquire protective cover. Thus, when the Coalition armor arrived in conjunction with their air strikes, the Iraqi were ill prepared, giving the Coalition armor valuable engagement time. Further facilitating the Coalitions success, Biddle argues the Iraqi defensive errors played an important role. The Iraqi protected their armor behind sand berms. These berms were not only useless against Coalition anti-armor munitions, but also acted as indicators as to where the armor was. Thus, the Coalition armor needed only to identify and engage a berm to destroy the enemy armor.

Biddle complements his argument in addressing the value of Coalition technology. He offers that the Coalition night-vision capability and longer-range armor certainly provided the Coalition a considerable advantage. He notes that the sandstorm, on the night of the Battle of 73 Eastings, highlights the significance of this technological advantage. Not only were the Coalition forces able to see, whereas the Iraqi were not, but also were able to engage the Iraqi armor from outside Iraqi armor range. However, Biddle argues that the outcome would have been different had the Iraqi dug their armor in, rather than hiding it behind berms. Not only would the Coalition have had greater difficulty identifying and engaging this armor, but they would also have been forced to close the range between the opposing forces, thereby providing Coalition targets to the Iraqi.

Biddle further demonstrates that the quality of Coalition training also played an important role in their success. Biddle cites the well disciplined movement of the Coalition forces as a contributing factor in the overwhelming success realized in the battle of 73Eastings. As stated, the use of air power to condition the Iraqi response, combined with the coordinated air and ground assaults to exploit this opportunity, facilitated the favorable results. This disciplined manoeuvre prevented gaps in the frontage and depth of the formation, providing for maximum concurrent coverage of the

[5] Biddle, Stephen; Victory Misunderstood: What the Gulf War Tells Us About The Future of Conflict. P139-179.

target area. Biddle argues that had this discipline not been present, the Iraqis would have had more time to respond, and inflict greater casualties on the Coalition forces. Overall, Biddle provides convincing arguments to rationalize the overwhelming Coalition success in the Gulf. .[6] However, technology, the state of training on both sides, and Iraqi errors are not the only factors. The synergistic results were also dependent on other factors. One of the most significant is the American application of joint lessons from Grenada. The most relevant of these will be identified in the following section.

The Grenada Situation

During the Grenada invasion, that synergistic effect to which Biddle attributes overall Coalition success in the Gulf was seriously lacking. From the very beginning, intelligence failures, command and control complexities, inter-service compatibility shortfalls, and imposed secrecy all plagued the planning and execution of OPERATION URGENT FURY. Despite having both technological and numerical superiority, the Americans failed to exploit these. Evidence shows that this lack of cohesion and unity between the services contributed to an American casualty rate which was ten times the per capita rate suffered by Americans during the Gulf War (based on force size).[7]

To understand the lessons that URGENT FURY presents, an appreciation of the overall aim and concept of operations is essential. In it's earliest form,URGENT FURY was a non-combatant evacuation operation (NEO) intended to extricate detained American citizens from Grenada. Most of these detainees were American students restricted to their campus dormitories by the Grenadian People's Revolutionary Army (PRA). However, before the concept of operations had been fully developed, the strategic objective was changed. In addition to the NEO, on 21 October 1983, President Reagan added two additional strategic goals. These were the restoration of a democratic government in concert with the Organization of Eastern Caribbean States (OECS), Jamaica, and Barbados; and the deterrence of Cuban intervention in Grenada. The Joint Task Force Commander, Vice-Admiral Metcalf, received this information on 23 October, two days before D-Day.[8]Obviously, these changes impacted on the overall plan.

The resulting operational concept comprised four phases. Phase one was the transit phase. It was intended to position the JTF for the second phase. This insertion phase was designed predominately to establish the initial bridgeheads by special operations forces and Marines. This second phase also included disabling the radio station and freeing political prisoners. The third phase comprised stabilization and evacuation. This phase included the evacuation of the students, and the expansion of the bridgehead by 82nd Airborne through decisive combat operations against the Grenadians. The relief of the special operations forces and the Marines was an additional task of this

[6] Biddle, Stephen; Victory Misunderstood… P139-179
[7] Dunn, Peter M, etal; American Intervention in Grenada…, P62, and Watson, Bruce, etal; Military Lessons of the Gulf War. P247
[8] Cole, Ronald; Operation Urgent Fury…, P28.

force. The final phase, peacekeeping, was the passing of the peacekeeping duties to the OECS force.[9] Not all went according to plan.

