







February 2019



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#### **The Power of Information**

**Reflecting on the Tet Offensive of 1968** 

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The war's real turning point came a month later and 8,000 miles away...Such was the power of moving images and sound, interspersed with dramatic narration and beamed into tens of millions of households...When the government claimed one thing and the networks showed another, the networks usually won.

- P.W. Singer and Emerson T. Brooking, authors of LikeWar: The Weaponization of Social Media

On September 15, 2017, the Secretary of Defense issued a memorandum introducing Information as a seventh joint warfighting function. It stated,

Information is such a powerful tool that it is recognized as an instrument of national power. The advent of the internet, the expansion of information technology, the widespread availability of wireless communications, and the far-reaching impact of social media have dramatically impacted operations and changed the character of modern warfare.

This is not a new idea, but rather a more formal recognition of an old one. The American military and the American populace both came to realize this in the escalation of the Vietnam War between 1965 and 1968. In the early hours of January 31, 1968, the North Vietnamese Army and the Vietcong assaulted Saigon as well as a significant percentage of the regional capitals, district centers, and autonomous cities in Vietnam, over 100 major targets employing as many as 100,000 troops. It was an attack aimed at producing a decisive military victory and a general uprising of the South Vietnamese populace. In most cases, however, the uprising never occurred, and the allied military forces quickly recovered from their initial shock and pushed the invaders out within days.

The Tet Offensive of 1968 was a watershed moment in American history, both in terms of the U.S. strategic approach to the conflict and the American public's perspective of the continued violence. It highlighted the limits of American power, the human nature of its elected

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officials, and the natural tensions between a nation's foreign and domestic policy.

Vulnerabilities were created and exploited by all parties to the conflict, and misunderstanding abounded. The Tet Offensive also exposed certain vulnerabilities in the changing character of war related to the speed of information. As David Patrikarakos said of the subject in *War in 140 Characters*: "[Information technology]...represents an almost entirely new power for smaller, less militarily powerful nations: the ability to defeat their adversaries on the narrative battlefield. This ability is, moreover, absolutely fundamental when victory on the physical battlefield is essentially impossible."

As information, influence, and culture developed into the anchors of blind spots and flash points in the Vietnam conflict, it became apparent that another culture was being seriously underestimated and misunderstood—that of the American people. General Rupert Smith put it in Clausewitzian terms in his book, *The Utility of Force*: "The U.S. failed to break the trinity of government, people and military that held the Vietnamese enemy together – whilst its own was put at peril."

The Tet Offensive case provides a compelling exploration of the American escalation in Vietnam from 1950 to 1968 through the lens of Operations in the Information Environment. It seeks to bring to readers a greater understanding of the decision-making that led to the Tet Offensive of 1968 as well as a discussion of the influence of information and culture on the outcome of the conflict.

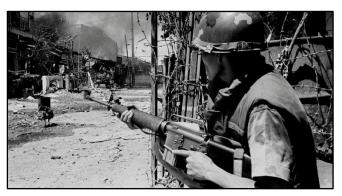
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A note from the author – "As with any historical occurrence, there are going to be differing opinions, perspectives, and analyses of how events, information, and evidence should be interpreted or best presented. This is largely driven by the message a resource tries to convey, the format used to communicate the message, and the intended audience.

With respect to the Tet Offensive in 1968, the last 50 years have done little to add clarity beyond what happened. In fact, very few sources agree on major points, and when they do, there is always another to provide a compelling counterargument. Many sources remain classified. The intent of this case study is not to determine why the Tet Offensive occurred. It is designed to introduce the military, political, and domestic environment in America and Vietnam before and after the Tet Offensive to provide an opportunity for students to explore possible causal factors and ultimately discuss how Operations in the Information Environment can be applied to conflict in the current and future operating environments. To that end, many historical elements have been omitted or de-emphasized."

#### PART I – THE INDOCHINA WARS

On the evening of 30 January 1968, Communist forces assaulted Saigon as well as a significant percentage of the regional capitals, district centers, and autonomous cities in Vietnam. A wave of over 100 major targets employed as many as 100,000 troops across the breadth of the country. It was an attack aimed at producing a decisive military victory and a general uprising of the



A South Vietnamese soldier takes position on a Saigon street during the Tet Offensive.

South Vietnamese populace. In most cases, however, the uprising never occurred, and the allied military forces quickly recovered from their initial shock and pushed the invaders out within days.

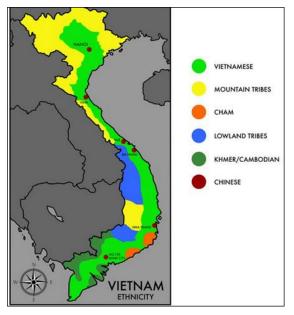
The 1968 Tet Offensive marked a watershed moment in the Vietnam War, both in terms of the U.S. strategic approach and the American public's perspective of the continued violence. It highlighted the limits of American power, the human nature of its elected officials, and the natural tensions between its foreign and domestic policy. The Tet Offensive also exposed certain vulnerabilities in the changing character of war related to the speed of information. America may have won the battle, but it lost the narrative.

#### Vietnamese Historical Background

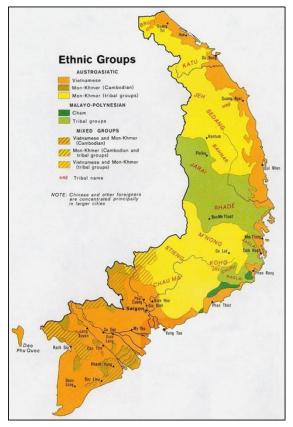
Vietnam is a thin, north-to-south oriented country in Southeast Asia primarily covered by a jungle of trees and brush in between two major rice-bearing alluvial plains—the Red River delta in the north and the Mekong River delta in the It shares borders with Laos, south. Cambodia, and China. The country has a geographic variance between mountains (up to 10,000 ft. in elevation near the Chinese border) to coastal plains which, when combined with the vegetation and water sources, contribute to a population as different as the land they inhabit.

Vietnam has a strong Chinese character, owing to the fact that the northern region of the country was a Chinese protectorate for over 1,000 years (111 B.C. to 939 A.D.). The Vietnamese regained control of their country through a series of rebellions, though they maintained ties with China until French domination became complete in 1884.<sup>1</sup> In the intervening period (940 to 1883), they embarked on their own form of colonialism to the south and into parts of modern-day Cambodia. It was late in this period (c. 1802) when the Imperial Capital was moved to Hue, a city symbolic for its connections to both the north and the south, tying the country together.

Heavy French influence in Vietnam accompanied 19th Century European efforts to open China to trade.<sup>2</sup> The French had actually been present in Vietnam through religious missionaries as early as



(Fig.1 - above) Major ethnic groups in Vietnam, January 1968 – Note urban areas are primarily ethnic Chinese while ethnic Vietnamese dominate the coastal plains. (Fig. 2 – below) A more nuanced ethnic breakdown of South Vietnam.



1626—in fact, Hue's famous Citadel is a product of French architecture. Vietnam had always remained culturally aloof, however, never sacrificing its fundamental character to increasing Western influence. This came to a head in the mid-19th Century in a military clash over the legal status of a French missionary. The end result was a short, one-sided naval battle and a French expedition which seized Saigon in 1859.<sup>3</sup> The subsequent 25 years saw a series of back and forth engagements as French forces sought to expand their foothold, fighting Vietnamese nationalists and Chinese volunteers for control of the country. Vietnam accepted the status of a French protectorate in 1884, though the country did not fully come under administrative control until 1913, beginning over 40 years of French colonial rule (with some significant interruptions during World War II).

#### First Indochina War

The period from December 1946 through July 1954 in Vietnam was marked by the First Indochina War (called the Indochina War in France and the French War in Vietnam). This conflict pitted French expeditionary forces supported by the Vietnamese National Army against the League for the Independence of Vietnam (also known as the Viet Minh) and the People's Army of Vietnam (PAVN). The war culminated at the Battle of Dien Bien Phu, a military base near the Laotian border. The French had occupied the position in an effort to draw the enemy's regular forces into a set-piece battle they were sure would result in victory. However, PAVN forces surrounded the military base, outnumbering the defenders by almost 4-to-1, and the French perimeter was brutally and systematically reduced during a siege of 56 days.



Viet Minh forces fly their flag over Dien Bien Phu on 7 May 1954.

Dien Bien Phu fell on 7 May 1954, coincident with the Geneva Conference beginning the very next day, which was arranged to reach a peace between all belligerents in Laos. Vietnam, and Korea. With respect to Vietnam, the Geneva accords established the separate states of Cambodia, Laos, and Vietnam; resulted in а disadvantageous armistice for France; and most significantly, a temporary split to Vietnam. The

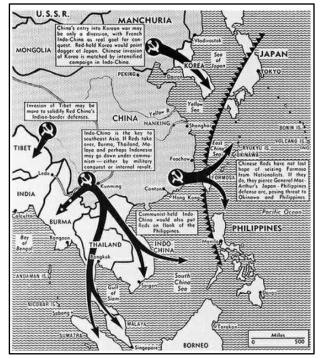
truce was signed by representatives of the French Union and the Viet Minh, included a division of Vietnam at the 17th parallel, and directed that free elections be held in July 1956 in order to unify the country. The northern part of the country went to the Communists while the southern portion went to the French-backed government of South Vietnam. A few months after the conference, South Vietnam withdrew from the French Union and attained complete sovereignty, establishing itself as a republic under Ngo Dinh Diem. In this manner, South Vietnam was quickly recognized by most Western powers.<sup>4</sup> Two years later, the 1956 free elections were never held, since South Vietnam was never a signatory to the 1954 accords.

#### A Brief History of U.S. Involvement in Vietnam (1950-1966)

Following the Allied victory in World War II (WWII), a power vacuum was created over those territories previously held by the Axis forces. For the most part, the Chinese fell in on previous Japanese holdings. In the Pacific Theater, Korea, Japan (U.S.), Formosa (Nationalist Chinese), Indochina (French), and the Philippines (U.S.) were notable exceptions. In America, there persisted a post-WWII perspective of American values as universal and desired by all. If the conflict in Korea, which began in June 1950, came as something of a shock, it had more to do with the growing unease felt at the speed and breadth of the global spread of Communism than it did from a strictly military sense.

The Korean War, which ended with another armistice at the same Geneva Conference in July 1954, was seen by American policy-makers as a somewhat successful, if temporary, attempt at stemming the tide of Communism. With French influence waning in Vietnam, Indochina was viewed as the new front line in the ideological struggle between Democracy and Communism. The United States was determined to hold that line.

<sup>(</sup>Fig. 3) A map made in 1950 depicts the 'Domino Theory' - the idea that one nation 'going Communist' would start a chain reaction of governmental change in the region. The map also depicts military threats to U.S. interests in East Asia by the Communist Chinese.



America's involvement in Vietnam did not begin with the Geneva Conference in 1954, however. It predated the conference by several years with President Truman's approval of military aid in 1950 to assist the French in maintaining their presence in the region, aid which was specifically designed to push back against Communist expansionism.<sup>5</sup>

**Truman Doctrine and Containment Theory**, 1947-1991. The post-WWII U.S. foreign policy of interventionism was illustrated in the Truman Doctrine, creating a precedent for providing aid (military, political, and economic) to all democratic nations under threat from internal or external authoritarian forces. Containment theory was coined by diplomat George Kennan in a 1947 report in which he stated, "The main element of any U.S. policy toward the Soviet Union must be a long-term, patient, but firm and vigilant containment of Russian expansive tendencies."<sup>6</sup>

An American Military Assistance Advisory Group (MAAG) was established in Vietnam in July 1950 to supervise the use of the promised military aid, observing where equipment was being sent and how it was being used.<sup>7</sup> The outbreak of the Korean War simply increased the American sense of urgency regarding the delivery speed and quantity of aid provided as the MAAG in Vietnam grew from an original 4 members in 1950 to 342 in 1954.<sup>8</sup> The aid packages themselves grew from \$23.5 million in 1951, to \$400 million in 1953, to more than \$7 billion by 1962 at the height of the advisory effort.<sup>91011</sup>

It became increasingly clear, from the Geneva Conference onward, that the free and democratic nation of South Vietnam would not stand long against their Communist neighbors to the north. As American foreign policy transitioned to containment via interventionism, U.S. involvement in South Vietnam began to escalate as a war of ideals. In 1955, the United States began to funnel aid directly to the South Vietnamese government and agreed to train the South Vietnamese Army (ARVN).<sup>12</sup> This training would focus almost exclusively on

**Domino Theory**, 1952-1975. First articulated in a clear manner in a National Security Council report in 1952, it was later credited to President Eisenhower when he referred to the concept in relation to the possible consequences of losing Indochina to the spread of communism.<sup>13</sup> It was a "binary conception...that quickly became unquestioned dogma".<sup>14</sup> Eventually discredited, the theory was "used by a string of presidents and their advisors to defend ever-deepening U.S. involvement in Vietnam."<sup>15</sup> It is difficult to overstate the influence of this idea on 20+ years of policy and policy-makers in the United States.

preparing the ARVN for major conventional conflict (see Massive Retaliation) rather than the counterinsurgency they ended up facing. Many historians consider this increased U.S. involvement in 1955 as the beginning of the Second Indochina War (the Vietnam War in America or the American War in Vietnam).

**Massive Retaliation**, 1954-1961. A strategy of the Eisenhower administration in which the U.S. military would reserve the ability to respond massively, with nuclear weapons, to Communist attacks like the one in Korea in 1950. Under this strategy, nuclear delivery platforms were prioritized, and low-to-mid intensity conflict was given little consideration.<sup>16</sup> This post-WWII concept of 'brinkmanship' was born of the impatience the administration had for the concept of 'limited war' that came out of the conflict in Korea. President Eisenhower promised that the American military would be restructured to support the new strategy.

In 1957, President Diem visited the United States, and President Eisenhower reaffirmed U.S. support for his regime. Within months of this meeting, Communist insurgents began armed conflict in the Mekong delta, specifically targeting village leaders and South Vietnamese officials they deemed to be a threat.<sup>17</sup> By 1959, a Communist command structure existed in the South, consisting of multiple logistical lines to push personnel, weapons, and supplies to insurgent fighters. In response, Diem authorized repression of Communist suspects and other dissidents throughout South Vietnam. Months later in 1960, a military coup in South Vietnam against Diem was unsuccessful, and the National Liberation Front (NLF) was officially formed in South Vietnam. The NLF were later dubbed the "Vietnamese Communists", also known as the "Viet Cong", by the Diem regime.<sup>18</sup>

**Flexible Response**, 1961-1963. First appeared in former Army Chief-of-Staff General Maxwell Taylor's 1960 book, *The Uncertain Trumpet*, where he coined the term in his highly critical stance on Massive Retaliation. The concept captured President Kennedy's interest in mirroring his own concerns over the limited options provided by Massive Retaliation. As the name of the strategy suggests, the idea was to provide a flexible range of options across the elements of national power which could be used to check Communist influence and "aggression and increase the credibility of its threats to employ force."<sup>19</sup>



(Fig. 4) A political map made to aid the American public in tracking the conflict in South Vietnam. Note the use of primary and secondary colors as a form of subtle messaging via color theory or political color symbolism – Red = threat, danger, enemy, or communism; Yellow = weak, cowardly, liberalism, or Buddhism; Blue = good, strong, or conservative; Pink = weaker form of red or democratic socialist movements; Green = blend of yellow and blue traits; Purple = blend of blue and red traits or a mix of ideologies.

In 1961, President Kennedy began increasing aid to Vietnam after two separate visits by Vice-President Johnson and General Taylor. In June, after agreeing to support a neutral Laos with Soviet Premier Nikita President Khrushchev. Kennedv remarked to James Reston of the New York Times, "Now we have a problem making our power credible, and Vietnam looks like the place."20 Six months later, the Military Assistance Command Vietnam (MACV) was formed, and by October 1963, the number of American advisors had increased from 948 to 16,732.21

The conflict escalated in 1963, beginning with a Viet Cong victory over ARVN forces in the Battle of Ap Bac in January. On the domestic front, Diem's regime increased anti-Buddhist rhetoric and violence, shooting demonstrators This was followed the next month by a monk famously in Hue in May. committing suicide by self-immolation while the world watched. President Kennedy remarked on a photo of the event, "no news picture in history generated so much emotion in the world as that one."22 The U.S. perspective was that the regime's ability to lead South Vietnam was waning, and that if "left in the hands of Diem, the United States would suffer a tremendous defeat."23 Discussion of a military coup began over the summer, gaining the support of the U.S. Ambassador, and in September, President Kennedy publicly criticized Diem during a television interview by Walter Cronkite on the CBS Evening News. Two short months later, Diem and his brother were assassinated with the tacit approval of the Kennedy administration, followed three weeks later by the assassination of President Kennedy himself.

