14. ABSTRACT

During the major combat operations of Operation Iraqi Freedom, Baghdad was identified as the operational center of gravity by General Franks, members of President Bush’s administration and others in Central Command. Based on current doctrine, Baghdad could not have been the center of gravity. The purpose of this paper is to conduct a center of gravity analysis and deconstruction to determine the true operational center of gravity (during the decisive operations phase). The paper will also explore why Baghdad was misidentified as the center of gravity and discuss possible ramifications if a wrong center of gravity is identified. Additionally, this paper discusses inadequacy of current joint doctrine and the responsibility of a professional military officer to remain current in doctrine.
NAVAL WAR COLLEGE
Newport, RI

Baghdad as an Operational Center of Gravity?

By

Thomas M. Feltey
Major, USA

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

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

Signature: ________________________

(13 Feb 2006)

________________________________
Faculty Advisor
Douglas Hime
Abstract

During the major combat operations of Operation Iraqi Freedom, Baghdad was identified as the operational center of gravity by General Franks, members of President Bush’s administration and others in Central Command. Based on current doctrine, Baghdad could not have been the center of gravity. The purpose of this paper is to conduct a center of gravity analysis and deconstruction to determine the true operational center of gravity (during the decisive operations phase). The paper will also explore why Baghdad was misidentified as the center of gravity and discuss possible ramifications if a wrong center of gravity is identified. Additionally, this paper discusses the inadequacy of current joint doctrine and the responsibility of a professional military officer to remain current in doctrine.
The mantra had always been: Baghdad is the enemy’s center of gravity; the purpose of the campaign is to remove the regime, the means to that end is capturing Baghdad.

Colonel Nicholas E. Reynolds, USMCR (Ret.),

*Basrah, Baghdad and Beyond*

Ever since Carl Von Clausewitz first described the concept that subsequent theoreticians have articulated as “center of gravity” in 1832, military leaders have struggled, intellectualized and argued about what exactly constitutes a center of gravity (COG) in warfare. Some, like Dr. Milan Vego, an expert in operational warfare, also attempt to trace its true meaning back to the literal German translation of Schwerpunkt or weight of effort.¹ Are centers of gravity important? “Yes,” centers of gravity are intended to be the focal point of all actions. They can be attacked either directly or indirectly. Do military professionals purport to study COGs? “Yes,” professional military education has included the concept of centers of gravity for decades. But the real question is, do military professionals always identify an adversary’s COG correctly? Unfortunately the answer to this question is “no,” and the major combat operations of Operation Iraqi Freedom (OIF) clearly illustrate this point.²

When the commander’s concept for OIF was initially written in December 2001 by General Tommy Franks, the undisputed strategic objective for Iraq was Saddam Hussein and his regime.³ As planning progressed by General Franks and the Central Command staff, Baghdad was subsequently identified as the operational center of gravity.⁴ Herein lies the problem; Baghdad was incorrectly identified as the operational center of gravity for the

---

² Major combat operations began on 17 March 2003 and ended on 1 May 2003, as announced by President George Bush aboard the USS Abraham Lincoln.
⁴ Ibid., 400, 505.
decisive operations phase of OIF. Additionally, the joint and service doctrine that is intended to provide commanders and planners with operational terms, definitions, general concepts and frameworks changed substantially during the initial planning phase of Operation Iraq Freedom.

The focus of this paper is on the operational center of gravity for Iraq during the major combat or decisive operations phase of OIF. In order to ascertain the true Iraqi operational COG, it will first be necessary to define a number of terms and concepts that relate to COGs. Both joint doctrine and other scholarly works have been consulted to complete this explanation and analysis. While doctrine remains our primary source of joint doctrine, it often lacks the granularity necessary to achieve thorough understanding and clarity. Once these terms and concepts have been provided the premise that, Baghdad as the operational COG will be reexamined through analysis of Iraq’s critical factors, followed by observations and recommendations.