Even before Vice Admiral Metcalf had initiated his own planning, he received a concept of operations, which was prepared at SACLANT under the guidance of the Joint Chiefs of Staff (JCS). This plan was lacking in content from its inception, because of a secrecy order established by the JCS. This order resulted in the exclusion of logistics, medical and intelligence staff from the planning process.[10] The results were predictable.

The absence of intelligence planning staff had one of the most consequential effects on the operation. Without it, the Americans did not realize proper force protection. Amongst other significant impacts, its absence reduced the principle of manoeuvre to haphazard movement in response to enemy actions. As the evidence shows, the failure to include intelligence planners in the staff also had serious implications on both force protection and the execution of URGENT FURY.

The liberation of the American students was the primary stated reason for entering Grenada. Therefore, it was inconceivable that the American intelligence community failed to effectively locate them. On 25 October, the day the invasion commenced, the U.S. Marines arrived at the only identified campus (True Blue) to rescue the students. During this rescue, the students advised the Marines that there was a second campus where students were detained (Grande Anse). On the 26th, Marine helicopters inserted the Rangers at this campus (Grande Anse). Here, they learned that there was yet a third campus (Lance aux Epines) with detained students.[11] This was one of numerous intelligence errors that challenged the fighting forces, and placed both them and the students at risk.

A second example of intelligence failure was in the production of accurate maps. Despite significant U.S. technology, the Americans did much of the planning without proper maps. The absence was so serious that landing beaches were selected from the knowledge of one particular staff officer, who had vacationed on the island.[12] It was only seven hours before their insertion that the Marines received their maps of the island. Many of the maps issued were poor black and white reproductions, making them difficult to read. Some maps were made from aerial photographs; whereas certain ones issued to some pilots were of a travel guide nature with an adhoc grid system superimposed.

Other major intelligence shortfalls plagued the invading forces. The absence of reliable maps compounded the serious lack of intelligence on the beaches and landing zones (LZ), resulting in hasty changes of plan. This affected the Marines on numerous landings. Whereas the Marine insertion force at Pearl's airfield changed it's LZ at the last minute due to enemy AAA concerns, a second Marine force was unable to land at the racetrack LZ, due to trees and enemy AAA. The Marine LZ at Grenville was also

[9]Simmons, Mike; Operation Urgent Fury: Operational Art or A Strategy… P34.
[10] Cole, Ronald; Operation Urgent Fury. P14-31 and P66
[11] Ibid, P49.
[12] Command and Staff College Education Centre, Quantico, URGENT FURY Operational Overview, P6.

unsuitable.[13] Proper intelligence certainly could have reduced the number of diversions resulting from unsuitable LZs.

As evidenced by the unexpected presence of AAA at the insertion sites, the intelligence on enemy strengths, locations, and probable actions was also seriously lacking. This weakness troubled the assaulting forces with unnecessary life-threatening challenges. When the Rangers parachute-inserted at Point Salines, they were unprepared. After leaving the aircraft at 500', to insert below the arcs of AAA, the Rangers immediately confronted three Soviet-style BTR-60 armored vehicles and an undetermined number of enemy. Being lightly armed and unprepared for this threat, it soon became obvious that the Ranger would not be able to break out and continue their task. The Marines were committed to assist. This failure to properly assess the enemy strengths, locations and intents, drew the Marines from their sector to reinforce the insufficiently armed Rangers. Of note, neither of these forces had compatible communications with the other.[14] Such reactive troop commitments degraded any perceived concept of manoeuvre warfare to a level of simple adhoc or reactionary movements.[15]