Lyndon Johnson assumed the U.S. presidency in 1963, and he was immediately frustrated with Vietnam's ability to monopolize his time and energies away from his personal priorities—getting re-elected and pushing his robust domestic agenda. His *Great Society* initiative proposed elimination of poverty and inequality, and new spending programs were required to address urban problems, medical care, and education. While championing the *Civil Rights Act of 1964* in front of a joint session of congress, Johnson emphatically stated that, "No memorial oration or eulogy could more eloquently honor President Kennedy's memory than the earliest possible passage of the Civil Rights Bill for which he



President Lyndon B. Johnson

fought so long." With the election looming, he was keen to simultaneously follow Kennedy's foreign policy lead and not lose the war, and there is clear evidence that he was "basing his Vietnam decisions on his campaign strategy rather than on military considerations and foreign policy concerns."<sup>24</sup> Anti-war Democrats in congress were quick to point out the dichotomy and disparate funding in the President's foreign and domestic policy agendas.

In mid-1964, a minor engagement between U.S. and North Vietnamese naval forces resulted in the Gulf of Tonkin Resolution on August 7th. Though the incident itself endures scrutiny to this day, Congress passed the resolution with very little opposition and provided the President with broad authority to utilize military force in Southeast Asia without any formal declaration of war.



Operation ROLLING THUNDER, 1965-1968. Originally planned to last eight weeks, the bombing campaign continued for three years.

What began as military retaliation for the encounter in Tonkin Gulf soon escalated into something much more significant the following year.

In February 1965, Viet Cong forces began openly targeting American installations. Less than three weeks later, President Johnson approved the systematic and coordinated bombing of targets in North Vietnam under Operation ROLLING THUNDER. This became the most intense sustained battle involving air and ground forces of the entire Cold War due to the robust North Vietnamese air defenses. In

an acknowledgment that the air forces required for ROLLING THUNDER were most vulnerable on the ground, troops were surged to protect the bases which supported the strikes. On 8 March 1965, 3,500 Marines made an amphibious landing at Da Nang to secure the airfield there. It marked the beginning of a shift from advisement and training roles to active combat, as the Marines often patrolled beyond the perimeter of the base to add depth to their defensive posture. This is exactly where the MACV Commander, General Westmoreland, wanted them—engaging the enemy. Ambassador Maxwell Taylor (former Army Chief-of-Staff and Chairman of the Joint Chiefs) disagreed and "insisted that they be restricted to defending U.S. bases and other installations along the coast." In the end, President Johnson sided with Westmoreland, giving him another two battalions along with administrative and logistical forces to support. All of this was accomplished intentionally without fanfare. President Johnson directed his staff to "minimize any appearance of sudden changes in policy".<sup>25</sup>

**Graduated Pressure**, 1963-1969. A strategic concept developed by Secretary of Defense Robert S. McNamara which viewed the use of force as a means of communication. "Gradually intensifying military action would convey American resolve and thereby convince an adversary to alter his behavior. Johnson found McNamara's strategic concept particularly attractive, because it would not jeopardize his domestic political agenda."<sup>26</sup> President Johnson's deliberations and actions, specifically prior to the election in 1964, should be viewed through the context of this strategic approach. Even after winning the election in his own right, major decisions appeared to be weighed against their effect on his domestic image as a moderate.

The shift to offensive operations was not made public until three months after the landing at Da Nang. The American populace was aware of the landing, but they were told it was simply to provide security to military facilities. By the end of the year, the ground troop strength had bloomed from the initial 3,500 Marines to over 184,000 military personnel.<sup>27</sup> More than two-thirds of these troops were volunteers, with the remainder being sourced through the Selective Service System, commonly referred to as "the draft", which was reactivated in August 1964 as America's involvement in Vietnam escalated. The American public's reaction to the buildup was nominal, which may attest to the minimization efforts of the administration. According to a Gallup Poll taken in late 1965, the respondents were split between believing the U.S. forces would achieve a victory or that the conflict would end in a draw.<sup>28</sup>

Despite the limited reaction to the buildup in America, the addition of U.S. combat troops dramatically changed the calculus for the North Vietnamese, who

were focused primarily on a military victory over the ARVN in the field, a fight they assumed they could win. With the gradual Americanization of the conflict, Hanoi embarked on a protracted strategy which would strive to avoid loss while creating conditions for a military stalemate the U.S. would tire of, driving them to a negotiated settlement.<sup>29</sup> This approach would remain until strategic conditions began to change in 1967.

After a number of significant military engagements and successful strikes, President Johnson suspended ROLLING THUNDER on 25 December 1965 in order to entice the North Vietnamese to the negotiating table. By most accounts, this failed due to U.S. policy-makers misunderstanding the nationalistic drive of the North Vietnamese and the fractured nature of the Communist Party in Hanoi.<sup>30</sup> Thirty-seven days later, the bombing resumed, and by the end of 1966, American troop strength had doubled to over 400,000.

#### The American Public and the First Television War

The American public and Congress had been generally supportive of the response to the incident in the Gulf of Tonkin and the troop deployments early in 1965, but they began to ask harder questions of the Johnson administration as the activity and deployments increased. Anti-war protests started erupting on college campuses and in major cities, indicating a sense of social unrest resulting from the confluence of America's deepening involvement in the war, military conscription, and the credibility gap between what was being delivered by public officials and what was being reported in the news. Improvements in satellite technology served as a major factor in reporting and disseminating images to the public, and many reports were able to be read by evening news anchors shortly after being written. As such, the Vietnam conflict is often referred to as the first "television war".

In February of 1966, Senator Fulbright, the Chairman of the Senate Foreign Relations Committee, convened a series of public hearings to question experts on the American escalation of the war in Vietnam. In addition to being public, the hearings were televised live, transforming the series into political theater which the American populace had not seen before. Juxtaposed with the images and reporting coming out of Vietnam itself, it became apparent that there was more to the story, and over 30 million viewers tuned in every day.

Many important public figures appeared before the committee including retired general Maxwell Taylor and the Secretary of Defense himself, Robert S. McNamara. Of particular note was George Kennan, who most policy-makers

considered "a principle architect of U.S. Cold War policy" for his development of containment theory. In his 1966 testimony, he shocked viewers by describing the Vietnam War as an "unfortunate" and "unpromising involvement in a remote and secondary theater." He went on to say, "The spectacle of Americans inflicting grievous injury on the lives of a poor and helpless people...people of a different race and color...[is] profoundly detrimental to the image we would like to hold of this country."<sup>31</sup>

Senator Fulbright followed up the hearings by publishing a book called *The* Arrogance of Power, described as a "damning critique of U.S. foreign policy." The senator affirmed his support for U.S. foreign policy overall, but he was "deeply disturbed by many specific policies and sanctimony, hypocrisy, the and arrogance with which they were carried out. We could see evil in others, but not in ourselves."32 The explosive nature of the critique coming from the Chairman of the Senate Foreign Relations Committee was profound. Predictably, the book was an almost instant best-seller.



Senators J. William Fulbright and Wayne Morse. Sen. Fulbright was a close ally of President Johnson and had originally supported the conflict, but he came to believe critical information had been withheld regarding the Gulf of Tonkin. Sen. Morse was one of only two senators in opposition to the congressional resolution in 1964, believing it to be a "historic mistake."

America's escalating involvement in Vietnam and the conflict it caused at home is an apt illustration of the natural tension between national interests and national values with respect to foreign policy. As 1966 rolled into 1967, the American public found itself questioning not only its role in Vietnam, but the very ideas of American exceptionalism, universal values, and their moral authority in the eyes of the rest of the world.

#### **Issues for Consideration:**

1. In the relatively short history of America's involvement in Vietnam from 1950-1966, where do you see clear instances of information being leveraged by groups to inform, influence, or deceive a target audience?

2. How did the perspective of the conflict change over the course of four administrations? How did our relationship with the South Vietnamese change?

3. Clausewitz stated that "war is an extension of policy". How did tension between President Johnson's foreign and domestic policies create vulnerabilities in America's approach to Vietnam between 1963-1966?

4. How does America's perspective of itself influence its approach to Operations in the Information Environment?

<sup>6</sup> Kennan, George F. The Sources of Soviet Conduct. (Foreign Affairs 25, 1946), 575.

<sup>8</sup> Krepinevich Jr, Andrew F. The Army and Vietnam. (JHU Press, 1986), 18.

<sup>22</sup> *Ibid*, 159.

<sup>24</sup> McMaster, 87.

<sup>26</sup> McMaster, 62.

<sup>28</sup> *Ibid*, 10.

<sup>29</sup> Smith, 237.

<sup>32</sup> *Ibid*, 53.

<sup>&</sup>lt;sup>1</sup> Fall, Bernard. *The Two Viet-Nams: A Political and Military Analysis* (Frederick A. Praeger, 1967), 10-12.

<sup>&</sup>lt;sup>2</sup> *Ibid*, 22.

<sup>&</sup>lt;sup>3</sup> Ibid, 23.

<sup>&</sup>lt;sup>4</sup> *Ibid*, 232-233, 257-258.

<sup>&</sup>lt;sup>5</sup> Karnow, Stanley. *Vietnam: A History* (New York: Viking, 1983), 43.

<sup>&</sup>lt;sup>7</sup> Fall, 219-220.

<sup>&</sup>lt;sup>9</sup> Fall, 220.

<sup>&</sup>lt;sup>10</sup> Olson, Gregory Allen. *Mansfield and Vietnam: A Study in Rhetorical Adaptation*. (East Lansing: Michigan State University Press, 1995), 22.

<sup>&</sup>lt;sup>11</sup> VanDeMark, Brian. Road to Disaster. (Harper Collins, 2018), 129.

<sup>&</sup>lt;sup>12</sup> Ricks, Thomas E. *The Generals: American Military Command from World War II to Today.* (Penguin, 2012), 223.

<sup>&</sup>lt;sup>13</sup> McMaster, H. R. Dereliction of Duty. (Harper Collins, 1997), 34.

<sup>&</sup>lt;sup>14</sup> VanDeMark, 123.

<sup>&</sup>lt;sup>15</sup> Smith, General Rupert. *The Utility of Force: The Art of War in the Modern World*. (Alfred A. Knopf, 2007), 223.

<sup>&</sup>lt;sup>16</sup> Krepinevich, 17.

<sup>&</sup>lt;sup>17</sup> Karnow, 238.

<sup>&</sup>lt;sup>18</sup> *Ibid*, 676-678.

<sup>&</sup>lt;sup>19</sup> Krepinevich, 28.

<sup>&</sup>lt;sup>20</sup> Gardner, Lloyd. Pay Any Price: Lyndon Johnson and the Wars for Vietnam. (Ivan Dee, 1995), 47.

<sup>&</sup>lt;sup>21</sup> VanDeMark, 135.

<sup>&</sup>lt;sup>23</sup> Schmitz, David F. *The Tet Offensive: Politics, War, and Public Opinion*. (Rowman and Littlefield, 2005), 27.

<sup>&</sup>lt;sup>25</sup> Karnow, 417-418.

<sup>&</sup>lt;sup>27</sup> Moise, Edwin E. *The Myths of Tet: The Most Misunderstood Event of the Vietnam War.* (University Press of Kansas, 2017), 12.

<sup>&</sup>lt;sup>30</sup> Nguyen, Lien-Hang T. *Hanoi's War: An International History of the War for Peace in Vietnam.* (University of North Carolina Press, 2012), 77.

<sup>&</sup>lt;sup>31</sup> Appy, Christian G. American Reckoning: The Vietnam War and Our National Identity. (New York: Viking, 2015), 52.

#### PART II – SHAPING THE TET OFFENSIVE (1967-1968)

#### Preparation Efforts in the North

In North Vietnam, the strategy and deliberations that preceded and led to the Tet Offensive are still somewhat unclear, particularly as they pertain to how the North decided upon aiming at what they called the "General Offensive, General Uprising". Lien-Hang T. Nguyen's analysis of the North's perspective in her book, *Hanoi's War*, provides perhaps the most concise view:

Contemporaneous and postwar studies published in Vietnam assert that the military losses and political setbacks suffered by the United States and the Republic of Vietnam in 1966 and 1967 presented a key opportunity for the communist forces to undertake a major offensive in 1968. Indeed, Vietnamese scholarship cites the inability of the United States to achieve its projected speedy victory over the insurgency as the *only* factor in Tet decision-making. In this view, the failure of Washington's war of attrition and its bombing campaigns over North Vietnam, compounded by the growing political disillusionment with the war in the United States, prompted the leadership of the Vietnam Worker's Party (VWP) to shift the "revolution to a new stage, that of decisive victory." With the U.S. presidential elections approaching in 1968, Hanoi made the decision in the spring of 1967 "to quickly prepare on all fronts to seize the opportunity to achieve a large victory and force America to accept a military defeat." According to Vietnamese scholars then, the Tet Offensive was strictly a result of the Party leadership's astute decision to exploit the favorable conditions, both militarily and politically, arising from the enemy's failing war effort in the South.<sup>1</sup>

Hanoi was far from single-minded in its approach to the war, however. Just like their enemies in Saigon and Washington, the Democratic Republic of Vietnam (DRV) had its own political factions. Despite this, the Party leadership reached a compromise in January of 1967 with the adoption of a political-diplomatic-military strategy. The diplomatic aspect of this strategy was to begin talks if America stopped their bombing campaign unconditionally. Those same factions within the Party, however, had decided that these talks could occur only after achieving a decisive military victory first. "While Ho Chi Minh, General Giap, and Chinese leaders urged caution by preparing communist forces for a protracted war, Le Duan and his hawks strove for total victory through an ambitious and risky large-scale offensive aimed at the cities and towns of South Vietnam."<sup>2</sup>

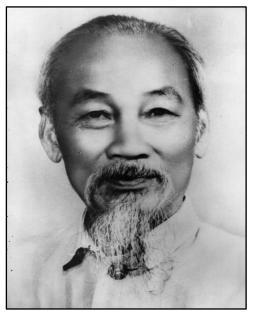
Le Duan adopted and championed the plan which became the Tet Offensive. He was a revolutionary leader in South Vietnam during the First Indochina War before becoming a politician in the VWP, and this experience lent him a vision of the populace rising in support of a general offensive. This same experience, however, may have blinded him to the differences between the First and Second Indochina Wars with respect to third-party involvement and influence. The notion that the South Vietnamese populace felt the same way in 1967, after decades of continuous war, about the U.S. forces as they did about the French (which occupied the country as a colony) was an assumption at best.

Serious planning for the operation began in mid-1967, and Le Duan appeared to seek a similar leverage to that achieved from Dien Bien Phu. When the Viet Minh went into the Geneva Conference on the backs of a clear military victory in 1954, they were initially able to negotiate from a position of tremendous strength. With the Tet Offensive, Le Duan hoped to go beyond a military victory by toppling the South Vietnamese government, "forcing any subsequent negotiations with the United States to reflect a victorious DRV over a vanquished RVN."<sup>3</sup>

Troop strength was a major problem for the North Vietnamese to overcome to support the offensive in South Vietnam. Hanoi was under no illusions that they had dominance in the south—the Communist forces there were badly outnumbered by the U.S. and RVN military. The approach to counter this was fourfold. First, the VWP made the decision in October to carry out the operation at the time of



Key North Vietnamese figures. Le Duan (top), Secretary General in the VWP. Eventually succeeded Ho Chi Minh as the most powerful figure in Vietnam. Ho Chi Minh (bottom), President of the DRV and creator of the Viet Minh, was a Vietnamese Nationalist who fought against the French. Considered the father of the revolution, his name is an alias which literally translates as "the enlightened one". He opposed the strategy of the Tet Offensive and was convalescing in China in January 1968.