**Definitions of Terms**

Joint Publication 3-0 defines centers of gravity as “[t]hose characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight.”5 Another complementary definition offered by Dr. Milan Vego describes a center of gravity as “that source of massed strength--physical or moral, or a source of leverage--whose serious degradation, dislocation, neutralization, or destruction would have the most decisive impact on the enemy’s or one’s own ability to accomplish a given military objective.”6 Vego further argues that COGs can be composed of both tangible

---

6 Vego, 309.
and intangible elements.™ The higher the level of war, the more likely intangible elements could become a COG.²

“Military objectives and centers of gravity are inseparable.”³ As one considers the application of military force against an adversary, an analysis of the adversary’s strategic objectives should be the first step. For each objective there is a corresponding center of gravity. Moreover, objectives and centers of gravity at each level of war are nested with those at both levels above them. Objectives at the operational level support the objectives at the strategic level, and destruction of the center of gravity at the operational level and should contribute to the destruction of the strategic center of gravity. The objective takes precedent, and if changed, the COG must also be changed accordingly.⁴ During the course of a campaign or major operation the adversary’s operational COG(s) should be systematically attacked either directly or indirectly, and the COG’s subsequent defeat or destruction weakens the strategic COG(s).⁵ Multiple COGs can exist if objectives are separated by substantial time and space, and COGs can change throughout the campaign as objectives are accomplished or changed over time.⁶

A planner should first begin his analysis of the center of gravity by assessing the enemy’s critical factors. Critical factors are defined by Vego as “a collective term referring
to critical strengths and critical weaknesses of a military force or nonmilitary source of power.”

Invariably an operational COG will be one of the enemy’s critical strengths that in some way protects the enemy’s strategic COG or blocks direct access to it. Prior to deciding on an enemy’s COG a validity test must be performed to confirm analysis. Vego provides two questions to ask:

The first question is whether destroying, neutralizing, or substantially weakening or degrading the enemy’s potential COG will result in progressive deterioration of the enemy’s morale, cohesion, and will to fight. The second question is whether one’s forces and assets are adequate to destroy or neutralize the enemy’s . . . COG.

A third question is whether this potential enemy COG is nested with the strategic COG? It could be identified as one of its critical capabilities or critical requirements. Additionally, the enemy’s potential COG should be capable of physically endangering the friendly forces’ COG. Because of this theoretical relationship, planners should also determine their own COG so that measures are taken for protection of it against enemy action.

Baghdad as the Operational Center of Gravity

On 16 April 2003, General Tommy Franks met with his subordinate commanders for the first time since the invasion had begun. He said, “I wanted to get our commanders together in Baghdad because that’s been of course the center of gravity for this regime while

14 Eikmeier, 5.
15 Vego, 440.
16 U.S. Joint Chiefs of Staff, Joint Doctrine for Campaign Planning, Joint Publication 5-00.1 (Washington, D.C.: U.S. Government Printing Office, 25 January 2002), II-7. “Critical capabilities are those adversary capabilities considered crucial enablers for the adversary’s COG to function and are essential to the accomplishment of the adversary’s objective(s).” “Critical requirements are those essential conditions, resources, and means for a critical capability to be fully operational.”
it stood.” General Franks began referring to Baghdad as the operational COG early on in the planning process, and accordingly, it seemed that the might of coalition joint forces were focused on destroying or capturing it. Additionally, Army V Corps planners developed a detailed and innovative plan labeling Baghdad as a center of gravity for systems Saddam used to control Iraq. Moreover, Lieutenant General David McKiernan, the Coalition Forces Land Component Commander for OIF, also regarded Baghdad as the center of gravity.

So, was Baghdad really the operational COG for the Iraqi regime? As previously stated, General Franks and others in the administration thought so. In order to ascertain the true operational center of gravity for the Iraqi regime, a COG analysis and deconstruction must be conducted.

The process of identifying a COG is an analytical process heaped in military art. Prior to skipping right to what could be COGs, a planner must look several echelons higher for guidance, objectives and the stated strategic COG(s). These items are important because each has an inherent relationship that transcends all levels of war. The process that will be used generally follows Milan Vego’s concept of operational design.