The lack of proper intelligence compounded the tasks of the fighting forces in many ways. In one incident, a Marine company received orders to secure Fort Adolphus. Seeing an unfamiliar flag flying at the fort, the Marine company commander assumed it was a Cuban stronghold. He was prepared to engage the fort with mortar fire before making his approach, but changed his mind at the last minute. The unfamiliar flag proved to be Venezuelan. The company commander did not know that Fort Adolphus was the Venezuelan Embassy.[16] If it had not been aborted, the mortar engagement could have had international repercussion. This was just one of numerous intelligence shortfalls that complicated the assault forces' efforts. Dealing with the large number of unexpected POWs provided another example of how intelligence failures negatively affected the operation. It caused the assault troops delays in their tasks as they dealt with this issue.[17]

Clearly, force security demands knowledge of the enemy. This knowledge was absent. Although the American intelligence community knew there were approximately 700 combat trained Cuban workers, 1200 to 1500 Peoples Revolutionary Army (PRA) members, and two to five thousand Territorial Militiamen, the American administration reported that there was no way of determining to what degree these forces would resist.[18] If this were the case, it is surprising that the assaulting force was so lightly armed. Nonetheless, this explanation is difficult to accept. Human intelligence (HUMINT) has always been a major and important source of intelligence. The Americans are particularly renowned for their efforts in this field. The American failure to effectively

[13]Command and Staff college, etal; Quantico; Urgent Fury… P7-13.
[14]Ibid, P12-13.
[15]Negrette, Bernardo; Grenada, Case Study in MOOTW, P12-13.
[16] Command and Staff college, etal; Quantico; Urgent Fury… P21.
[17] Cole, Ronald; Operation Urgent Fury… P53
[18] Dunn, Peter, etal; American Intervention… P102.

exploit their intelligence capability to determine the enemy intent led to major problems in all areas of the operation.

Unfortunately, the failure in intelligence was not the only planning failure to plague URGENT FURY. As earlier stated, the operational commander, Vice Admiral Metcalf was presented the concept of operations from which to develop his plan. Of particular interest is the inclusion of all service participation in URGENT FURY as an important operational objective.[19] In the aftermath of the operation, this decision became the catalyst for numerous joint operation lessons. However, this was not the only case in which the JCS became involved in Vice-Admiral Metcalf's plan. On day two of the operation, General Vessey, the Chairman of the Joint Chiefs of Staff, ordered that the force capture the military barracks at Calivigny before dark. The reason for this order remains unclear, except that it had originally been identified as a day one objective. Major General Schwarzkopf, the JTF Deputy Commander, questioned this intervention into the tactical command of ground operations for two reasons. First, the barracks were a scheduled target for the airborne forces the following morning. Second, there was little resistance expected. General Vessey stood by his order, and the JTF responded appropriately. Since the Airborne were still too far away to advance to their next morning's objective by nightfall, the Rangers, who were resting after two days of hard fighting at Point Salines were given the task.[20] Obviously, such unacceptable interference is potentially dangerous and raises doubt over who is in command.

Besides suffering the effects of national interference, the JTF HQ was lacking in other ways. The appointment of Major General Schwarzkopf as the JTF deputy commander was certainly an afterthought. His appointment did not occur until after the invasion commenced, but before the fighting had stopped. The day before the invasion he was sent solely as a ground force advisor to Vice- Admiral Metcalf because the Admiral's staff was virtually all 'blue navy' trained. There was no experienced ground commander.[21] Vice-Admiral Metcalf exacerbated this poor staffing situation by choosing not to recall two-thirds of the designated augmentation staff with whom he had exercised specifically for this nature of operation.[22]

Many shortfalls are attributable to this adhoc JTF HQ, and these minimized the HQ's overall effectiveness.[23] First, was an absence of coordination between the assaulting forces. The Marines, Airborne, and Rangers all planned their ops in a vacuum. Each was ignorant of the mission, location, and capabilities of the other forces involved, reflecting a serious lack of unity.[24] Furthermore, each followed different procedures for assigning tasks.[25] Compounding this problem was the absence of a single joint ground force commander on the island. This was particularly dangerous because the Army and Marine forces were advancing towards each other without compatible communications,