Tet, the most significant and revered holiday in Vietnam. The Viet Cong announced in October that they would observe a seven-day Tet truce, from 27 January to 3 February 1968, "the longest cease-fire ever proposed by the Communists."<sup>4</sup> The general idea was to take advantage of the combination of complacency and lower troop strength (as units gave their soldiers leave to celebrate with family members) to both decimate war material and create a situation conducive for a general uprising of the South Vietnamese populace. Previous truces had been used by Hanoi to supply their forces in the south, taking advantage of the lull in U.S. bombing efforts and ground offensives. There was no reason not to assume a similar effect in 1968 given the precedent.

Second, the Communist forces needed to bleed American strength away from the major population centers which were to be the primary targets in the coming offensive. To do this, PAVN forces focused on the north and west, near the Laotian and Cambodian borders, initiating fighting at Loc Ninh (80 miles north of Saigon) on 27 October and Dak To (in the central highlands) on 3 November. They also began to concentrate forces in the vicinity of Khe Sanh in the north, though serious fighting there did not commence until



The Battle of Khe Sanh, 21 January – 18 April 1968. Approximately 6,000 U.S. Marines and ARVN troops were moved in to defend Khe Sanh when intelligence estimated 4 NVA infantry divisions were converging on the area (Karnow, 539-540). As the battle raged on and was transmitted nightly to the American public, it served to contradict claims of a complete military victory by U.S. forces over the North Vietnamese during the Tet Offensive.

20-21 January. All of this served to siphon strength and attention away from the North's true objectives. As testament to how complete the deception was, General Westmoreland wrote to Admiral Sharp, Commander-in-Chief Pacific, on 23 January about Khe Sanh that the enemy might attack elsewhere "in an attempt to divert and disperse our strength" and that "the confrontation in Quang Tri may well be the decisive phase of the war."<sup>5</sup>

Third, the North Vietnamese would need to immediately start funneling additional troops and weapons south to bolster the Viet Cong forces already in place. The operational effect of this third approach is often underestimated, however. As historian Edwin Moise points out, "...Hanoi was pouring North Vietnamese troops into South Vietnam...at a time when MACV was absolutely determined to report low enemy strength". While MACV later admitted to getting

the number wrong by a factor of 40,000 enemy troops, official histories from PAVN forces put the discrepancy closer to 80,000. The true number of infiltrators coming south may continue to be disputed, but it is well documented that analysts were aware the infiltrations were happening and in very high numbers, approximately 20,000-30,000 per month, from September 1967 through January 1968.<sup>6</sup>

Finally, a related component of the North's deception strategy included an ambitious diplomatic initiative. It aimed at producing a lull in enemy operations (to support NVA and Viet Cong preparations) and communicating a desire to a



General Vo Nguyen Giap was considered Vietnam's most prominent military figure, leading the Viet Minh military forces to victory against the French at Dien Bien Phu in 1954. Giap opposed the Tet Offensive plan so much that he arranged to be out of the country when it was implemented.

global audience about Hanoi's willingness to On 29 December, the North negotiate. Vietnamese Foreign Minister, Nguyen Duy Trinh, gave a speech at the Mongolian Embassy in Hanoi which discussed the initiation of negotiations with the United States. The speech, which was transmitted by Radio Hanoi on 1 January 1968, stated that North Vietnam would open negotiations with the United States after it stopped bombing.<sup>7</sup> This diplomatic component of the Tet strategy was virtually the same authored by Trinh during the Party's deliberations the previous January, and it was echoed perhaps in President Johnson's statement in September that the U.S. would halt the bombing in exchange for "productive discussions." <sup>8</sup> Here, the timing is more suggestive of Le Duan's political maneuvering, utilizing it as a component of active military deception.

Another key component of the coming offensive for the North would be to ensure the synchronization of the efforts and impacts from the many aspects of the General Offensive and General Uprising. Close coordination of the attacks would be critical, with timing being essential. The North Vietnamese recognized the risk that transmission of their plans presented. This was a natural dilemma that Hanoi faced—how to coordinate and deliver orders for a secret attack when its widespread nature actually called for publicity amongst their scattered forces.

There was no single answer, and there are numerous examples of portions of the plan, even explicit attack orders, obtained by U.S. and RVN forces in the

months preceding the Tet Offensive. Allied forces were reporting and disseminating the information, but two primary factors prevented a clear picture from being formed. First, U.S. military forces were convinced that the enemy was not in a position to mount a major offensive, and in many cases, they were encouraged to downplay anything to the contrary. Reports were either not forwarded or were only forwarded with a senior official expressing doubt via editorial on the analysis. Second, the North Vietnamese accounted for the lack of security through their multi-pronged deception efforts. "The passive deception undertaken by the communists could not prevent indications of the impending urban attacks from reaching allied intelligence organizations, but it did make the danger posed by NVA units along the border and at Khe Sanh appear more threatening."<sup>9</sup> In this case, thousands of enemy troops actively threatening a base exceeded the attention garnered by mere conjecture of an uprising of the South Vietnamese populace.

In a meeting of the Party Central Committee sometime in January 1968, Le Duan presented the final plan for the Tet Offensive. In his speech, "he was just as extravagant in his optimism, just as willing to ignore reality, as any U.S. government spokesman."<sup>10</sup> In addition to gross mischaracterizations of military

victories the North was currently enjoying over U.S. forces, he also claimed there was political turmoil in South Vietnam. There were a steady series of military commanders holding power in Saigon following Diem's assassination in 1963, but the junta ended with the rise of Nguyen Van Thieu (right). While he was perhaps yet another ARVN general to Le Duan, he had been the military figurehead for two years before becoming the president in 1967. The government in South Vietnam was actually experiencing stability rather than the turmoil which Le Duan described. Hanoi's view of the population in South Vietnam was even more skewed. It was believed that they were in a "revolutionary ferment", ready to sacrifice their very lives if only they could be armed and directed by revolutionary forces.<sup>11</sup> As the North would discover, this was an extremely gross assumption.



Nguyen Van Thieu, ARVN General who trained in France and the United States. Took part in Ngo Dinh Diem's assassination in 1963. Served as military governor from 1965-1967, then president of South Vietnam from 1967-1973.

#### The Optimism Campaign

Back in America, the public continued to devour the information being provided by the Fulbright hearings during the day and the news at night. The number of protests increased, and talk of a stalemate or even an outright military loss in Vietnam began to dominate the conversation in early 1967. The death and destruction on display was appalling to the entire world. In a speech given on 4 April 1967, Dr. Martin Luther King Jr., the popular international civil rights figure and Nobel Peace Prize recipient, accused America of being the "greatest purveyor of violence in the world today."<sup>12</sup> In his remarks, he specifically conflated the struggles for civil rights in America and peace in Vietnam. He called for an end to the draft, an end to the escalation, an end to the violence, and negotiations for peace. King's message was clear: the United States government was isolating itself from the global community and from its own citizens in pursuit of an elusive military victory half a world away. Though the press responded to the speech negatively, it was clear that the link Dr. King had made between the two struggles for civil rights and peace in Vietnam was not going to quickly go away.

The momentum of President Johnson's *Great Society* program had been slowing for months. Vietnam was continuing to vex the President at home, causing inflation, wage concerns, and mounting strikes. The situation called for a cutback in domestic spending or an increase in taxes, but Johnson was unwilling to break up his immense majority in Congress by asking for either. He had widened the war without calling for any public sacrifice. The problems could not be managed effectively unless the war ended, but Johnson was loath to do so. As he said later to his biographer Doris Kearns:

If I left the woman I really loved—the *Great Society*—in order to get involved with that bitch of a war on the other side of the world, then I would lose everything at home. All my programs. All my hopes to feed to the hungry and shelter the homeless. All my dreams to provide education and medical care...But if I left that war and let the Communists take over South Vietnam, then I would be seen as a coward and my nation would be seen as an appeaser, and we would both find it impossible to accomplish anything for anybody anywhere on the entire globe.<sup>13</sup>

President Johnson knew the message needed to change. In response to the growing unrest at home and abroad, American political and military leaders engaged upon a coordinated effort to persuade the public that the situation was

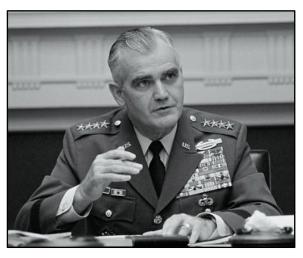
not what it seemed. Historian Edwin Moise has referred to this phenomenon as the "optimism campaign", referencing the deliberate and pervasive effort to create a specific narrative regarding U.S. involvement in Vietnam.<sup>14</sup>

Part of this campaign included the creation of a "psychological strategy committee", the Vietnam Information Group (VIG) by Walt Rostow, the National Security Advisor.<sup>15</sup> The group was made up of representatives from various government agencies with Rostow as the chairman, and they met weekly at the White House to coordinate information flow—"which reporters to cultivate, what upbeat statistics to circulate, which officials to send out for speeches and talk shows, what should be said."<sup>16</sup> The official mandate of the group was to promote public optimism about the war, and they did so in a manner which was careful to avoid "confus[ing] the reporters and lead[ing] to unfavorable stories."<sup>17</sup> Their focus was remarkably short-sighted as they were only looking at American public opinion in 1967. In this, they were somewhat successful in leveling off the decline of optimism and strengthening public support for the war. There were some, however, like George Allen, the CIA representative to the VIG, who were worried about the long-term ramifications of the committee's actions. Allen became increasingly negative regarding the group's function, which he stated was "to manipulate public opinion and to alter public perceptions so that they would coincide with what the administration wanted the public to believe. There was no consideration of objective truth, honesty, or integrity in performing these tasks, and surprisingly little concern about credibility."18

There was an equivalent organization to the VIG based in Saigon, with a membership in the hundreds, which "fed correspondents everything from statistics to captured enemy documents, nearly all designed to prove that the war was being won. The press briefings in Saigon came to be referred to cynically as "the Five O'clock Follies". [President] Johnson personally participated in the effort, touring military bases and naval installations around the country to promote optimism and confidence."<sup>19</sup> It was a deliberate charade, and the press knew it.<sup>20</sup> The President also enlisted the aid of other prominent Americans, including former Presidents Truman and Eisenhower, to help rally public opinion. Additionally, the President understood the visual impact of an experienced soldier in uniform, so he began putting General Westmoreland in the limelight as well.

Given his role as the MACV Commander, General Westmoreland became a centerpiece of this campaign early in 1967 at the insistence of the White House, and his frequent engagements with the media from that point forward expressed positivity regarding the effects of American efforts and the difficulty the enemy

was experiencing in response. In April of 1967, he informed the President that "the crossover point" (the point at which the enemy could no longer effectively replace his losses) had been reached as proof that the attrition strategy was working. He did not include this claim in "his address to the Associated Press on 24 April or his address to Congress on 28 April (in which he said that enemy strength had 'nearly doubled' in the past twenty-two months)."21 Effectively, in April of 1967, he told the President that the crossover point had been reached, but he was telling the American public something completely different. He did not repeat



General William Westmoreland, speaking before Congress in 1967. Appointed by President Johnson as Commander of U.S. forces in Vietnam from 1964-1968. He later became Chief of Staff of the Army.

the "crossover point" claim in public until he appeared on *Meet the Press* later in November 1967 stating that enemy manpower "cannot be replaced."<sup>22</sup> With the numbers of infiltrators moving south by this point, the statement was completely false.

Privately, General Westmoreland knew this, and he asked the President for more troops to be able to push into Laos to stop the infiltrations, despite his claims that the crossover point had been reached. He stated that the minimum essential force for 1968 was about 560,000 and an optimum force was 678,000.<sup>23</sup> The picture he painted for the President in April was that with the force strength he currently had—almost a half million troops at this point—he could only hold the line, not end the war. With an additional 100,000 troops, he could end the war in three years. With 200,000, he could end it in two.<sup>24</sup> President Johnson was not convinced, only granting an additional 45,000 troops. A larger increase in troop strength from an overtaxed Army would require activation of the reserves, a move the President had been hesitant to make due to the psychological and political implications at home while heading into an election year. However, he did sign into law a modification of the draft, the Military Selective Service Act of 1967 on June 30, which expanded the ages of conscription from 19-26 to 18-35.

One piece of the optimism campaign which was not under complete control was the media. There were two different types of journalists covering Vietnam those on the ground in Vietnam as part of the Saigon press corps, and those based in New York and Washington. Their influence varied, as Moise noted. "If

we are to construct a valid composite of the picture the media were presenting to the American public in late 1967, we should give more weight to what [Joseph] Alsop, [Hanson] Baldwin, and [James] Reston were writing [in the States] than to what any three members, or indeed any five members, of the Saigon press corps were writing."<sup>25</sup> In general, the ones in Vietnam reported what they saw and heard on the ground, much of it filtered for their consumption, while those in New York and Washington often had direct access to the policy-makers. In many cases, they even had personal relationships with members of the administration up to and including the president himself. McGeorge Bundy, the National Security Advisor under Presidents Kennedy and Johnson and one of President Johnson's 'Wise Men', told the president that in the optimism campaign, "Alsop was worth ten U.S. government spokesmen."<sup>26</sup> In some instances, these trusted voices of the media were even more optimistic in their writing than the military could have hoped, and their influence with the American public was profound.

For other journalists, the responsibilities of their profession trumped any relationship or personal position on the war. For them, the truth reigned supreme. They were willing to have their opinions changed, and they were willing to ask the most difficult questions. In this, Walter Cronkite, the anchor of the *CBS Evening News*, was possibly the most influential journalist in America at the time, and his personal views on the war were fairly balanced. He had asked President Kennedy tough questions about the Diem regime and America's involvement in 1963, and he was quick to point out the unfortunate, though superficial, similarities between the drama unfolding at Khe Sanh and the French debacle at Dien Bien Phu. After government mistrust began to peak with the Fulbright hearings in 1966, there was perhaps no one that America trusted more. This would become critically important in the weeks following Tet.

#### **Cracks in the Foundation**

Operation ROLLING THUNDER's bombing campaign continued through 1967, though a debate over Vietnam strategy began to divide the Johnson administration into factions early in the year. The groups were loosely referred to as 'doves' and 'hawks', and the most interesting position is that of Secretary of Defense McNamara, who started to have serious doubts over the U.S. approach to the Vietnam War. This was the beginning of an obvious erosion in his relationship with the President, which came to a head later in the year. Journalist Stanley Karnow, in his epic *Vietnam: A History*, provides a detailed description of the environment within the administration early in 1967:

At that stage...they were still in what Leslie Gelb, then a young Pentagon analyst, later termed a "twilight zone"—they had not yet reconciled their private pessimism with the official policy of optimism.

In many instances, these bureaucrats would return home in the evening to face puzzled or even defiant wives and children. Gelb's wife, who often would have watched the war on the television news before his arrival, would greet him with the question: "What are you guys doing out there?" Others had college-age sons and daughters attended "teach-ins" who or participated in antiwar demonstrations, and disputes now poisoned the dinner conversation. John McNaughton, a certified hard-liner a year earlier, was disturbed enough to say to McNamara that "a feeling is widely and strongly held" around the country that "'the Establishment' is out of its mind." The pervasive opinion was, as McNaughton described it, "that we are trying to impose some U.S. image on distant peoples we cannot understand, and that we are carrying the thing to absurd lengths." What loomed was "the worst split in our people in more than a century," compounded by the government's increasing isolation of the public. McNaughton noted sadly that [anyone who] had the guts to voice misgivings about the war, had [already] resigned. And, he asked ominously, "Who's next?"27

Secretary of Defense Robert McNamara's growing disillusionment caused him to commission the Vietnam Study Task Force in June 1967, which eventually produced the infamous Pentagon Papers, portions of which were leaked in 1971. In August, testifying under subpoena in a closed-door session of the Senate Armed Services Committee, the Secretary of Defense, who was an original architect of the bombing campaign, asserted that ROLLING THUNDER had no chance of succeeding. His testimony angered the generals and those members of Congress who supported them. A few months later, McNamara was fully convinced that the U.S. had things wrong in Vietnam. He made a recommendation to the President via memorandum in November to freeze troop levels, stop bombing North Vietnam, and to transition the ground fighting to South Vietnamese forces. It was tantamount to saving that every strategy pursued by the U.S. in Vietnam thus far was a complete failure. Multiple accounts persist of what happened next between him and the President, but on 29 November, the Secretary of Defense announced his pending resignation. The transfer to his successor, Clark Clifford, would not occur until later in 1968.