The decisive phase of Operation Iraqi Freedom was a unique situation. General Franks was both the theater strategic and the operational commander. As such, during the planning and conduct of operations, he was obligated to contend with both levels of war. The

---

18 Franks, 396 and 400.
22 Vego, 469-494.
process begins with the commander receiving strategic guidance. In this case General Franks received this guidance from President Bush, and Secretary Rumsfeld. Franks was fortunate that the guidance communicated was fairly clear. The key points of this guidance came in the form of a National Security Presidential Directive and included: freeing Iraq in order to eliminate Iraqi weapons of mass destruction, ending Iraqi threats to its neighbors, liberating the Iraqi people from tyranny and assisting them in creating a moderate, pluralist and democratic nation. Occasiona, the theater strategic commander is forced to deduce strategic objectives or guess about the desired end state, however, this was not the case in OIF. The National Security Presidential Directive, as noted above, provided the specific strategic objectives and hinted at a desired end state--the existence of a U.S. friendly, free democratic nation in the heart of the Middle East.

The next step in working toward determining a center of gravity is identifying the critical factors or strengths and weaknesses of the adversary. Since the focus of this paper is on the operational level COG, the details of the strategic Iraqi critical factors will be omitted and Saddam Hussein will be considered as the strategic COG for Iraq. However, before moving directly to Iraq’s operational critical factors, it is important to first view what Central Command saw as the strategic COG’s critical capabilities.

When General Franks briefed President Bush and his war cabinet on December 28, 2001, he identified to the president what he saw as “Slices (sic)…that kept Saddam in power.” Although non-doctrinal, one can argue that these “slices” were in fact the critical

---

24 Franks, 339.
capabilities that enabled Hussein to function as the Iraqi COG. The strategic critical capabilities were:

1. The leadership, the real inner circle of Saddam and his two sons, Uday and Qusay.

2. Internal security and the regime intelligence, including the close-in ring of bodyguards in the Special Security Organization; the command, control and communications network.

3. Weapons of mass destruction infrastructure.

4. Missile production, maintenance and delivery capability.

5. The Republican Guard divisions and the Special Republican Guard that protected Baghdad.

6. Land and territory inside Iraq where pressure could be exerted such as the northern Kurdish area that was effectively autonomous.

7. The regular Iraqi army.

8. Iraqi commercial and economic infrastructure; and the diplomatic infrastructure abroad that included Iraqi agents working out of their embassies.

9. The civilian population.\(^{25}\)

Given these enabling critical capabilities, operational critical factors can now begin to be determined. Unlike at the strategic level, which requires detailed analysis across the spectrum of the diplomatic, informational, military, and economic (DIME) considerations, the critical factors that are most relevant to the operational commander are predominantly

\(^{25}\) Woodward, 56 and Franks, 339.
military in nature. Based on unclassified sources, the assessed operational critical factors of Iraq are found in Figure 1: 26

**Strengths**

- Republican Guard (six divisions)
  - Three in the North
    - Adnan, Hammurabi and Nebuchadrezzar
  - Two in the South
    - Baghdad and Al Nida
  - One immediately South of Baghdad
    - Medina
- Special Republican Guard (three brigades)
  - Exclusive mission to protect regime centered in Baghdad
- Irregular Forces (Fedayeen)
  - Commanded by Uday Hussein
  - 18,000-20,000
- Weapons of mass destruction
- Regular army (seventeen divisions)
- Commando (five brigades)
- Special forces (Two brigades)
- Maritime mine warfare crafts (three)
- SCUD and FROG surface to surface missiles
- Anticipated urban defense