[19] Labadie, S.J.; Jointness for the Sake of Jointness; P11.
[20] Cole, Ronald; Operation Urgent Fury… P53
[21] Ibid, P4.
[22] Doty, Joseph; Urgent Fury… A Look Back… A Look forward. P13.
[23] Negrette, Bernardo, C.; Grenada Case Study in MOOTW, P13
[24] Negrette, Bernado,C.; Grenada,Case Study in MOOTW., P13.
[25] Doty, Joseph; Urgent Fury… P10.

and with an inter-service boundary, which had changed twice since they deployed.[26] Furthermore, each had its own air resources, but there was no unified air support commander.[27]

The complexity of the plan added to the overall disjointed effort. On D-Day, the Rangers were to fly from continental U.S. (CONUS), and parachute onto and secure an airfield. Shortly thereafter they were then to turn this airfield over to another force, 82nd Airborne. Nonetheless, while the rangers were flying in from CONUS, the Marines were to simultaneously execute a helo-assault from maritime vessels to a second airfield. Timing was critical to the achievement of surprise, but unfortunately, the timings were not realized.[28] At the commencement of the insertion phase, a problem with the navigation system in the lead aircraft put the Rangers thirty-six minutes behind the Marine insertion.[29] Surprise was lost and the Rangers inserted in daylight. Besides the statement it makes on the complexity of the plan, this incident implies a serious lack of initiative on behalf of the aircrew and/or an over-dependence on technology. There were five aircraft in the formation, only the lead lost its navigational system.

The rules of engagement (ROE) further exacerbated the efforts of the ground forces, and caused unnecessary risks to their lives. In considering the almost total lack of information on enemy locations and probable actions, it is difficult to believe that the rules of engagement would deny the use of attack-helicopters and heavy weapon support systems to cover the initial landings. This restriction was a major factor in the slow progress made in clearing the various objectives, and contributed to the need to mix forces with incompatible communications and differing operational procedures. This precarious ROE situation, although avoidable, was corrected once the enemy's determination was recognized.[30] Unfortunately, the new authority to use these weapons was not easily exploitable. The insistence by the JCS that all services be involved enabled a serious problem with communications. The Army, was unable to communicate with the Marines and the Navy. To overcome this problem, the Army was communicating their calls for fire back to Fort Bragg. Fort Bragg in turn transmitted these orders forward to the ship in Grenada, which engaged the target. This unacceptable communications shortfall caused dangerous delay in the calls for fire and put the landed Army forces at unnecessary risk. In a similar problem with communications, American aircraft bombed an American command post injuring seventeen. The absence of correct communications electronic orders and instructions (CEOIs) was the reported cause.[31] .

A number of other American planning errors negated the potential of synergistic results in Grenada. One of the most serious was their negligence regarding logistics. It was not until D-1 that a logistics planner arrived in the JTF HQ. Obviously, this was too late to have an immediate impact. This failure resulted in a fuel shortage by day two of

[26] Labadie, S.J.; Jointness for the Sake of Jointness in Operation URGENT FURY, P12-14.
[27] Cole, Ronald; Operation Urgent Fury… P66.
[28] Labadie, SJ.; Jointness for the Sake of Jointness…, P13-14.
[29] Negrette, Bernardo, C.; Grenada, Case Study in MOOTW, P16.
[30] Cole, Ronald; Operation Urgent Fury…, P52-54
[31] Cole, Ronald, Operation URGENT FURY..., P3-4.

the operation.[32] It also caused a shortage of other supplies that led troops to appropriate their greatest needs from the Grenadian economy. The configuration of the Marine vessels further complicated the logistics. The Marine vessels had been loaded in accordance with off-loading sequence appropriate to their intended destination (Lebanon). The diversion of these vessels to Grenada complicated this situation , because a different set of stores was required. Therefore, many of the resources were not readily accessible.[33]

Other support problems also caused disruptions in the operation. Not only, were there insufficient medics, but also there was a failure in personnel replacement planning. Thus, when the troops became fatigued during phase two of the operation, the JTF HQ requested two battalions of airborne soldiers as replacements.[34] Fortunately, two battalions had been on 3-hours notice-to-move for deployment in the follow-on operational phase. The two battalions arrived as requested. In other areas artillerymen were used to form companies. These companies assumed the Marines' security tasks in built up areas, thus freeing the Marines for other commitments.