Late 1967 also saw Senator Robert F. Kennedy, a close friend of McNamara's, publicly break with the administration's approach to the war in Vietnam. He had previously been a vocal advocate during his brother's administration, but the years of escalation without a clear understanding of the problem had driven him to an anti-war position within the government. During an appearance on Face the Nation in November, Kennedy asserted that the administration had long since deviated from the policies of his late He added that the view that brother. Americans were fighting to end communism in



Robert S. McNamara. Developed the strategic concept of Graduated Pressure; architect of the Gulf of Tonkin Resolution and Operation ROLLING THUNDER. Resigned in 1968 after being convinced that America needed a different approach in Vietnam.

Vietnam was "immoral".<sup>28</sup> The senator's switched stance on the war proved to be extremely popular with the American public. Though he had not announced he would seek the presidency, Senator Kennedy only trailed the President by six percent in a July 1967 poll of presidential possibilities. By October, he was ahead by a full 20 percent.<sup>29</sup>

In the middle of a concerted public relations campaign, President Johnson now had vocal opposition from Robert Kennedy, presidential contender and the brother of a very popular predecessor, and his Secretary of Defense had become a liability, announcing his retirement. The President was frustrated and angry, so he doubled down on military messaging from General Westmoreland.

In an interview with *The Washington Star* in January 1968, the President extolled the virtues of the attrition strategy and the man behind it, "He has done an expert job; anybody that can lose four hundred and get twenty thousand is pretty damn good." <sup>30</sup> Whether he believed it any more than General Westmoreland is irrelevant. They both *wanted* to believe it.

Their collusion in crafting an incomplete or false narrative may not have been as orchestrated as some historians conclude. However, their lack of transparency (along with the political and military organizations they led) seriously eroded the patience and will of the American public and set the stage for an inflection point in American history. Their optimism campaign, combined with the deception efforts of the North Vietnamese, created a confluence of selfdelusion and misunderstanding, a cognitive gap which was left wide open in the final days of January 1968.

#### **Issues for Consideration:**

5. How did the North Vietnamese succeed or fail at leveraging the Physical, Informational, and Cognitive Dimensions of the Information Environment in building their plan for the Tet Offensive?

6. What were the underlying national narratives promoted by the "Optimism Campaign"? How did the campaign relate to commonly held or conflicting notions of American national identity? How did it affect operations in Vietnam?

7. What did the American public see from their military and government leadership with respect to the Optimism Campaign? Did it detract from the public perceptions of the legitimacy of the Johnson administration?

8. What competing narratives about the conflict emerged in civil society that facilitated or mitigated enemy actions? How did the American values of "freedom of speech" conflict with national security interests? How did different parties adapt and utilize new technologies in the Physical Dimension to conduct IO?

9. How did each side suffer from cognitive bias in the months leading up to the Tet Offensive? What were the cultural sources of any important biases?

<sup>&</sup>lt;sup>1</sup> Nguyen, Lien-Hang T. *Hanoi's War: An International History of the War for Peace in Vietnam.* (University of North Carolina Press, 2012), 89.

 $<sup>\</sup>frac{1}{2}$  Ibid, 90.

<sup>&</sup>lt;sup>3</sup> *Ibid*, 90.

<sup>&</sup>lt;sup>4</sup> Wirtz, James. *The Tet Offensive: Intelligence Failure in War*. (Cornell University Press, 1991), 72.

<sup>&</sup>lt;sup>5</sup> Westmoreland, General William. *Military Assistance Command: Message 01060 to Admiral Ulysses S. G. Sharp (CINCPAC).* (Westmoreland Message File, U.S. Army Center of Military History, Washington, D.C.)

<sup>&</sup>lt;sup>6</sup> Moise, Edwin E. *The Myths of Tet: The Most Misunderstood Event of the Vietnam War.* (University Press of Kansas, 2017), 119-121.

<sup>&</sup>lt;sup>7</sup> Wirtz, 77.

<sup>&</sup>lt;sup>8</sup> Karnow, Stanley. Vietnam: A History (New York: Viking, 1983), 681.

<sup>&</sup>lt;sup>9</sup> Wirtz, 81.

<sup>&</sup>lt;sup>10</sup> Moise, 111.

<sup>&</sup>lt;sup>11</sup> *Ibid*, 112.

<sup>&</sup>lt;sup>12</sup> King Jr., Martin Luther. "Beyond Vietnam," a speech at New York's Riverside Baptist Church,

<sup>4</sup> April 1967.

<sup>&</sup>lt;sup>13</sup> Karnow, 320.

<sup>14</sup> Moise, 94.

<sup>21</sup> Moise, 37.

- <sup>23</sup> Moise, 37.
- <sup>24</sup> Karnow, 506.
- <sup>25</sup> Moise, 107.
- <sup>26</sup> *Ibid*, 106.
- <sup>27</sup> Karnow, 506.

<sup>29</sup> Karnow, 511.

<sup>&</sup>lt;sup>15</sup> Karnow, 513.

<sup>&</sup>lt;sup>16</sup> Appy, Christian G. American Reckoning: The Vietnam War and Our National Identity. (New York: Viking, 2015), 173.

<sup>&</sup>lt;sup>17</sup> Moise, 89.

<sup>&</sup>lt;sup>18</sup> Allen, George. None So Blind: A Personal Account of the Intelligence Failure in Vietnam.

<sup>(</sup>Chicago: Ivan R. Dee, 2001), 235.

<sup>&</sup>lt;sup>19</sup> Karnow, 513.

<sup>&</sup>lt;sup>20</sup> VanDeMark, Brian. Road to Disaster. (Harper Collins, 2018), 147.

<sup>&</sup>lt;sup>22</sup> Ricks, Thomas E. *The Generals: American Military Command from World War II to Today.* (Penguin, 2012), 233.

<sup>&</sup>lt;sup>28</sup> Shesol, Jeff. *Mutual Contempt: Lyndon Johnson, Robert Kennedy, and the Feud That Defined a Decade.* (New York: W. W. Norton & Company, 1998), 386.

<sup>&</sup>lt;sup>30</sup> Bowden, Mark. Hue 1968. (New York: Atlantic Monthly Press, 2017), 24.

#### **PART III – INFLECTION POINT**

President Johnson delivered his 1968 State of the Union address on the 17th of January: "I report to you that our country is challenged, at home and abroad. That it is our will that is being tried, not our strength; our sense of purpose, not our ability to achieve a better America. That we have the strength to meet our every challenge; the physical strength to hold the course of decency and compassion at home; and the moral strength to support the cause of peace in the world. And I report to you that I believe, with abiding conviction, that this people—nurtured by their deep faith, tutored by their hard lessons, moved by their high aspirations—have the will to meet the trials that these times impose..."<sup>1</sup> His beliefs were tested far sooner than he had imagined.

One week later, the atmosphere in Washington was that of crisis. On the 21st, fighting had broken out at Khe Sanh, an airstrip and base just south of the Demilitarized Zone (DMZ) near the Laotian border, and on the 23rd of January, two other noteworthy events occurred. In the Sea of Japan, an American intelligence-gathering vessel, the *USS Pueblo*, was attacked and seized by North Korea. The administration viewed the seizure as evidence of collusion between Communist states to divert attention and U.S. resources away from Vietnam.<sup>2</sup> And in Laos, the North Vietnamese overran a Laotian Army outpost just 14 miles west of Khe Sanh with Soviet-made PT-76 amphibious tanks, the NVA's first use of armor in the war.<sup>3</sup> The pressure to back up words with action was intense, and concerns over the flashpoint with the North Koreans or the potential new threat to Khe Sanh were dominating the President's thoughts.

The mounting pressure was exacerbated by President Johnson's internal struggle with the specter of the French debacle at Dien Bien Phu in 1954. The tactical similarities between the battle at Dien Bien Phu and the growing crisis at Khe Sanh were superficial at best, but the political-military parallels were hard to ignore. Both battles were in northern territory on the Laotian border, and both involved allied forces surrounded by the North Vietnamese. Here, the similarities ended, particularly due to the Americans' constant resupply and ability to call on air and fire support at a scope and scale the French could never have hoped for. Still, the cognitive linkages to the French failures were warping the President's perspective, and he went so far as to demand his Joint Chiefs sign a statement vowing that Khe Sanh would not fall into enemy hands.<sup>4</sup> He even had a scale model of the base built in the situation room for him to follow battlefield reports on as they came in, hour after hour. "I don't want any damn Dien Bien Phu," he stated.<sup>5</sup>

The President's focus was communicated to and shared by General Westmoreland, who was completely convinced that Khe Sanh was the main effort of the indicated offensive. General Westmoreland's greatest fear was that other enemy activities in South Vietnam would serve to divert attention and combat power from this indispensable base near the DMZ. As it happened, the general had it backwards. Khe Sanh was part of a complex deception plan that was all the more effective due to the U.S. leadership's fear of repeating the mistakes of the last Western power to fight in Vietnam.

Only one of the senior commanders was able to view the situation objectively enough to understand that something else was going on and had the strength of character to act on his assessment. Lieutenant General Frederick Weyand, commander of III Corps, believed that something was coming, and "it wasn't going to be up on the Laotian border somewhere, it was going to be right in our backyard."<sup>6</sup> The Viet Cong had been attacking all over the III Corps Area of Operations—which included Saigon—for the first three weeks of January, and there was no reason to believe they would stop other than the proffered truce. General Weyand canceled some planned operations near the Cambodian border, curtailed leave and liberty, and moved his forces closer to the population centers, especially Saigon.<sup>7</sup> General Westmoreland did not share General Weyand's concerns, but he allowed the shift, perhaps acknowledging that Saigon and the MACV headquarters adjacent to Tan Son Nhut Airport were critical to retain.

To the increasingly skeptical American public, the official estimates seemed likely to be more lies. The President and the military commander of American forces in Vietnam were continuing to deliver optimistic messages of progress about the "light at the end of the tunnel" while the world seemed to be coming apart at the seams.<sup>8</sup> The credibility gap was increasing. Officials insisted the enemy's strength had culminated while that same enemy simultaneously threatened a major U.S. outpost south of the DMZ. After the *USS Pueblo* was seized, *Life* magazine predicted American setbacks around the world which would culminate in "the looming bloodbath at Khe Sanh."<sup>9</sup> At home, America was devolving into widespread unrest and protests over the war and civil rights, which were somewhat conflated after Dr. King's outspoken attempt to unite the movements the previous year with his "*Beyond Vietnam*" speech.<sup>10</sup>

For the North Vietnamese, things were not going as planned, however. Orchestrating the actions of small bands of irregular fighters, widely separated across the breadth of South Vietnam and linking them up with NVA regulars for additional strength and leadership was a monumental task. Historian Edwin Moise described Hanoi's problem this way: "If a large group of people are trying

to carry out a complex task for the first time, they will probably do it badly. This is doubly true if they have no opportunity to rehearse before doing it for real."<sup>11</sup> The often-repeated claim of closely coordinated attacks is a myth. This perception persists due to the surprised and confused state of American forces and policy-makers, not because of the grand scheme of Le Duan. The decision to begin the offensive was only made in Hanoi on 15 January.<sup>12</sup> Without the use of radio, this gave little time for couriers to deliver orders and for units to prepare and get into position.

Another problem was the date of the attack. The order sent south out of Hanoi was for the offensive to begin during the first night of Tet, but different lunar calendars used in the country had this on different days. Most of the Communist units in South Vietnam had the correct calendar, which placed this date on the evening of 30 January. North Vietnam was using a modified calendar, however—one that made the date of attack 29 January.<sup>13</sup> The mistake was not realized until the afternoon of the 29th, and though a message was released to correct the error, at least eight of the major targets at Da Nang, Qui Nhon, Tuy Hoa, Nha Trang, Ninh Hoa, Pleiku, Ban Me Thuot, and Kontum were hit in the early morning hours of 30 January, mostly in the middle of the country (see map on next page).

Additionally, there were a number of attacks which would occur late. Xuan Loc, Da Lat, Phu Chong, Ba Ria, and Cu Chi were all attacked on 1 February. Go Kong was not assaulted by ground units until 5 February, and Bac Lieu was not attacked until the 11th.<sup>14</sup> The perception that the enemy was everywhere had more to do with this *lack* of coordination than any intent of the North Vietnamese. The evening and early morning of 30-31 January was the beginning of the Tet Offensive, and it is remembered this way because of the primary target—Saigon.

#### **General Offensive**

In the early hours of 31 January 1968, North Vietnamese and Viet Cong forces attacked Saigon. Along with it, over 100 major targets, including a significant percentage of the regional capitals, district centers, and autonomous cities in Vietnam, were assaulted. At first, confusion reigned across the country, particularly in Saigon. Upon hearing the first sounds of attack, many in the capital city thought they were hearing fireworks from the Tet festivities. Others, particularly the South Vietnamese civilians who had seen so much upheaval in their government since 1963, simply assumed it was yet another coup. The realization that it was a purposeful attack by the enemy during a time of truce



Major attacks during Tet Offensive, 30 January - 1 February 1968.

took a while to take hold. The fight became an urban brawl between forces more accustomed to fighting in the jungles, and Saigon, "the center of American power in South Vietnam", was a clear focal point.<sup>15</sup>

Another example of the lack of coordination by Hanoi was that many targets hit on schedule were not hit by all of the planned forces. One such target was the famous attack on the U.S. Embassy in Saigon, where 19 Viet Cong commandos held the building for several hours before being overrun. Two units were to attack the embassy that day, but only the smaller of the two ever reached the target at the specified time.<sup>16</sup> This is due to the timing of the notification. Infiltration units like the one which assaulted the embassy were already in place for the most part. The regular NVA units which were supposed to reinforce them were often hours late.

The attacks on the American embassy, the airport, the ARVN and MACV headquarters, the South Vietnamese Independence Palace, and the National Radio Station in Saigon came as a shock to an already reeling America. Due to the location of the press corps, the initial reporting of the Tet Offensive focused

almost entirely on Saigon. On the second day of the fighting, two reporters witnessed and recorded the execution of a Viet Cong officer by a South Vietnamese official. The details of why the execution occurred were overshadowed by the impact of the photo and film on global audiences. For many Americans, this was the image that defined the Tet Offensive. It prompted questions at home and abroad of the morality of the conflict and whether America was on the right side.



Nguyen Van Lem, a Viet Cong officer, summarily executed by BGen Nguyen Ngoc Loan, the Chief of the South Vietnamese National Police, on 1 February 1968. The photo was captured by Eddie Adams, AP photographer, winning the Pulitzer Prize.

The initial reaction of American officials was to interpret the offensive in line with their previous assumptions about the importance of Khe Sanh and the attacks being a diversion, a test of American will, and a last-gasp effort to win. Westmoreland remained convinced that if he could triumph at Khe Sanh, the enemy was done. The President believed that he needed to bolster public support in the face of the fighting. As such, he insisted that Ambassador Bunker and

General Westmoreland appear in front of the press, despite the pressure they were under on the scene, in order to help shape public perception of the war. Westmoreland met with reporters on 1 February, outside the U.S. Embassy, and stated, "the enemy, very deceitfully, has taken advantage of the Tet truce in order to create maximum consternation within South Vietnam...In my opinion, this is diversionary to his main effort which he had planned to take place in Quang Tri province."<sup>17</sup>

The next day, the President held his own press conference to downplay the element of surprise and focus on the military victories. He stressed that the enemy had lost over 10,000 fighters and allied forces had taken fewer than 500 casualties. Beyond the numbers, however, the continued fighting at Khe Sanh, Saigon, and Hue City belied the optimism. Any truth there was in the reports was also overshadowed by comments like the one published by AP reporter Peter Arnett, who quoted an unnamed U.S. officer describing the fighting at Ben Tre, "It became necessary to destroy the town to save it." Though the veracity of the quote has been repeatedly challenged, it nevertheless became a clarion call of the anti-war movement, epitomizing the brutal lack of reason sometimes found in conflict.