*note: list is not prioritized

**Weaknesses**

- Ill disciplined, poorly trained regular army
- Deteriorating republican guard equipment
- Obsolete regular army equipment
- Limited indirect fire capability
- Limited capability of Air Forces
  - Very little flight time
  - Poor Maintenance and availability of repair parts
  - Fighter, ground attack (130)
  - Fighter (180)
- Limited air defense capability
  - outdated equipment
  - Limited by Operations Northern and Southern Watch
- No surface warfare ships
- Limited Intelligence, Reconnaissance and Surveillance (ISR) capability
- No rotary wing attack aircraft
- Centrally commanded and controlled military/incompetent leaders
- Poor command and control network

*Figure 1, Iraqi Critical Factors*

The critical factors described in Figure 1 are essentially broad capabilities that exist across the entire operational spectrum but are of little value until the operational objectives are discerned. During the decisive operations of OIF, Baghdad was considered the main

operational objective, and all plans and orders focused on getting there quickly in order to remove the regime from power.27

With Baghdad established as the main operational objective it is necessary to revisit the critical factors that are relevant specifically to Baghdad. The revised critical strengths are:

1. Republican Guard Divisions
   a. Two in the South (Baghdad and Al Nida)
   b. One immediately South of Baghdad (Medina)

2. Special Republican Guard (three brigades) with the exclusive mission of protecting the regime in Baghdad.

3. Irregular Forces (Fedayeen)

4. Anticipated urban defense

The revised critical weaknesses are:

1. Deteriorating Republican Guard equipment

2. Limited indirect fire capability

3. Limited capability of air forces

4. Limited air defense capability

5. Limited ISR capability

6. Centrally commanded and controlled military and incompetent military leadership

---

27 Fontenot, Degen, and Tohn, 47.
7. Poor command and control network.

Based on the previous discussion of critical factors, the Iraqi center of gravity should be found among the list of critical strengths. While all these critical strengths are important, it is necessary to “deduce” which of these critical strengths is most important to “accomplishing the objective.”28 This does not mean that commanders or staffs disregard the other critical factors because knowledge of the interconnecting relationship between the critical strengths and the objective is helpful later when deciding how to attack the center of gravity.29

Although the benefit of hindsight is useful, actual combat actions were not considered in this analysis. The Special Republican Guard Brigades seem to surface as the most important critical strength associated with objective Baghdad and, hence, are the operational center of gravity. In order to validate this conclusion, a series of questions must first be asked. First, does the destruction, defeat or neutralization of the Special Republican Guard result in the progressive deterioration of the Iraqis’ capability to defend Baghdad? The answer to the first question is “yes.” “The Special Republican Guard, a force of approximately 15,000 soldiers, had the specific task of defending key sites and repressing popular unrest in Baghdad.”30 With the exception of the Fedayeen, no other tactical organization was specifically tasked with defending Baghdad proper. The other Republican Guard Divisions, with the Medina Division being the Iraqi main effort at the Karbala Gap, were tasked with defending the avenues of approach leading into Baghdad.31 The Special

---

28 Patrick Sweeny, “Effects-Based Confusion: The Missing Link with Operational Art” (Emerging Concept Reading NWC 2073, 1 December 2005), 5.
29 Ibid.
30 Ibid., 99.
31 Ibid., 99-101.
Republican Guard was also assessed with an overall 90% operational readiness rate and the Coalition Forces Land Component Commander (CFLCC) only projected to capture 10% of their forces, possibly assuming they would fight determinedly to the death. These factors clearly demonstrate the importance Iraqi leadership placed in the Special Republican Guard and the critical role it played in the defense of Baghdad and the Iraqi Regime.

The next question to be asked is: are coalition forces and assets adequate to destroy, defeat or neutralize the Special Republican Guard? The answer to this question is a resounding “yes.” The main ground forces designated to assault Baghdad consisted of the U.S. Third Infantry Division, and the U.S. First Marine Expeditionary Force. Both of these units are division sized organizations that dwarf the size and capabilities of the Special Republican Guard by more than double.