A final area worthy of discussion is the strategic issue. As identified, the publicly stated objective was to rescue the American citizens. The American establishment failed to convince other nations and many of the American people that this was their true intent. The international community saw it as an opportunistic act to change the political leanings of a neighboring state. The failure at the national level to allow the press to accompany the force, combined with the failure to advise at least select Allies, resulted in major condemnation by the international community and the press. The American invasion of a country, which was technically still a member of the British Commonwealth, shocked one of President Reagan's staunchest supporters, Prime Minister Thatcher.[35] The Americans may have cleaned up their backyard, but they lost critical international support in the process. Consequently, many allies compared the American actions with the Russian invasion of Afghanistan. The question of the legality of the invasion remains debatable.

Biddle convincingly argues that the Coalition's synergistic results in the Gulf resulted from a combination of Coalition technology and cohesiveness and Iraqi errors. This paper professes this synergism also resulted in a large part from the application of joint lessons from Grenada. In Grenada, the Americans had both technological and numerical superiority, which assured their victory. However, they nullified their potential for overwhelming success through many joint planning omissions.

To validate whether the lessons learned in Grenada facilitated success in the Gulf requires a return to the six operational considerations identified in the U.S. Joint Force Planning Guidance and procedures. Again, these are; intelligence, planning, logistics, command and control, manpower and personnel, and multinational considerations. As

[32] Labadie, S.J.; Jointness For The Ssake Of Jointness In Operation URGENT FURY, P66.
[33] Command and Staff college, etal; Quantico, Urgent Fury Operational Overview, P7.
[34] Cole, Ronald, Operation Urgent Fury…, P49.
[35]Ibid, P50-68.

the evidence confirms, intelligence was severely lacking, placing American servicemen at unnecessary risk. They were committed with poor maps and little knowledge of their enemies' capabilities and intentions. Poor planning and command and control procedures compounded the servicemen's risk. The JCS failed to permit the CJTF to properly execute his plan unhindered by their influence. The CJTF also failed to effectively plan logistics, intelligence, and medical. Furthermore, he failed to ensure the existence of a joint staff capable of coordinating workable command and control procedures and virtually all aspects of support. International considerations appeared to have little influence on the American approach to the problem. However, they did coordinate the inclusion of the OECS for post operations peace keeping. Overall, it is obvious Grenada provided the Americans a number of humbling joint lessons in each of the categories considered. The question remains, if their learning from these contribute to the success in the Gulf.

The Persian Gulf Situation

The results of Grenada reflected poorly on the U.S. military's joint capability. This poor showing stimulated the senate initiative to reform the American defense structure. The result was the Goldwater – Nichols Act of 1986. Senator Sam Nunn articulates the purpose of this bill:

> These changes are designed to correct problems that have been evident in the Department of Defense for many years. These problems include lack of interservice cooperation, poor quality of collective advice from Joint Chiefs, cumbersome chains of command, inadequate authority of the war fighting commands in the field and excessive bureaucracy at every level.[36]

Although these changes appear to focus at the strategic level, they could have had a significant impact on the operation in Grenada. As the evidence shows, they certainly played a critical role in facilitating inter-service cooperation, which contributed to the synergistic results in the Gulf.

The lessons from Grenada stress the absence of both unity of command and unity of effort. In the Gulf, unity of effort played a major role in achieving the unparalleled success. As Biddle observed, Coalition cohesion amplified the impact of the Iraqi errors. Putting the Goldwater – Nichols changes into context facilitates an understanding of how the Coalition realized this synergism. This act forced a major restructuring on the Department of Defense (DoD). Consequently, the Chairman of the Joint Chiefs of Staff (CJCS) became the principle advisor to the President, the National Security Council, and the Secretary of Defense. Previously, each of the JCS advised on their particular service, often providing conflicting information from their JCS peers[37] Goldwater – Nichols also provided a clear chain of command to theater commanders and gave them the authority to

[36] Claver, John. Unified Effort in support of Command Manoeuvre on the Joint Battlefield. P3.
[37] Ibid P3

make decisions appropriate to their appointments.[38] The purpose of latter point was to eliminate national interference in operational decisions such as those reported on Grenada.