Most of the attacks in the Tet Offensive were over in hours and days. The fighting at Khe Sanh lasted until 18 April, and though it was not more than a deception effort for the rest of the offensive, that was not readily apparent at the time. In Saigon, the fighting lasted for almost three weeks before the last organized enemy units were captured or killed. The longest, bloodiest battle of the Tet Offensive occurred in Hue City, where the fighting would last for 26 days.

As the battle unfolded there, the enemy was able to take control of almost the entire city. Two locations held out until U.S. could and ARVN forces counterattack and retake the former imperial seat. As the focus shifted to Hue, the third most populated city in South Vietnam, America could not help but ask how the enemy had managed to capture the ancient capital, raise their flag over the citadel there, and hold it for almost a month.



The Citadel at Hue. When the enemy raised their flag over the ancient Imperial Capital, it could be seen from every corner of the city and stood as a symbol of the ongoing struggle during the Tet Offensive.

Walter Cronkite, the anchor of the *CBS Evening News*, had similar questions. When the initial reports of the widespread attacks started pouring

in, his first reaction was to wave them at his producers, stating, "What the hell is going on? I thought we were winning the war." The next evening, the 2nd of February, Cronkite spoke to an audience of millions, "The allies proclaimed today that they have broken the back of the five-day old communist offensive in South Vietnam, but dispatches out of that pathetic country tell a somewhat different story."<sup>18</sup> Cronkite was bothered by the disparity between the official accounts and the news reports, so he went to Vietnam on 11 February to see for himself what was going on. As a former war correspondent in WWII, Cronkite was confident in his ability to accurately assess the reality of the operational situation.



Walter Cronkite, anchor of the *CBS Evening News*, on location in Vietnam, February 1968.

Before he could even set foot on the ground, Cronkite's suspicions were confirmed. His flight into Vietnam had trouble finding a place to land, because so many of the airfields were still shut down from the offensive. He was also forbidden to travel to Khe Sanh due to the danger there. During his interview with General Westmoreland, he was assured that Tet was a big success, and the battle for Hue was done with allied forces defeating over 10,000 enemy troops there. The general had earlier asserted that there were no

more than a few hundred enemy in Hue. Cronkite was suspicious, so he flew to Hue himself and saw that the battle was far from over, the outcome still uncertain, and the enemy's flag still flew defiantly above the Citadel.<sup>19</sup>

When he returned home, Cronkite delivered his infamous report on the fighting at Tet. On the 27th of February, he painted a picture for millions of Americans of a Vietnam in chaos, an enemy difficult to identify, of bodies counted and uncounted, and of battles with no clear objective:

"We have been too often disappointed by the optimism of the American leaders, both in Vietnam and Washington, to have faith any longer in the silver linings they find in the darkest clouds... To say we are closer to victory today is to believe, in the face of the evidence, the optimists who have been wrong in the past. To suggest that we are on the edge of defeat is to yield to unreasonable pessimism. To say that we are mired in stalemate seems the only realistic, yet unsatisfactory conclusion. On the off chance that

military and political analysts are right, in the next few months we must test the enemy's intentions, in case this is indeed his last big gasp before negotiations. But it is increasingly clear to this reporter that the only rational way out then will be to negotiate, not as victors, but as an honorable people who lived up to their pledge to defend democracy, and did the best they could."<sup>20</sup>

As he built to a close in his narrative, one of the most respected and balanced voices in the country was telling the American people what they had suspected all along. If his report was seen as negative, it was only because the notion that Tet had been anything but a complete military victory for American military forces had been entirely absent from the media coverage up to that point.<sup>21</sup> Cronkite's broadcast at the end of February also sounded the death knell of the American public's complete trust in their government. In a comment attributed to President Johnson after the broadcast, he said, "If I've lost Walter, I've lost middle America."<sup>22</sup> True or not, the idea behind the comment certainly seemed to be. The Vietnam generation marked a transition of American civil society from a trusting body politic generally content with government versions of events to a much more skeptical group with significantly less trust in their elected and military leaders. An emboldened media, boosted by technological progress, amplified this popular activism.

#### **General Uprising**

When Le Duan had envisioned the coming offensive, he was absolutely sure a massive uprising would follow. The population of South Vietnam that he had fought with against the French were meekly awaiting leadership and the means to resist the Americans and their puppets in the South Vietnamese government. He was not alone in his delusions, however. The resolution that came out of the Party plenum in January actually claimed that Communist forces would not be weakened by losses in taking their objectives—instead they would become significantly stronger.<sup>23</sup> The assumptions went so far as to believe that ARVN units would simply join the fight on the side of the North Vietnamese once they saw the string of tactical victories which would surely take place. It is likely that Le Duan's un-validated assumptions regarding the uprising were born simply out of desperate, wishful thinking—the same sort of thinking sustaining the beliefs of President Johnson and General Westmoreland.

Le Duan's vision of the South Vietnamese populace engaged in a popular uprising was never reconciled with his dated experience during the First Indochina War and the enforcement squads he had running rampant among the Viet Cong during the Second. These groups were wreaking havoc amongst the

South Vietnamese during the Tet Offensive, targeting government officials, teachers, priests, doctors, American sympathizers, families of ARVN soldiers, etc. Virtually anyone who was potentially a threat to the communist cause was likely to become a victim. In Hue, the purge was particularly brutal. Mass graves containing as many as 3,000 bodies were found on the outskirts of the city, the result of ruthless purges by revolutionary forces while they had control of the city. Thousands more were written off as simply "missing".<sup>24</sup>

The Tet Offensive also took a toll on civilian infrastructure. In Hue alone, a vast majority of the civilian populace was displaced as the city was razed by the fighting. Almost 10,000 homes were destroyed there, clogging the roads with refugees fleeing the fighting and the enforcers alike.<sup>25</sup> How could the South Vietnamese populace prioritize a political insurrection when it was both unpopular, unsafe, and impractical? They did not. Not a single ARVN unit defected, and there was no general uprising of the population in South In this respect, certainly, the Tet Vietnam. Offensive failed to achieve its aim. Ironically, there was a general uprising associated with the Tet Offensive, though it did not occur in the manner predicted by Le Duan. It occurred in America.



Hue, 7 February 1968. Residents sift through the rubble of their destroyed homes. The bloodiest battle of the Tet Offensive displaced as many as 110,000 civilians.

#### **American Uprising**

Throughout February 1968 and the beginning of March, the American public remained glued to the nightly news, bombarded with images of the destruction and carnage being wrought by both sides in the ongoing offensive. On 10 March, the American public learned that General Westmoreland was requesting reinforcements—206,000 more troops. This flew in the face of the constant boasting of Tet as a military victory. In his discussion with the President, the Chairman of the Joint Chiefs, General Wheeler, acknowledged that the offensive was far from over and the enemy still had significant capability in the field.<sup>26</sup> Satisfying the request would require activating the reserves, extending tours of duty, or increasing the numbers of draftees. In all likelihood, it would require pursuing each of these options.

Less than a week later, Senator Robert F. Kennedy announced his candidacy for the Presidency of the United States. In February, he had delivered

a scathing critique of the administration's actions regarding the war, stating, "Our enemy, savagely striking at will across all of South Vietnam, has finally shattered the mask of official illusion with which we have concealed our true circumstances, even from ourselves".<sup>27</sup> He went on to put the war in a more realistic context for the American public, in part based on his perspective as a member of the President's cabinet under his slain brother.

There were casualties and unrest in the administration at this point, too. Robert McNamara, Secretary of Defense and one of the architects of the Vietnam War, left office and was replaced by Clark Clifford on 29 February. President Johnson was left in a difficult place as he had just received the request for reinforcements on the 27th. He recognized that it would "place the nation on a virtual war footing in an election year, amid growing protests against his management of the conflict".<sup>28</sup> He leaned on Clifford for options. The new Secretary of Defense commissioned a study before he was even sworn in, the first strategic analysis of its kind since the escalations of 1965. The results were depressing. More than anything, he and other members of the so-called "Wise Men", most of whom were staunch supporters of the war to that point, were disturbed by the vagueness of the recommendations.<sup>29</sup> Nothing was certain, and Clifford concluded there was no reason to continue looking for results from similar escalations. He had been a longtime advocate of the war in Vietnam, but like his recent predecessor, he was now convinced that the current approach to the conflict was bankrupt. His recommendations to the President included a halt to the bombing, negotiations with the North Vietnamese, and turning over the ground fight to the South Vietnamese.

While Clifford's task force was conducting its study, another round of hearings before Senator Fulbright's Foreign Relations Committee occurred which gave the public "a unique insight into the mounting congressional dissidence against the administration's Vietnam policies".<sup>30</sup> At the same time, the first presidential primary election occurred in New Hampshire, and President Johnson only narrowly won by a margin of a few hundred votes. This came as a shock. The public pressure on the President was mounting, and the results of Secretary Clifford's study did nothing to alleviate it. It was clear that something had to give. On March 22, "in what amounted to a vote of no confidence", President Johnson announced that Westmoreland would become the Army Chief of Staff, leaving his subordinate, General Creighton Abrams, as the MACV Commander.<sup>31</sup> The press saw the move as a relief. They reported it as such, and there was no counter from the White House.<sup>32</sup>

On 31 March 1968, President Johnson asked for airtime from each of the major news services, and he sat down in the Oval Office to give a special address to the American people. He explained the grave circumstances as he saw them, and he acknowledged the natural tension between his priorities as the sitting President in 1968: "I have concluded that I should not permit the presidency to become involved in the partisan divisions that are developing in this political year...Accordingly, I shall not seek, and I will not accept, the nomination of my party for another term as your president".<sup>33</sup>

The news was stunning to America. A recent poll showed that 63% of Americans thought the President had mishandled the war, but no one expected abdication in an election year. Perhaps with the President reorganizing his priorities, there was finally going to be an end to the war. Four days later in Memphis, Tennessee, Dr. Martin Luther King Jr. was shot and killed outside his hotel room. Within hours, the nation erupted with violence and chaos in almost every major city in the country. More than 50,000 National Guardsmen were activated by State governors, and the active duty Army sent more than 23,000 soldiers to support them.<sup>34</sup> The world seemed to have caught on fire.

#### No End in Sight

There was no clear ending to the Tet Offensive in Vietnam. The initial attacks themselves only lasted a few days, while the fighting in Hue took the longest to subside. Despite the widespread offensive and the nature of the urban fighting in Saigon and Hue in January and February 1968, the bloodiest month of the Vietnam War came later. Pursuant to President Johnson's offer of a bombing halt, the North Vietnamese prepared for negotiations while simultaneously setting conditions for another round of attacks. They sought similar aims to their previous effort, assaulting 119 targets on 4 May 1968, including Saigon. This was referred to as "mini-Tet", and it went worse for the Communists than the first one.<sup>35</sup> This time, however, the allied forces were less surprised, and the enemy suffered horrendous losses while achieving none of their objectives. There was some optimism to the combat results in May, though that month turned out to be the bloodiest of the entire war.<sup>36</sup>

On June 5th, Senator Robert F. Kennedy was assassinated after giving a speech at the Ambassador Hotel in Los Angeles. Unlike the riots that followed Martin Luther King's assassination two months earlier, there was no uproar this time. The entire country seemed to be subdued, perhaps inured to the violence of recent months. For a time, it seemed as though the path forward was even more uncertain and unclear. On 11 July 1968, the last Marines left Khe Sanh,

abandoning the base and illuminating the lies regarding the "crucial anchor" of the defensive chain that it supposedly represented.<sup>37</sup> Due to continuing concerns about public perception, though, the Marines' withdrawal from the base was executed in secret.

The public outrage over the official lies and deceits of America's involvement in Vietnam intensified due to the contradictions between that behavior, the widespread faith in America's values as universal, and the government's claims about defending freedom and supporting democracy around the world. The populace had faith in American exceptionalism, a belief in the existential nature of the conflict with communism, and a certainty that the righteousness of the conflict would be matched by ethical behavior from their elected officials. The Tet Offensive of 1968 changed all of that. It shattered any perception that a U.S. victory was close at hand. There may have been some significant military accomplishments, but the narrative no longer made sense. The patience of the American public was truly exhausted, and future generations would learn from Vietnam to be more skeptical of America's use of military power. By the middle of 1968, the American public was weary of the social division and chaos at home and abroad, and they saw the supposed existential crisis in Vietnam very differently from their policy-makers. The only hope they had was for an end in sight.

### **Issues for Consideration:**

10. What role do military forces and leaders play in establishing and maintaining trust with our nation? How are our ethos and values manifested at the strategic, operational, and tactical levels in the information environment?

11. Why did the U.S. and our ARVN allies fail to exploit the horrific transgressions committed by the NVA and Viet Cong? Did we take the "moral high ground" for granted within Vietnam, in our own country, and on the world stage?

12. What are the implications in the information environment for a nation fighting a limited war against an adversary who is fighting a total war?

13. If MCDP-1 is correct and "moral and mental factors exert a greater influence on the nature and outcome of war," how does information impact these factors? What role does information play in enemy and friendly center of gravity analysis at the strategic, operational, and tactical levels?

14. Take a look at pages 32-35 from MCDP-1 on Initiative and Response. How can this complex interplay apply to actions in the Information Environment? How can Operations in the Information Environment affect our culminating point?

15. What similarities and/or differences do you see between the Information Environment in 1968 and today? What vulnerabilities can you see in the Information Environment in the United States today? What implications does this have for you as leaders at the tactical level of the military?

(University Press of Kansas, 2017), 133.

<sup>&</sup>lt;sup>1</sup> Public Papers of the Presidents of the United States: Lyndon B. Johnson, 1968-69. Volume I, entry 14, pp. 25-33. Washington, D. C.: Government Printing Office, 1970.

<sup>&</sup>lt;sup>2</sup> Schmitz, David F. *The Tet Offensive: Politics, War, and Public Opinion*. (Rowman and Littlefield, 2005), 94.

<sup>&</sup>lt;sup>3</sup> Jones, Gregg. Last Stand at Khe Sanh. (Da Capo, 2014), 75.

<sup>&</sup>lt;sup>4</sup> Karnow, Stanley. *Vietnam: A History* (New York: Viking, 1983), 541.

<sup>&</sup>lt;sup>5</sup> Schmitz, 89.

<sup>&</sup>lt;sup>6</sup> Sheehan, Neil. A Bright Shining Lie. (New York: Random House, 1988), 707.

<sup>&</sup>lt;sup>7</sup> Moise, Edwin E. The Myths of Tet: The Most Misunderstood Event of the Vietnam War.

<sup>&</sup>lt;sup>8</sup> Hammes, Thomas X. *The Sling and the Stone: On War in the 21st Century*. (Voyageur Press, 2006), 72.

<sup>&</sup>lt;sup>9</sup> Hanson, Victor Davis. *Carnage and Culture: Landmark Battles in the Rise of Western Power.* (Anchor Books, 2002), 401.

<sup>&</sup>lt;sup>10</sup> Appy, Christian G. *American Reckoning: The Vietnam War and Our National Identity.* (New York: Viking, 2015), 61.

<sup>&</sup>lt;sup>11</sup> Moise, 134.

<sup>&</sup>lt;sup>12</sup> Nguyen, Lien-Hang T. *Hanoi's War: An International History of the War for Peace in Vietnam.* (University of North Carolina Press, 2012), 108.

<sup>&</sup>lt;sup>13</sup> Moise, 134.

<sup>&</sup>lt;sup>14</sup> *Ibid*, 135.

<sup>&</sup>lt;sup>15</sup> Hanson, 390.

<sup>16</sup> Moise, 135.

<sup>&</sup>lt;sup>17</sup> Schmitz, 91-96.

<sup>&</sup>lt;sup>18</sup> Bowden, Mark. *Hue 1968.* (New York: Atlantic Monthly Press, 2017), 223.

<sup>&</sup>lt;sup>19</sup> *Ibid*, 365.

<sup>&</sup>lt;sup>20</sup> *Ibid*, 505.

<sup>&</sup>lt;sup>21</sup> Moise, 184.

<sup>&</sup>lt;sup>22</sup> Hastings, Max. Vietnam: An Epic Tragedy, 1945-1975. (New York: Harper Collins, 2018), 484.