The third question to ask is: Is the Special Republican Guard nested with Saddam Hussein, as the strategic COG? Again, the answer to this question is also “yes.” Referring back to General Franks’ list of “Slices” or critical capabilities of the Iraqi Regime, General Franks clearly identified “. . . the Special Republican Guard that protect[s] Baghdad” as one Saddam Hussein’s critical capabilities. Insofar as nesting, the Special Republican Guard is inherently nested by virtue of it being a critical capability. Furthermore, the designated specific task of protecting the regime enables Saddam Hussein to remain in power and effectively command and control a number of Iraqi instruments of power. Also, the Special

---

32 Ibid., 69.
33 Fontenot, Degen, and Tohn, 52.
34 Woodward, 56.
Republican Guard was commanded by Saddam’s youngest son, Qusay, and was fiercely loyal to both Saddam and the regime.\textsuperscript{35}

The last test of validity is to examine why the Special Republican Guard was integral for Iraq to accomplish its mission or objective. From an Iraqi perspective, a pending coalition invasion seemed unlikely, at least not in the near term.\textsuperscript{36} Saddam Hussein’s primary objective was to prevent popular uprisings and/or a coup attempt. In order to do this, Saddam was forced to position most of his military forces in support of preventing popular unrest. In Baghdad this was critical. Saddam believed that any large concentration of forces within the city could be the catalyst for a coup.\textsuperscript{37} The Special Republican Guard was the only trusted and militarily capable force allowed in Baghdad to accomplish this objective.

In the event of war, Saddam Hussein’s military goal was to inflict so many coalition casualties that popular support in the coalition’s home countries would wane and possibly even demand an end to the war, leaving Hussein in power.\textsuperscript{38} Given this military goal, it is possible to assume that Iraq saw the coalition’s strategic center of gravity as national will. In order to affect the coalition’s strategic center of gravity, the Iraqi military had to kill and wound coalition troops. Saddam probably assessed the coalition’s lead combat divisions as the coalition’s operational center of gravity. If coalition troops did reach Baghdad, the Special Republican Guard would have been the primary combat unit left to inflict heavy casualties on the coalition during intense urban combat.

The final aspect to consider for friendly forces is whether or not the Special Republican Guard poses a threat to the friendly center of gravity. In an effort to spare

\textsuperscript{35} Murray and Scales, 84.
\textsuperscript{36} Murray and Scales, 95.
\textsuperscript{37} Ibid., 96
\textsuperscript{38} Ibid.
detailed analysis, it is easy enough to assume, that the coalition’s operational COG was either
the U.S. Third Infantry Division or at a minimum its lead combat brigades. Either one of
these potential coalition COGs would be at serious risk if confronted with the Special
Republican Guard conducting an urban defense in Baghdad. In fact this was such a risk, that
even President Bush and other senior members of his administration constantly questioned
General Franks on his progress with planning in regards to what they called “fortress
Baghdad.” 39

For these reasons, it is evident enough to prove that the Special Republican Guard
was absolutely critical for Hussein to accomplish his objectives and was in fact the
operational center of gravity for Baghdad as an objective.

**But, After Baghdad the Regime Fell Quickly?**

In retrospect, some could argue that Baghdad must have been the operational center
of gravity for decisive operations in Operation Iraqi Freedom because once Baghdad was
permanently occupied on April 10, 2003, most resistance faded and the regime seemingly no
longer controlled Iraq. 40 So, was General Franks correct when he said, “you kill the roots
[Baghdad]. . . and the tree will fall [the regime]”? 41

Even with the benefit of history, Baghdad still does not match the profile of a center
of gravity given widely accepted definitions. It appears, more so than anything else, that
Baghdad was a strategic decisive point. Joint Publication 3-0 defines a decisive point as “a
geographic place, specific key event, critical system, or function that allows commanders to

39 Woodward, 126.
40 Foutenot, Degen, and Tohn, 378.
41 Franks, 400.
gain a marked advantage over an enemy and greatly influence the outcome of an attack."42 Baghdad conforms to this definition extremely well. It is a geographic location and provided coalition forces a marked advantage over Iraqi forces, which greatly influenced the outcome of major combat operations. Baghdad was essential because that was where the regime was centered along with the other systems (like telecommunications, media, economic, intelligence and military organizations, etc.) that Saddam used to exert control over Iraq.43 Obtaining control of Baghdad was a decisive point because neutralizing these systems seriously degraded the regime’s ability to control Iraq.