In August of 1990, when the Gulf situation arose, the U.S. was in a much better position for this considerable undertaking than they were during Grenada. From the onset, a clear chain of command existed. It started with President Bush, flowed through Secretary of Defence Cheney, and ended at the CinC CENTCOM, Gen. Schwarzkopf. General Powell, as the CJCS, remained the principal defense advisor through whom General Schwarzkopf received and passed information to the Secretary of Defence and the President. Learning from the Grenada experience Gen. Schwarzkopf also created a clear joint structure under his command. His ground, air, naval, and Marine component commanders were clearly identified as the Commanding-General (CG) Third Army, CG Ninth Air Force, Commander 7th Fleet, CG MARCENT, respectively. Of particular significance to these commands was the presence of joint trained staff officers, compliments of Congressman Skelton. After the enactment of the Goldwater – Nichols Act, Congressman Skelton held hearings to ensure the various war colleges' curricula properly reflected a joint orientation.[39]

Despite these efforts, for international political reasons there was still not absolute unity of command in the Gulf. Saudi LGen. Khalid bin Sultan was the appointed CG for participating Saudi and Arab forces. His command was independent of Gen. Schwarzkopf's. However, any initial doubts regarding this apparent fissure in the command structure evaporated when the air war commenced. In this campaign, eleven air forces united into a cohesive team to initiate the defeat of Saddam's forces. Thirty–nine days later, the Coalition forces, under the two commanders, advanced to defeat the Iraqi ground forces with unprecedented success.[40] Their unity of effort proved strong enough to bridge the apparent fissure in command unity. This unity of effort combined with Iraqi weaknesses provided the synergism to which Biddle had referred. The Goldwater – Nichols act facilitated its delivery.

As the lead nation, the U.S. ensured, the guiding principles of the Goldwater – Nichols Act were respected throughout the campaign. With one notable exception, Gen. Schwarzkopf received full command authority over the operation. The exception arose after the bombing of the Amiriya bunker in Baghdad in which approximately 400 civilians died. Consequently, the Pentagon assumed some control over target selection.[41]

Despite a number of intelligence shortfalls, the Americans made vast improvements over their intelligence failure in Grenada. During the Gulf build-up phase, they focused most of their intelligence effort in determining the size, location, and capability of Iraqi forces and important military and strategic infrastructure. Once this phase was completed, they split their efforts between strategic and operational targets.

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[38] Claver, John; Unified Effort in support of Coommand Manoeuvre on the Joint Battlefield. P3.
[39] Summers, Harry; Critical Analysis of the Gulf War, P240-245.
[40] Ibid, P239-245
[41] Watson, Bruce, etal; Military Lessons of the Gulf War, P154.

Operational targets included Iraqi military and communications capabilities, whereas the strategic targets included suspected weapons of mass destruction including nuclear and biological/chemical production and delivery capabilities. Although the SCUDs were not a significant military threat, they did acquire strategic importance. Sadam's desire to disrupt the Coalition by drawing Israel into the war was dependent on his use of SCUDs. To prevent Israel from entering the war, the Coalition used strategic resources, including Special Forces, to identify and destroy the SCUD threat.[42]

Overall, the Coalition intelligence community received criticism for three major errors. The first was incorrectly reporting the number of Iraqi military in and around Kuwait. The intelligence community had reported 540 thousand personnel, vice the actual 400 thousand. Second, they had reported the Iraqis possessed 35 SCUDS when they actually held 200. Finally, they reported that Iraqi chemical weapons were in the Kuwait region when they were not. Despite these shortfalls, operational intelligence was by all accounts impressive. In many cases the detail was so precise it allowed the Coalition tremendous insight into their enemy's actions. As evidence, the Coalition dropped leaflets into the Iraqi lines, which accurately specified the name of the Iraqi brigade or division receiving the leaflets. The realization of such detail came from intensive monitoring of Iraqi defenses and movements. All source intelligence, including space-based systems, electronic warfare, aircraft, and Special Forces, all contributed to data collection. Unfortunately, the volume of information collected created problems with its dissemination.[43]