<sup>23</sup> Moise, 113. <sup>24</sup> Hanson, 394. <sup>25</sup> Schmitz, 99. <sup>26</sup> *Ibid*, 109. <sup>27</sup> U.S. Congress. Congressional Record, 90th Congress, 2nd Session, Vol. 119, no. 19. (Washington, D.C.: U.S. Government Printing Office, 1968). <sup>28</sup> Karnow, 552. <sup>29</sup> *Ibid*, 555. <sup>30</sup> *Ibid*, 558. <sup>31</sup> Schmitz, 142. <sup>32</sup> Bolger, Daniel P. Our Year of War. (De Capo Press, 2017), 146. <sup>33</sup> Karnow, 565. <sup>34</sup> Bolger, 147. <sup>35</sup> Boot, Max. The Road Not Taken: Edward Lansdale and the American Tragedy in Vietnam. (New York: Liverwright, 2018), 523. <sup>36</sup> Moise, 150. <sup>37</sup> Karnow, 542.

#### Bibliography

- Allen, George. None So Blind: A Personal Account of the Intelligence Failure in Vietnam. Chicago: Ivan R. Dee, 2001.
- Appy, Christian G. American Reckoning: The Vietnam War and Our National Identity. New York: Viking, 2015.
- Bolger, Daniel P. Our Year of War. De Capo Press, 2017.
- Boot, Max. The Road Not Taken: Edward Lansdale and the American Tragedy in Vietnam. New York: Liverwright, 2018.
- Bowden, Mark. Hue 1968. New York: Atlantic Monthly Press, 2017.
- Fall, Bernard B. *The Two Viet-Nams: A Political and Military Analysis.* Revised Edition, Frederick A. Praeger, 1965.
- Gardner, Lloyd. Pay Any Price: Lyndon Johnson and the Wars for Vietnam. Ivan Dee, 1995.
- Hammel, Eric. Fire in the Streets: The Battle for Hue, Tet 1968. CASEMATE, 1991.
- Hammes, Thomas X. The Sling and the Stone: On War in the 21<sup>st</sup> Century. Voyageur Press, 2006
- Hanson, Victor Davis. Carnage and Culture: Landmark Battles in the Rise of Western Power. Anchor Books, 2002.

Hastings, Max. *Vietnam: An Epic Tragedy, 1945-1975.* New York: Harper Collins, 2018.

- Jones, Gregg. Last Stand at Khe Sanh. Da Capo, 2014.
- Karnow, Stanley. Vietnam: A History. The Viking Press, 1983.
- Kennan, George F. "The Sources of Soviet Conduct." *Foreign Affairs* 25 (1946): 566-582.
- King Jr., Martin Luther. "Beyond Vietnam," a speech at New York's Riverside Baptist Church, 4 April 1967.
- Krepinevich, Andrew. *The Army and Vietnam.* Johns Hopkins University Press, 1986.
- McMaster, H. R. Dereliction of Duty. Harper Collins, 1997.
- Moise, Edwin E. *The Myths of Tet: The Most Misunderstood Event of the Vietnam War.* University Press of Kansas, 2017.
- Nguyen, Lien-Hang T. Hanoi's War: An International History of the War for Peace in Vietnam. University of North Carolina Press, 2012.
- Olson, Gregory A. Mansfield and Vietnam: a Study in Rhetorical Adaptation. Michigan State University Press, 1995.
- Ricks, Thomas E. The Generals: American Military Command from World War II to Today. Penguin, 2012.
- Schmitz, David F. *The Tet Offensive: Politics, War, and Public Opinion.* Rowman and Littlefield, 2005.
- Sheehan, Neil. A Bright Shining Lie. New York: Random House, 1988.
- Shesol, Jeff. Mutual Contempt: Lyndon Johnson, Robert Kennedy, and the Feud That Defined a Decade. New York: W. W. Norton & Company, 1998.

- Smith, General Rupert. *The Utility of Force: The Art of War in the Modern World*. Alfred A. Knopf, 2007.
- Sorley, Lewis. A Better War: The Unexamined Victories and Final Tragedy of America's Last Years in Vietnam. Harcourt, 1999.
- U.S. Congress. *Congressional Record*, 90th Congress, 2nd Session, Vol. 119, no. 19. Washington, D.C.: U.S. Government Printing Office, 1968.

VanDeMark, Brian. Road To Disaster. Harper Collins, 2018.

- Westmoreland, General William. Military Assistance Command: Message 01060 to Admiral Ulysses S. G. Sharp (CINCPAC), Westmoreland Message File, U.S. Army Center of Military History, Washington, D.C.
- Wirtz, James J. *The Tet Offensive: Intelligence Failure in War.* Cornell University Press, 1991.

### Facilitator Discussion Guide

Note from the author – What follows is a proposed discussion guide. This is not prescriptive by any means; it is simply the format that Expeditionary Warfare School faculty utilized during Academic Year 2019. The writing for this case was completed in October 2018, and the discussion was held with students for the first time immediately afterwards. The discussion guide below utilizes two specific components in an introduction which is meant to prime the discussion through the lens of learning objectives specific to Expeditionary Warfare School. If your unit or study group has a different aim point for the discussion, feel free to modify or discard components of the discussion as desired.

### Introduction

Establish ground rules and frame the discussion environment. Some suggested points are outlined below in narrative format:

Be willing to be a student. Put aside your ego and expertise, and be willing to ask questions you don't know the answer to. Be willing to be wrong. Be willing to offer solutions to the group that have holes in them. Complex problems are characterized by friction, and complex solutions are rarely reached without it either. The history we are looking at today is not easily understood by any one person. If it was, it probably wouldn't have happened in the first place.

This case study was not written to answer a question. It was written to explore the impact and importance of information operations, because in the case of the Tet Offensive, the American public and the American military were the target of an active information campaign in concert with combat operations, and it worked. The lessons we can draw from this experience may prove useful as we look at contemporary conflict.

For many Americans, the Vietnam War is a litmus test of sorts. How a person feels about Vietnam often says much about that person's thoughts regarding freedom of speech, civil rights, foreign policy, the use of American power, and the role of the media. Consider the importance of this realization as we begin to discuss the nature and character of this conflict 50 years ago.

This case study is not a story of good and evil or black and white. It is a fog of shifting grays where if you look hard enough, you can catch glimpses of yourself. This is a story of fundamentally good men trying to make the best decisions they could in a difficult situation. Aren't we all the same?

### Seven Functions of Information Operations

Consult the reading on Information Environment Operations (now referred to as Operations in the Information Environment) Concept of Employment. You can find this in Annex B. The seven functions can also be found on the Marine Corps' Deputy Commandant for Information website.

This is your first icebreaker. What you want to do here is establish a baseline for your students in understanding these seven functions, which will serve as one of two lenses that you will view the rest of the case through. Consider using a whiteboard or some other form of visual aid to reinforce this, and rather than presenting the functions to them, ask for student participation here.

What are the seven functions of information operations? Highlight key words in each function. This is particularly important. For instance, what is the connotation of the word "assure" (defend) in Assure Command and Control? What is the difference between functions 4-6? How are we approaching each audience?

Thinking back on what you've read, which of these functions apply to the case? Let your students explore this a bit, but if you get down to it, you may find a decent argument that each was present in some form. Which are

Key in on trust as a component of the first function. <u>What do we need in order</u> to assure or defend?

<u>How do we inform? How is this different from influence?</u> Recognize that in an effort to "influence", it is a slippery slope to "deceive", which erodes trust. The key here is how the American public was treated as a target of domestic information operations.

### Current Environment: 1968 vs. Today

This is the second icebreaker, and it also introduces an important lens to view the case through. However, it is important to point out that this next portion contains several sensitive topics that may be inappropriate for the student audience you are attempting to engage. Use as you see fit.

In the research for this case, the author was able to engage several veterans of the Tet Offensive and/or the domestic environment in America in 1968. They all said something very similar—that the last time America was as divided and chaotic as it is today was in 1968. And before that, it was the Civil War. Needless to say, a statement of this sort may raise a few eyebrows, but if you take the time

to list out key domestic and foreign policy issues for American in 1968, you may be surprised as a group to realize that the lists for those same categories today are very similar.

While this idea may seem novel, it is not. The Ken Burns PBS documentary film on Vietnam released in September 2017 and the CNN mini-series, *1968*, were both made for the same reason. 1968 was a momentous and tumultuous year in American history, and if you didn't realize before this case that the MLK and RFK assassinations; the student protests in major cities all over the world; the Tet Offensive; the seizure of the USS Pueblo by North Korea; the Chicago Democratic Convention; and the Apollo 8 orbit of the moon all happened in the same 12 months, you'll be forgiven for not seeing a connection between them.

America WAS divided and chaotic in 1968, and in looking at similar lines of conflict and division between 1968 and today, we might see similar vulnerabilities and opportunities there as well. Below are some example lines of potential conflict to discuss and explore:

- Social divides MLK assassination, civil rights, the Draft, Black Lives Matter, #MeToo movement, transgender issues, privacy of social media, and the economy.
- Political divides RFK assassination, police crackdown on free speech, mass shootings and gun control, and Fake News.
- International divides Prague Spring, Mao's Red Tide, protests in Paris, a massacre in Mexico, seizure of *USS Pueblo*, sea control in the South China Sea, trade disputes, Iran Nuclear Deal, Russian hackers, wall on U.S./Mexico border, Venezuelan assassination attempt, transnational threats, and great power competition.
- New domains of conflict Man orbits the moon (introduction of space as a domain) and advent of drones, cyber, and AI.

### **Issues for Consideration**

The Issues for Consideration (IFC) and the information required to discuss each one is contained within the case itself. Each is rather straightforward. It is recommended that the IFCs are tackled in chronological order, however. While you may feel the need to omit one or more of them, it should be noted that the case was written with the assumption that whomever reading it had little-to-no experience with the subject matter beforehand. Keep this in mind when determining your specific learning objectives and which IFCs to focus on or omit.

1. In the relatively short history of America's involvement in Vietnam from 1950-1966, where do you see clear instances of information being leveraged by groups to inform, influence, or deceive a target audience?

- *Monolithic Communism* as an existential threat. We convinced ourselves as a nation that communism was so much of a threat that we had trouble seeing past it. The conflict in Vietnam was a struggle by nationalists who happened to be communist, not communists with an eye on global domination.
- Each of the American leaders before President Johnson was keep to not get involved in Vietnam with ground units. However, our "advisors" were certainly in combat at times (Ap Bac). Was this just messaging? Why did Johnson decide to change things (either with the Gulf of Tonkin Resolution or ROLLING THUNDER)?

2. How did the perspective of the conflict change over the course of four administrations? How did our relationship with the South Vietnamese change?

• While this is somewhat addressed in the notes above, consider how the character of American foreign policy shifted from one administration to the next. How would this look to our allies, and how did it affect our relationship with the South Vietnamese?

3. Clausewitz stated that "war is an extension of policy". How did tension between President Johnson's foreign and domestic policies create vulnerabilities in America's approach to Vietnam between 1963-1966?

• Specifically look here at President Johnson's domestic agenda and the tension created while trying to pursue it and preserve his predecessor's policies as well. How does Clausewitz's aphorism apply when policies are at odds with each other?

4. How does America's perspective of itself influence its approach to Operations in the Information Environment?

• This is important to consider if you have elected to use the two introductory lenses to view this case through. Discuss the answer to this in 1968 and the answer today. Has the role of the media changed? How has social media affected this?

5. How did the North Vietnamese succeed or fail at leveraging the Physical, Informational, and Cognitive Dimensions of the Information Environment in building their plan for the Tet Offensive?

• The North Vietnamese perspective is important. Turn the map around for a few minutes and consider their grasp of Operations in the Information Environment. How did they wield information?

6. What were the underlying national narratives promoted by the "Optimism Campaign"? How did the campaign relate to commonly held or conflicting notions of American national identity? How did it affect operations in Vietnam?

• Consider and discuss the key variables which spurred the Optimism Campaign—civil rights, the Draft, increasing deployments, increasing disconnect between what was being reported by different parties, body counts, the "crossover point", etc. How was the media utilized?

7. What did the American public see from their military and government leadership with respect to the Optimism Campaign? Did it detract from the public perceptions of the legitimacy of the Johnson administration?

• Consider what the American public was hearing and who they were hearing it from. The second question of the IFC is key to discuss here. If you had the "influence is a slippery slope to deception" discussion in the introduction, you can reinforce the point that treating the American population as a target built a "house of cards" for President Johnson which eventually crumbled under the weight of repeated lies.

8. What competing narratives about the conflict emerged in civil society that facilitated or mitigated enemy actions? How did the American values of "freedom of speech" conflict with national security interests? How did different parties adapt and utilize new technologies in the Physical Dimension to conduct IO?

• Look here at body counts and crossover points juxtaposed with additional requests for increased troop strength and the resultant effect on the American public's attitude. Did this have any discernable effect on the North Vietnamese decision calculus? How did each side contend with the problems of messaging? How was new technology utilized effectively or ineffectively?

9. How did each side suffer from cognitive bias in the months leading up to the Tet Offensive? What were the cultural sources of any important biases?

• This is straight out of the reading, but key your students to instances on both sides of self-delusion, i.e. seeing and hearing what was wanted instead of what was there.

10. What role do military forces and leaders play in establishing and maintaining trust with our nation? How are our ethos and values manifested at the strategic, operational, and tactical levels in the information environment?

• This gets back to the discussion regarding trust in the introduction. If you've already hit on the topic of trust, look here at how it was abused or underestimated as a factor in the case. Tie it back to the other part of the intro regarding 1968 vs. today. How do we as leaders in uniform ensure we hold true to our ethos and values in the information environment? Discuss how this might be more or less difficult in light of social media.

11. Why did the U.S. and our ARVN allies fail to exploit the horrific transgressions committed by the NVA and Viet Cong? Did we take the "moral high ground" for granted within Vietnam, in our own country, and on the world stage?

• There isn't a clear answer to this, but discuss as a group what might have happened if this information was exploited. Would it have threatened the rest of the "house of cards" being built by American political and military leaders?

12. What are the implications in the information environment for a nation fighting a limited war against an adversary who is fighting a total war?

• This is critical to think about, for this may be a situation we find ourselves in again. We think we understand total war (WWI, WWII), and we believe we have a handle on limited war in the nuclear age (Korea). What happens when our opponent is waging a total war against us while we (for many different reasons) elect to fight a limited war? Consider economics, foreign policy, relationships with our allies, our peer competitors, etc.

13. If MCDP-1 is correct and "moral and mental factors exert a greater influence on the nature and outcome of war," how does information impact these factors? What role does information play in enemy and friendly center of gravity analysis at the strategic, operational, and tactical levels?

• This is more conceptual, but within the case, consider how the information available affected the perspective of the key players on all sides, including the American public. Did the American military and political leaders consider the American public to be a key factor in their planning? Did the North Vietnamese consider the American public?

14. Take a look at pages 32-35 from MCDP-1 on Initiative and Response. How can this complex interplay apply to actions in the Information Environment? How can Operations in the Information Environment affect our culminating point?

• Again, more conceptual and integrates another document from outside this case study. Here, think about the rise and speed of global communications as well as the integrated nature of social media. Also, if it came up in the introduction, the idea of "fake news" may have applicability to this discussion.

15. What similarities and/or differences do you see between the Information Environment in 1968 and today? What vulnerabilities can you see in the Information Environment in the United States today? What implications does this have for you as leaders at the tactical level of the military?

• This is another opportunity to discuss this key idea if you elected to save it for the end. For details on this IFC, see the notes on "Current Environment: 1968 vs. Today" on pages 2-3 above.

### Conclusion

Wrapping up a discussion like this will depend greatly upon the ground already covered. That being said, if the introduction and two lenses (seven functions of IO and 1968 vs. today) are used as suggested, it is recommended they be revisited. If not, you may find success in using IFC 13 or 15 as a suitable closing discussion. Regardless of the avenue of approach you use, the intent of this case is to enable a student to think more critically about Operations in the Information Environment today. What can we take away from the Tet Offensive in 1968 to guide our thoughts, actions, and perception today?