Additionally, Milan Vego, in his discussion of identifying centers of gravity, cautions that a common error among commanders and planners is to confuse decisive points with centers of gravity.44 Although the two are similar and interconnected, decisive points are not a source of strength and therefore cannot be a center of gravity.45

**Final Thoughts**

Based on the analysis contained in this paper, Baghdad was not an operational center of gravity. However, Baghdad was both an operational level objective and a strategic level decisive point for coalition forces. Within Baghdad, as an operational level objective, the Special Republican Guard clearly emerged as the center of gravity. But what comes next? How could such a mistake be made and how can such a mistake be mitigated in the future?

One of the possible problems that caused General Franks to misidentify Baghdad as the operational center of gravity could be the relative frequency in which doctrine changes.

42 Joint Publication 3-0, GL-8.
43 Fontenot, Degen, and Tohn, 49.
44 Vego, 309.
45 Ibid.
This is particularly true with regard to centers of gravity. Although the concept of centers of gravity has existed since the days of Clausewitz, the exact definition tended to change slightly over time. In the 1986 version of army FM 100-5, a center of gravity is defined as, “. . . that characteristic, capability, or location from which the force derives its freedom of action, physical strength, or will to fight.”  


47 Ibid.


The key difference found in the older army doctrine was the reference to locality. The 1986 version of FM 100-5 also goes as far as using St. Vith as an example of an American center of gravity during the Battle of the Bulge in 1944.

Could the problem with General Franks’ misidentification of the operational center of gravity been because he was simply following old doctrine or misused doctrinal terms? It seems very plausible especially since General Franks also insisted on using other non-doctrinal terms like “Slices” and misused the term “lines of operations,” referring to the types of forces he would use to attack the enemy, rather than a “directional orientation of the force in time and space in relation to the enemy . . . that connect[s] the force with its base of operations and its objectives.”  

48 This very well could be the reason.

Joint doctrine has progressed a great deal since its conception and today, Joint Publication 5-00.1, *Joint Doctrine for Campaign Planning*, offers commanders and planners some guidance and rationale for determining an adversary’s center of gravity. However, this doctrine is only the “cliffs notes” version of what is necessary for commanders and staffs to
conduct thorough analysis and planning. Often joint doctrine is intentionally vague because the services cannot agree on the precise wording. This is a problem that Joint Forces Command must address. Service parochialism must be overcome and doctrine needs more specificity and clarity. With this in mind, the onus of keeping doctrinally proficient still rests with the professional military officer. Ultimately, it is an officer’s individual responsibility to ensure that he or she engages in the scholarly analysis of history, and, most importantly, remains informed as new doctrine emerges or old doctrine is modified. At times this can be challenging, particularly, when new concepts emerge and become vogue. Frequently these new concepts are not vetted properly and add to doctrinal confusion.

Fortunately, the result of General Franks’ misidentification of the Iraqi operational center of gravity was not catastrophic. This may possibly be attributed to the vast mismatch between coalition and Iraqi military capabilities. However, the ramifications in future conflicts could be disastrous and might result in “the inability to achieve the military objectives at an acceptable cost and the unconscionable expenditure of lives, time, and material in efforts that do not achieve strategic or operational results.”49 Hopefully this paper will serve as a catalyst for Joint Forces Command to revisit existing doctrine on determining a COG in order to produce a clearer and more thorough product so that military leaders do not have to refer to Dr. Vego, Dr. Strange, and other academics for detailed discussions on matters concerning operational art. Moreover, military leaders of all branches and services must speak, act and think in compliance with proper doctrine all the time. The importance of the proper identification of an enemy’s center of gravity cannot be over emphasized. The next battlefield of major combat operations may not be as forgiving as it was in Iraq.

49 JP 5-00.1, II-6.