Unlike Grenada, where force protection suffered because of an intelligence failure, intelligence in the Gulf significantly enhanced force protection. Learning from the mistakes in Grenada, Gen. Schwarzkopf placed considerable effort on this issue. This started with rather routine actions such as acclimatization and joint training for desert and biological/chemical environments, and grew to formation level live fire training. This force protection also included a massive air campaign to eliminate critical Iraqi command and control, lines of communication military formations, and infrastructure. This campaign was complemented with all aspects of electronic warfare, both to protect friendly air power and to deny Iraqi use of the electro-magnetic spectrum. Electronic warfare and coordinated information operations were also used to facilitate the massive deception plan supporting the manoeuvre of VII and XVIII corps to the west. This deception facilitated the execution of the renowned left flanking manoeuvre into the heart of the Republican Guard, the identified operational center of gravity.

The Coalition also reinforced its force protection through other deceptive means. The Marines frequently practiced amphibious assault rehearsals and mine-clearing exercises to convince Sadam that a beach assault was likely. This ruse worked by drawing several Iraqi divisions further into Kuwait. On D-Day, the Marines assaulted the beaches to add credibility to the deception plan, and to further protect the VII and XVIII Corps. To complement this force protection scheme, the Arab Joint Forces Command

[42] Summers, Harry; A Critical Analysis of the Gulf War, P146-155
[43] Watson, Bruce, etal , Military Lessons of the Gulf War, P147-163.

attacked the southern Iraqi defenses in Kuwait to convince Iraqi forces that Kuwait was the primary effort of the Coalition.[44]

Further evidence of the American attention to the Grenada lessons is reflected in virtually every aspect of Coalition planning. In support of the air campaign, the Coalition had established a routine of in-flight refueling each night along the Saudi border and over the Gulf. The Coalition air forces maintained this practice in preparation for the massive air assault, which accompanied the ground attack. This quality of coordination, planning, and synchronization facilitated Biddle's assessment into the profoundness of the Iraqi defeat.

The maritime forces also played an important role in the overall success of the campaign. Not only was their participation critical to the success of the deception plan, but also they made a significant contribution to depleting Iraq's lines of communication. It has been estimated that the maritime embargo reduced Iraq's imported goods by 50%. Furthermore, the fleets provided both supporting fire for the initial assaults and launched numerous cruise missiles in support of the operational plan. The air power provided by the combined fleet was also integrated into the overall air plan.[45]

Although the naval forces affected Iraq's strategic lines of communication, the air forces were used intensively to destroy operational-level lines of communication. Not only was this an important component of the operational plan, it also facilitated force protection. During the ground assault, the effects of this effort became known when thousands of Iraqi surrendered claiming they had neither eaten nor drank for several days. Such success can be attributed the results of the well coordinated efforts across a wide spectrum of capability, including information and electronic warfare operations, and multi-service/national cooperation.

Learning from the Grenada experience, General Schwarzkopf insisted on sufficient supplies, medical support, and reinforcements to sustain his American forces for sixty days. He also established a joint support command to assist him in controlling the huge volume of materiel.[46] However, many of the Coalition forces were not as robust in this regard, and there was little General Schwarzkopf could do about this except to monitor their status through his new support command. Despite learning from this failure in Grenada, General Schwartzkopf and his staff were confronted with an equally perplexing problem, the security and movement of such a considerable volume of materiel. Risk management was played an important role in addressing this concern.

The Americans also took care not to repeat the command and control and interoperability mistakes from Grenada. In the Gulf, they practiced manoeuvre in the classical sense and did so with great precision and success. Not only did General Schwarzkopf exercise operational level manoeuvre through his acclaimed left flanking manoeuvre, but he also used air power, electronic warfare, and information operations to

[44] Watson, Bruce etal; Military Lessons of the Gulf War, P81-119
[45]Watson, Bruce; etal, Military Lessons of the Gulf War., P121-133.
[46] Schrady, David; Combat Logistics Command and Control for the Joint force Commander, P50-62

develop this opportunity.[47] In achieving this goal, General Schwarzkopf ensured his subordinates clearly understood his intent, and had the appropriate resources and fire support to execute their missions. He also required that each prepared numerous branch and sequel plans to their main effort.[48] As reported by the British, they appreciated receiving their assigned mission, the required resources, and being permitted to get on with the task without interference from higher HQ.[49]