## Marine Air Ground Task Force Information Environment Operations *Concept of Employment*

6 JUL 2017

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#### **UNITED STATES MARINE CORPS**

Deputy Commandant for Combat Development and Integration

6 July 2017

#### FOREWORD

As the nation's premier warfighting organization, the Marine Corps continually adapts and applies new ways to leverage our time-tested *maneuver warfare* philosophy to fight and win in any environment. Since 1775, Marines have combined tools and tactics to dictate tempo, influence perceptions, impose fear and anxiety, and find innumerable other ways to defeat the adversary or achieve mission objectives. We will continue this success in the future as we adapt to meet the new challenges of a perpetually expanding and increasingly complex *information environment*.

The Marine Air Ground Task Force (MAGTF) Information Environment Operations Concept of Employment introduces a comprehensive approach to fighting and winning in and through the information environment. This approach should be viewed from the maneuver warfare perspective, such that we extend this warfighting philosophy into the information space. This concept introduces ideas intended to improve the MAGTF's ability to coherently plan and execute integrated actions in and through the information environment. These ideas include operationalizing the information environment as a maneuver space, commanding and controlling information capabilities integrally to achieve objectives, and providing MEF commanders with dedicated organization, tools, and experts to ensure rapidly advancing information capabilities can be planned and execute effectively. Combining these ideas under a whole-of-MAGTF functional approach, this COE describes a bold new direction for the Marine Corps to achieve advantage in and through the information environment.

While the notion of operating in and through the information environment may not be new or unfamiliar, what is new is our approach to achieving decision in battle by incorporating a large number of rapidly advancing multifunctional information capabilities into MAGTF operations. This requires the MAGTF to plan and employ a wide range of new capabilities cohesively and in a way that emphasizes both the physical and cognitive aspects of any mission. To achieve this, the MAGTF must be appropriately organized, manned, trained, and equipped to ensure operations in this evolving environment become seamless and intuitive across the whole-of-MAGTF. This also requires the MAGTF's ability to extensively leverage information capabilities available across the Department of Defense (DoD), Combatant Commands, and Joint/Coalition mission partners.

Pahat S. Walsh

**ROBERT S. WALSH** Lieutenant General, U.S. Marine Corps Deputy Commandant, Combat Development and Integration

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#### **INTRODUCTION**

With the pervasiveness of the internet and wireless communications, the far-reaching impact of social media, and the increasing use of these and other information capabilities by adversaries, today's information environment (IE) poses new and complex challenges and opportunities for the Marine Air Ground Task Force (MAGTF). The *Department of Defense Strategy for Operations in the Information Environment* asserts that:

This networked environment has enabled both state and non-state actors to employ activities in or through the IE to effectively achieve their objectives. They use various capabilities to exploit, disrupt, and disable command and control systems and other critical infrastructure; to disseminate propaganda and disinformation; to foster internal dissent; to recruit and solicit financing; and to promote legitimacy for their actions while discrediting the legitimacy of others. Although we can expect potential state adversaries to offer sophisticated challenges through aggressive operations in the IE, new forms of technology and communication have lowered the barriers of entry for non-state actors. These actors, and their supporters and surrogates, can now access the IE with ease and at relatively low cost, using it to advance their objectives and influence audiences around the globe.

The IE's increased significance poses challenges and presents opportunities for the Marine Corps. Fundamentally, it is now necessary to organize, operate, and fight integrally in and through the IE, just as we do in the physical maneuver domains, to ensure unity of action, and achieve military advantage. Otherwise, the MAGTF is at serious risk of losing its competitive edge across the range of military operations.

#### **MILITARY CHALLENGE**

The *Marine Corps Operating Concept* summarizes the military challenge:

The Marine Corps is currently not organized, trained, and equipped to meet the demands of a future operating environment characterized by complex terrain, technology proliferation, information warfare, the need to shield and exploit signatures, and an increasingly non-permissive maritime domain.

Deducing the military challenge above, this concept of employment (COE) identifies the crux of the problem facing the MAGTF: *there is an inadequate mechanism in place for the MAGTF commander to comprehensively understand, plan, and execute Information Environment Operations (IE Ops) as an integral component of MAGTF operations.* Today, the MAGTF commander has limited ability to maintain a coherent understanding of relevant threats, vulnerabilities, and opportunities across the IE; and has limited C2 mechanisms in place to integrate disparate IE Ops capabilities holistically and dynamically across the MAGTF. Additionally, intelligence and other information about many aspects of the IE are at best scattered across the MAGTF and external organizations, and at worst are non-existent. Moreover, there is no organization or C2 mechanism focused on holistically planning and conducting IE Ops. Given the increasing complexity and consequence of the IE, the MAGTF must develop a new approach to maneuvering in the IE and conducting *Information Environment Operations* at the tactical level.

#### DEFINITION

Instituting a new approach to MAGTF IE Ops begins by establishing its definition:

The integrated planning and employment of MAGTF, Naval, Joint, and Interagency information capabilities, resources, and activities that enhance the Marine Corps single-battle concept and provide defensive, offensive, exploitative effects and support in order to operate, fight and win in and through a contested information environment.

#### VISION

Information Environment Operations represent our time-tested *maneuver warfare philosophy* in the information environment. Marines understand well that warfare is a violent contest of irreconcilable, independent, human wills, each trying to impose itself on the other. Military strategists, tacticians, and commanders throughout the ages have sought both *physical and cognitive* advantages to prevent battle, or to achieve disproportionate results in battle. IE Ops are conducted in and through the IE to achieve or enable these same advantages. This leads us to establishing the following vision for MAGTF IE Ops in the 2025 timeframe:

The MAGTF operates with freedom of action in and through the information environment to preserve, generate, and apply informational power in concert with fires and maneuver to accelerate tempo and achieve physical and cognitive advantage.

In 2025 the MAGTF will be organized, trained, and equipped to sense, understand, and coherently operate within the information environment. Achieving the vision requires developing and integrating four central ideas: (1) planning and executing IE Ops along *functional lines of effort* to enable cohesive and comprehensive planning and employment of IE Ops capabilities, (2) establishing a dedicated MAGTF IE Ops *organization* – the MEF information Group (MIG) with an associated Combat Operations Center (MIG COC) focused on integrating IE Ops along the functional lines of effort, (3) building *agile distributed C2 capabilities* to enable collaborative distributed planning and dynamic, decentralized execution, and (4) fusing, analyzing, and using disparate intelligence and other information about the IE through a near-real time *running estimate* that feeds the common operational picture/common tactical picture (COP/CTP), provides planning support, mission coordination, and supports mission assessment.

#### FUNCTIONS OF MAGTF INFORMATION ENVIRONMENT OPERATIONS

MAGTF IE Ops begin with establishing functional lines of effort. The key characteristic of a *function* is that varying mission contexts do not change the nature of the function, while at the same time; the function is potentially applicable in any mission context. This immutable and often-applicable benefit establishes the use of functions as a stable organizing framework that drives efficiency in planning and operations. Seven IE Ops *functions* are introduced in this COE as illustrated and defined in figure 1.

1	Assure Enterprise C2 & Critical Systems	Actions to operate and defend networks, systems and information in order to enable command and control and the assured operation of critical systems.
2	Provide IE Battlespace Awareness	Actions to characterize the physical, informational and cognitive dimensions of the Information Environment in order to identify challenges, opportunities and comparative advantages for the MAGTF.
3	Attack & Exploit Networks, Systems, & Information	Actions in accordance with approved authorities to exploit or attack adversary networks, systems, signatures and information in order to create advantages for the MAGTF.
4	Inform Domestic & International Audiences	Actions taken to inform domestic and international audiences IOT build understanding and support for operational and institutional objectives.
5	Influence Foreign Target Audiences	Actions taken in accordance with approved authorities to influence select foreign audiences and affect their decision-making and behaviors IOT create conditions favorable to operational objectives.
6	Deceive Foreign Target Audiences	Actions to induce ambiguity, misunderstanding, resource misallocation and delayed actions IOT mislead adversary decision makers, reveal their strengths, dispositions, and future intent while protecting MAGTF's capability, readiness, posture and intent.
7	Control IW Capabilities, Resources, & Activities	Actions taken to provide the commander with the ability to exercise command and control and integrate assigned Marine, Naval and Joint information assets and enhance the MAGTF's ability to operate in the Information Environment.

#### CONCEPT OF EMPLOYMENT (COE) PURPOSE AND SCOPE

Developing and implementing MAGTF IE Ops requires identifying essential capabilities across the *doctrine*, *organization*, *training*, *materiel*, *leadership* and *education*, *personnel*, *facilities*, and *policy* (*DOTMLPF-P*) framework. This COE provides a vision and conceptual framework focused on the 2025 timeframe, and while the ideas presented herein are scalable to any MAGTF size or type, the primary focus of this COE is the Marine Expeditionary Force (MEF). This focus is required to assist MIGs in achieving initial operational capability (IOC) in 2017. This concept should drive discussion and experimentation to help develop and refine detailed information exchange requirements, staff roles and responsibilities, and technical command and control requirements.

#### **CONCEPT DEVELOPMENT AND FUTURE EVOLUTION**

As a concept of employment, this document provides enough detail to inform the stand up and operation of a MIG and MIG COC; however, as a concept this document is not prescriptive and is meant to provide a starting point for experimentation, wargaming, and training exercises to discover and refine this capability in the coming years. During the course of this document's development and through extensive collaboration with leaders and subject matter experts from across the Marine Corps, it has been widely recognized that establishing a MIG as an MSC-like command within the MEF command element is not reflected in current doctrine. Moreover, the MIG commander is not a member of the MEF's general or special staff. This represents a new concept with C2 implications that have yet to be fully understood. Uncertainties with implementing a MIG have been registered within this COE and with force developers. This COE asserts continued study, wargaming, experimentation, and real world experiences are needed to fully understand and develop this capability across the DOTMLPF-P. *This document is the first of many information products that will be developed in collaboration with the operating forces to drive this concept and capability to maturity and effectiveness*.

### **MEF INFORMATION GROUP**

The MIG is established as a MEF command element (CE) subordinate command dedicated to planning, conducting, coordinating, and/or supporting IE Ops missions across the MEF's area of interest (AOI). Given specified IE Ops tasks from an OPLAN, CONPLAN, OPORD, FRAGO, or other authoritative directive, the MIG develops an integrated IE Ops plan and coordinates IE Ops missions and tasks within the larger MEF concept of operations (CONOPS) and scheme of maneuver (SoM). The MIG is formed by growing and repurposing the MEF Headquarters Group (MHG), is commanded by a Marine colonel, and has a permanent staff focused on planning, executing, and/or coordinating IE Ops missions across the MEF's AOI. Additionally, the MIG HQ is manned with new force structure provided under *Future Force 2025*, and is comprised of subordinate commands which plan, perform, or support IE Ops and other IE related activities. MIG subordinate commands with a primary role in IE Ops include the Radio Battalion, Communications battalion, Intelligence Battalion, and the Communication Strategy and Operations Company. Other MIG units which provide support to IE Ops include the Air Naval Gunfire Liaison Company (ANGLICO), the Law Enforcement Battalion, MEF Support Battalion, as well as the Expeditionary Operations Training Group (EOTG). Figure 2 provides a high level organizational chart of the MIG.

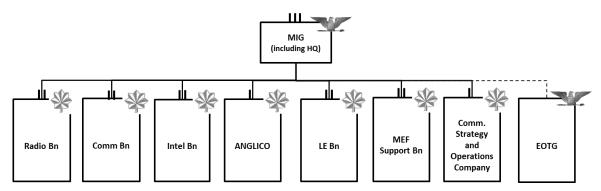


Figure 2. MIG Command Structure

The responsibility and authority for IE Ops ultimately rests with the commander. However, just as all commanders rely on subordinate commanders and staff to carry out the mission, so too will the MEF commander rely on subordinate commanders and staff to plan and conduct integrated IE Ops. The MIG commander is the MEF commanding general's primary subordinate commander delegated the authority to plan, execute, and/or coordinate integrated IE Ops across the MEF's AOI. This leads to the following MIG mission statement:

#### **MEF Information Group Mission**

Coordinate, integrate and employ IE Ops capabilities in order to ensure the MAGTF Commander's ability to facilitate friendly forces maneuver and deny the enemy freedom of action in the information environment. Provide communications, intelligence, supporting arms liaison, and law enforcement capabilities in support of MAGTF operations.

#### **MIG COMMAND RELATIONSHIPS**

The MIG is a departure from MHG's current role. The MIG commander reports directly to the MEF commanding general and is the MEF's lead for planning, integrating, coordinating and supporting IE Ops across the MAGTF. Because the majority of future IE Ops capabilities will be employed by major subordinate commands (MSCs), the MIGs success will depend on facilitating a *whole-of-MAGTF approach* to ensure coordinated planning and decentralized execution across the MSCs and the MEF's AOI. While not a 5th MAGTF element, the MIG does perform a role similar to an MSC, but is retained within the MEF command element, and is not a staff section. Positioning the MIG within the command element is necessary to ensure strategic, joint, and organic capabilities are seamlessly integrated and coordinated across the MEFs deep, close, and rear areas; and to mitigate inherent complexities

associated with IE Ops missions such as: cross-boundary effects and coordination requirements, a requirement for special authorities, and a need for near-real time deconfliction and asset re-programming. These inherent IE Ops challenges combined with an urgent need to operate more effectively in and through the IE, require a MIG to leverage an agile distributed C2 mechanism which spans MSCs (down to company or lower levels) and integrates with the joint headquarters and/or national level agencies in support of MEF-level operations.

#### IE Ops C2 Example using MACCS Model

The Marine Air Command and Control System (MACCS) provides an agile distributed C2 model which may be an appropriate example for IE Ops. The MACCS is a distributed C2 capability that connects and integrates information, people, technology, and procedures from the Joint/theater headquarters all the way down to the individual forward air controller (FAC) assigned to an infantry battalion. In this distributed model, the aviation combat element (ACE) commander and his/her battlestaff plan, supervise, coordinate, and execute all current and future air operations in support of the MAGTF through various C2 agencies, information systems, and communications. These capabilities are used by planners and mission coordinators to integrate the six functions of Marine Aviation in support of all MAGTF operations.

#### MIG, MEF STAFF, AND MSC RELATIONSHIPS

Based on the MEF CONOPS, task organization, specified and implied tasks, and the commanding general's direction, guidance, and priorities, the MIG commander directs and coordinates subordinate command relationships. In coordinating these relationships, the MIG commander may directs MIG subordinate units to support MEF command element, support MSC operational requirements and/or provide IE Ops forces and capabilities to MSCs. In these arrangements, the commanding general uses his/her general staff to task the MIG commander, who then directs subordinate commands to fulfill the tasking requirements. *To streamline C2, the MIG commander may direct a subordinate unit to respond directly to MEF staff tasking requirements, just as the MHG commander does today with the Intel Battalion, Communications Battalion, and Radio Battalion.* However, in the future there may be operational phases where the MIG becomes the MEF's main effort, or where the MIG commander retains authority and must execute or coordinate a mission within an MSC's assigned boundary to achieve priority objectives. In these situations, the MIG commander becomes the supported commander, and the commanding general may require his/her staff and/or MSCs to support the MIG commander. *The development of agile distributed C2 mechanisms and the introduction of the MIG commander as a "MSE-like" commander within the command element should be a focus of future experimentation to determine appropriate command relationships, procedures, and technologies to employ this organizational capability.* 

#### **MIG HEADQUARTERS (HQ)**

The MIG HQ is organized with personnel to provide IE Ops planning and execution support as directed by the MIG commander. During planning, the MIG HQ provides future and current operations personnel to support MEF operational planning teams (OPTs) and any other B2C2WGs. During mission execution, the MIG HQ provides current operations personnel to support MEF G-3 current operations planning or mission coordination. Additionally, the MIG HQ establishes and operates the MIG COC as the MIG commander's centerpiece for planning, executing, and coordinating IE Ops. Figure 3 is the organizational chart of the MIG HQ.