The British were not the only ones to benefit from General Schwarzkopf's trust. General Schwarzkopf showed considerable understanding of each nation's needs. Ensuring the national wishes of each participant was respected, General Schwarzkopf carefully assigned operational tasks based on the individual capabilities and national sensitivities of the various participants.[50] The strategic support provided by President Bush complimented this effort. Not only was he successful in garnering international support for the operation, he also secured UN legitimacy for the invasion. Evidently, this lesson from Grenada was also well learned.[51]

The remaining significant lesson from Grenada was in dealing with the press. In Grenada, the Americans ordered a press black out until they completed the evacuation of the American citizens. The U.S. received international and national criticism for this decision. This was only partly rectified in the Gulf. The U.S. insisted on press pools, and escorts to guide the press from site to site. Although the escorts were reportedly for the reporters' safety, the press saw this as a means of controlling their movements and this medium. The press also claimed that the screening of all press reports for security reasons is censorship.[52] The debate over the freedom of the press over operational security continues. Despite this disagreement, even the press confirmed that OPERATION DESERT STORM was an overwhelming success story in joint/Coalition warfare.

Validating the Thesis

The same six joint planning operational considerations used to declare Grenada a failure in joint and Coalition operations provide more encouraging picture on the American involvement in the Gulf War. Intelligence, planning, logistics, command and control, manpower and personnel, and multinational considerations were all consciously planned and deliberately practiced in the Gulf. Although some difficulties still existed, the evidence demonstrates that the Americans took the Grenada lessons on joint operations seriously. Despite challenges in the assessment and dissemination of intelligence, the Americans obviously applied the lessons from Grenada. The

[47] Summers, Harry; A Critical Analysis of the Gulf War, P212-229.
[48] Watson, Bruce; etal Military Lessons of the Gulf War, P96.
[49] Ibid, P109.
[50] Watson, Bruce; etal Military Lessons of The Gulf War. P105.
[51] Summers, Harry; etal A Critical Analysis… P172.
[52] Watson, Bruce; etal Military Lessons of the Gulf War, P202-210.

considerable effort in the intelligence preparation of the battlefield played a critical role in the Coalition success.

Equally obvious are the improvements in operational planning and command and control. Gen. Schwarzkopf kept both assigned tasks and their synchronization simple, while effectively integrating these into an example of operational manoeuvre. He also ensured that this manoeuvre received the necessary fire, deception, and electronic warfare support to realize both operational surprise and success.

Unlike Grenada, where a fuel shortage on day two of the operation influenced movement, and a shortage of personnel and medics affected operations, General Schwarzkopf coordinated a comprehensive, although somewhat cumbersome support plan to sufficiently sustain his force. Simultaneously, he denied the enemy this same freedom of action.

Finally, the American administration as a whole, and specifically President Bush and General Schwarzkopf recovered considerably from their blunders of failing to recognize multinational sensitivities in Grenada. Unquestionably, OPERATION DESERT STORM could not have happened without the balanced approach these two leaders showed. As Biddle reported, Coalition technology and cohesion compounded the Iraqi errors. As this paper demonstrates the synergistic results could not have been realized without the Americans' dismal performance in Grenada. The resulting joint lessons certainly, facilitated the Goldwater-Nichols Act, which drove change in the DoD. Despite some resistance towards this change, it facilitated a greater appreciation of joint/combined doctrine within the military and played an important role in Coalition success in the Gulf. The lessons from Grenada were well learned and applied!

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The author professes that the conventional arguments that poor Iraqi training and superior Coalition technologies were the reason for Coalition success are incomplete. As such, they can lead to dangerous conclusions regarding future force development based on RMA concepts. Through a series of actual and model battles, the author demonstrates how Iraqi errors, compounded the Coalitions technological advantage. Similarly, Coalition synergism further enhanced the positive results. In conclusion, the author recommends caution in replacing training to fund technology. His arguments and examples are compelling.

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