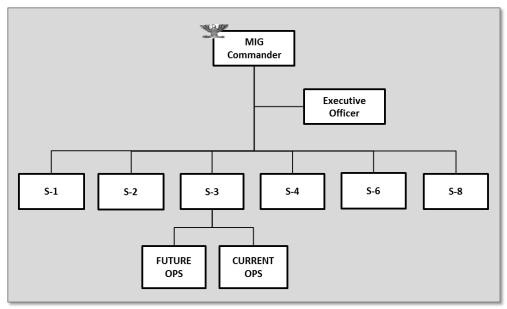


Figure 3. MIG Headquarters Diagram

#### MIG HQ Future and Current Operations Primary Tasks

MIG HQ future and current operations sections will support MEF IE Ops by performing at a minimum the following tasks:

- In support of future (beyond 96 hours) or current (less than 96 hours) planning time horizons, provide IE Ops objectives based on the interrelationships of threats, vulnerabilities, and opportunities in the IE as they relate to overall MEF objectives
- Provide deliberate planning support and course of action (COA) generation and/or decision recommendations to meet requirements mission priorities and objectives
- Develop the IE Ops concept of operations as part of the broader MAGTF CONOPS and scheme of maneuver
- Provide IE Ops asset capability and availability information in support of detailed planning and the development of the Air Tasking Order, IE Ops Coordination Order (ICO) and execution checklist
- Support the FECC in the development of appropriate cyberspace operations CONOPS, plans, and annexes
- Develop appropriate planning documentation including FRAGOS and coordination orders
- Discover, request, and maintain cyberspace operations and electronic warfare (EW) tasking authorities
- Participate in the MEF OPSEC program and help protect MEF critical elements in accordance with their established procedures
- Execute a MIG OPSEC program to identify and then safeguard critical information
- Ensure subordinate battalions have an OPSEC program and are protecting critical information
- Conduct authority acquisition and coordination in support of detailed planning
- Develop tactics, techniques, and procedures and combined arms options to achieve targeting objectives
- Identify mission priorities for planned capabilities and assets to facilitate decision support tools
- Support the G-2's intelligence gain/loss risk assessment metrics for the planned operation
- Provide the G-6 with IE Ops mission and data service priorities for the planned operation
- Establish and maintain planning and coordination relationships with MARFOR, JTF, and Combatant Command staff representatives in support of planning and operations
- Organize and provide trained IE Ops forces and capabilities to MEF MSC, MEB, MEU, and SPMAGTF CEs for operational employment

- Support MEB, MEU, and SPMAGTF training and pre-deployment requirements
- Support the development of appropriate space operations CONOPS, plans, and annexes
- Support the development of appropriate Special Technical Operations CONOPS, plans, and annexes
- Assist in the integration of space-based capabilities in operations, training, and exercises
- Assist in the integration of National Technical Means (NTM) into operations, contingency operations, training, and exercises
- Integrate OPSEC and signature management (SIGMAN) initiatives into operations, training, and exercises
- Provide the ability to detect, identify, and counter effects in a denied, degraded, or disrupted IE
- Assist in the integration of Special Technical Operations into operations, training, and exercises
- In coordination with joint and national level agencies provides space-based threat intelligence to enhance force protection, enable lethal and non-lethal fires, and characterize threat SATCOM networks

#### **MIG COC**

The MIG COC is the MEF C2 agency that forms the centerpiece for the integrated employment of the seven functions of IE Ops. The MIG COC also provides the functional interface to the Joint Force for the employment of MAFTF IE Ops capabilities as part of a joint/combined operation. The MIG COC plays a central role in integrating IE Ops with the MAGTF CONOPS through connectivity with the MEF COC and FECC and any other C2 agency within the command element or the MSCs. The role of the MIG COC is established according to the operational employment of the MAGTF and associated joint, coalition, or national assets operating in the MAGTF's assigned area of operations. Borrowing directly from the TACC model, the MIG COC is the operational command post for the MIG from which the MIG commander and his/her staff plan, supervise, coordinate, and execute all current and future IE Ops in support of the MAGTF. Additionally, just like the TACC and MACCS, the MIG COC facilitates the command and control of IE Ops through an agile distributed C2 system, generically entitled an *Information Battle Management and Control System (IBMCS)*, which may include subordinate C2 nodes integrated within MAGTF C2 centers including the MEF COC, Fires and Effects Coordination Center (FECC), TACC, Direct Air Support Center (DASC), Intelligence Operations Center (IOC), etc. Figure 4 illustrates the MIG COC as a C2 center for the MIG integrated across the MAGTF.

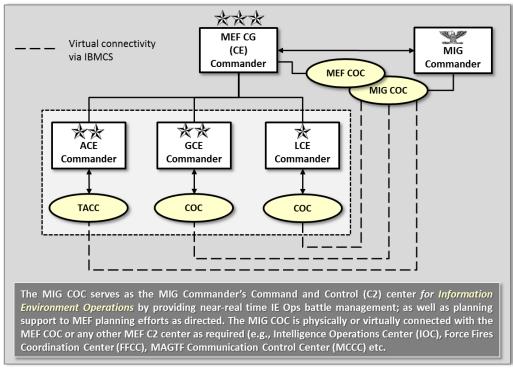


Figure 4. Information Environment Operations Command Center

#### **MIG COC Tasks**

As the MIG's C2 center, the MIG COC must be highly reconfigurable to ensure it can support a variety of MEF deployment configurations. MIG COC configurability depends on leveraging distributed IBMCS technologies designed to enable the MIG and MIG COC to achieve tasks through the capabilities and actions of subordinate MIG commands which have existing support relationships with elements of the MEF staff or MSCs. In this regard, the MIG COC may accomplish assigned tasks through subordinate organizations. In this model, the MIG COC maintains supervision of mission execution. With respect to deployment configurations, the MIG COC may be physically established in one location or virtually established in a distributed manner across the COC and other MAGTF C2 centers (e.g., IOC) as the situation requires. The MIG COC is primarily responsible for the following tasks:

- Maintain and disseminate a comprehensive running estimate of threats, vulnerabilities, and opportunities in and through the IE affecting MAGTF operations
- Monitor the status of MAGTF IE Ops assets including organic and externally available capabilities
- Conduct near-real time IE Ops battle management (direction, coordination, and deconfliction) in support of MEF operations
- Serve as the operational point of contact between the MEF and external IE Ops control agencies
- Establish IE Ops control measures in the MAGTF area of operations
- Promulgate changes to the rules of engagement for IE Ops capabilities and actions
- Promulgate signature management (SIGMAN) control conditions/actions in the MAGTF area of operations
- Manage the execution of applicable IE Ops FRAGOS and coordination orders
- Direct and/or coordinate the execution of MAGTF IE Ops
- Evaluate the results of MAGTF IE Ops
- Provide COA change recommendations to the G-3 to meet emergent requirements in the IE battle
- Provide visualization overlays that illustrate the interrelationship of threat information, friendly force information, and environmental information as it relates to current and future IE Ops courses of action
- Provide near-real time IE Ops asset and spectrum-dependent system (SDS) coordination, deconfliction, and dynamic reprogramming to support emergent requirements in the IE battle
- Provide support to the G-2 and G-6 by providing near-real time visualization and decision support recommendations which enable EMS maneuver, competing priority resolution, and EMS fratricide prevention
- Provide support to the G-6 by providing near-real time visualization and decision support recommendations to enable near-real time configuration, and content and bandwidth management actions to ensure MAGTF C2 network flexibility and resiliency
- Support the FECC in coordinating the timing and tempo of integrated non-lethal fires solutions

#### MIG COC Dynamic Re-tasking and Re-programming of Multifunctional Capabilities

While conducting MAGTF IE Ops, supporting / supported relationships and associated tasking authorities can rapidly change – even during the course of a single mission. This is a unique consequence of introducing many new multi-functional sensors and emitters across the MEF's area of operations and MSCs (e.g., Intrepid Tiger II (IT-II), RadioMap, Communications Emitter Sensing and Attack System (CESAS) II, etc.). As threats, vulnerabilities, and opportunities in or through the IE are identified in near-real time, multi-functional capabilities will need to be dynamically re-tasked and re-programmed to meet emergent requirements. This means that a single asset capable of performing a variety of sense, attack, or communications missions may need to be tasked to perform any or all of these during a mission. This poses a challenge of managing multiple tasking authorities as well as coordinating the timing and deconfliction of multiple payload transmissions. In this notional example, the G-2, G-3, and G-6 would all need the ability to retask or re-program the asset, perhaps nearly simultaneously. The MIG COC will possess the tools and services to enable this near-real time C2 requirement through a distributed IBMCS capability which is used across the MAGTF.

#### **MIG SUBORDINATE COMMANDS**

Figure 2 briefly introduced MIG subordinate commands which are described in more detail below. These commands provide the personnel, equipment, and knowledge needed to perform IE Ops in support of the MAGTF. As this concept is developed in the coming years, the integrated and coordinated employment of these commands and their respective capabilities will become increasingly important.

#### INTELLIGENCE BATTALION

During operations the intelligence battalion supports the commanding general's priorities and is responsible for planning, directing, collecting, processing, producing, and disseminating intelligence; as well as providing counterintelligence (CI) support to the MEF, MSCs, subordinate MAGTFs, and other commands as directed. During combat and crisis response operations, the intelligence battalion commander assumes the role of the intelligence support coordinator. In support of IE Ops, the Intelligence Battalion conducts media analysis to determine enemy actions, identifies changes in population behaviors, supports operational assessments, provides indications and warnings (I&W), and identifies threats the MEF rear area. *The MEF G-2, on behalf of the MEF commanding general, tasks the MIG commander for intelligence support. The MIG commander directs the intelligence battalion commander to support the G-2. The MIG COC plays a critical role in coordinating and deconflicting the intelligence battalion's operations and collections activities with other IE Ops actions across the MAGTF's battlespace.* 

#### RADIO BATTALION

The radio battalion plans and conducts signals intelligence (SIGINT), EW, and cyberspace operations support to the MAGTF and Joint force commander. During operations, and by direction of the MIG commander, the radio battalion supports the commanding general's priorities for planning and conducting all SIGINT operations throughout the MAGTF area of operations. The radio battalion plans and performs these missions in close coordination with higher headquarters (HHQ)/ National and Joint level agencies, the MEF G-2, MEF G-3, and the MIG Future Ops and/or Current Ops sections. The radio battalion and its detachments remain in general support of the MAGTF, except for electronic warfare support teams (EWSTs), which provide *direct support* to the supported air, ground, or logistics unit. The MEF G-2, on behalf of the MEF commanding general, tasks the MIG commander for SIGINT operational support; likewise, the G-3 tasks the MIG commander for electronic warfare and cyberspace operations support. The MIG COC maintains awareness of and may be required to coordinate and/or deconflict radio battalion actions with the G-3 and G-6. The Radio Battalion provides the MAGTF with SIGINT support teams (SSTs) and is planned to provide EWSTs as new force structure is implemented. SSTs include tech-SIGINT, digital network, and cryptologic language operators. EWSTs include electronic warfare, digital network, and cryptologic language operators, as well as, a dataflow manager to conduct electromagnetic spectrum operation systems integration and data management. EWSTs provide indications and warnings (I&W) support to ground, airborne, and advance force operations and support electronic battle damage assessments. Employment variations for SSTs and EWSTs consist of static, vehicle mobile, man packable, and airborne.

#### COMMUNICATIONS BATTALION

During operations the communications battalion supports the commanding general's priorities and is responsible for installing, operating, securing, and maintaining communications networks in support of MAGTF command elements (CEs), Marine component headquarters, or combined/JTF headquarters in order to enable effective C2 of assigned forces. It provides communication detachments and teams to install, operate, and maintain beyond line of sight (BLOS) wideband transmission systems, tactical network services, and telephone services in support of MEU/SPMAGTF CEs. The battalion as a whole conducts and supports MAGTF DODIN Ops. With future force 2025, additional capabilities and manpower are planned to become organic to the communications battalion – this includes the *DCO-Internal Defense Measures (IDM) Company*, which is envisioned to provide a robust organic DCO and Cybersecurity capability for the MAGTF. *The MEF G-6, on behalf of the MEF commanding general, tasks the MIG commander for communications support. The MIG commander directs the communications battalion commander to support the G-6. The MIG COC plays a critical role in coordinating and deconflicting the communications battalion's operations and activities with other IE Ops actions across the MAGTF's battlespace.* 

#### COMMUNICATION STRATEGY AND OPERATIONS COMPANY

The Communication Strategy and Operations (CommStrat) Company (formerly the Public Affairs / Combat Camera Company) plans and conducts Inform Operations in support of the MAGTF and Joint Force commander. During operations, and by direction of the MIG commander, the CommStrat Company supports the commanding general's priorities, and is responsible for the planning and execution of inform operations, to include public engagement and the acquisition, production, and dissemination of communication and other information products. The CommStrat Company plans and performs these tasks in close coordination with higher headquarters, the MEF CE (particularly the MEF G2, G3, and CommStrat Officer), and the MIG COC and subordinate battalions. The CommStrat Company provides production support to the MIG subordinate battalions and the MEF, MEB, and MEU CEs; specifically, it employs Operational Support Teams to: (1) acquire imagery and content needed to develop communication products and meet other requirements; (2) augment the MEB with personnel when needed; (3) augment MEUs with personnel upon change of operational control (CHOP); and (4) fill other deployment requirements, to include individual augment requirements, as needed. The company also supports training requirements, such as MEU and SPMAGTF certifications, escorting media during MEF or MEB training exercises, and providing media and communication training to units prior to deployment. The MEF CommStrat Officer (formerly known as the Public Affairs Officer (PAO)) and the G-3, on behalf of the MEF commanding general, tasks the MIG commander for CommStrat support. The MIG commander directs the CommStrat company commander to support the CommStrat Officer. The MIG COC plays a critical role in coordinating and deconflicting the CommStrat operations and activities with other IE Ops actions across the MAGTF's battlespace.

#### LAW ENFORCEMENT BATTALION

Law Enforcement (LE) Battalion provides specialized capabilities to the MIG and MIG COC supporting two of the seven IE Ops Functions—*Provide IE Battlespace Awareness*, and *Attack and Exploit Networks, Systems and Information*. Military Police support IE Battlespace Awareness and the IE Ops running estimate as they interact with host nation (HN) military and law enforcement partners, the civilian population, and enemy prisoners of war in the course of conducting policing operations (including police intelligence operations), security and mobility operations, and detention operations. Employing an expeditionary forensic lab (the Expeditionary Forensic Exploitation Capability (EFEC)), the battalion supports IE Ops function Attack and Exploit Networks, Systems and Information, with its Expeditionary Analysis Cell (EAC) by conducting forensics exploitation and analysis of captured enemy material providing the commander with near-real time results supporting all-source intelligence analysis and decision making. *The MIG Coc plays a critical role in coordinating and de-conflicting EFEC activities with IE Ops and other IE related actions across the MAGTF battlespace*.

#### AIR NAVAL GUNFIRE LIAISION COMPANY (ANGLICO)

ANGLICO provides Marine Air Ground Task Force (MAGTF) Commanders a liaison capability and ability to plan, coordinate, and conduct terminal control of fires in support of joint, allied, and coalition forces. In the information environment ANGLICO, with the assistance of joint, allied, or coalition forces, supports the MAGTF Commander's information effects through direct liaison capability. ANGLICO accomplishes this liaison function by co-locating with supported commands and by facilitating IE Ops fire support requests (e.g., electronic attack (EA)) to the MAGTF on behalf of the supported commander.

### FUNCTIONAL APPROACH TO MAGTF IE OPERATIONS

The seven MAGTF IE Ops functions were briefly introduced in figure 1. The MIG commander has overall authority for ensuring the seven IE Ops functions are integrated in support of the MAGTF CONOPS and scheme of maneuver. The following sections describe the seven functions in more detail and include descriptions of the functions, as well as associated roles, responsibilities and tasks.

## FUNCTION #1: ASSURE ENTERPRISE COMMAND AND CONTROL SYSTEMS AND CRITICAL SYSTEMS

The G-6 enables the MEF commander to command and control assigned forces through planning that both informs and supports the concept of operations. Close coordination with the G-2, G-3, G-4, and MIG COC is necessary to ensure actions performed by the G-6 in the information environment support MAGTF IE Ops, and ultimately preserve the commanding general's ability to retain freedom of action in all warfighting domains. The MIG commander's communications battalion provides the personnel and equipment for conducting this function. The G-6 directs communications and cyberspace operations through the MCCC. While this function is primarily thought of as a G-6/MCCC/Communications Battalion responsibility, this function should be viewed in a broader context than actions occurring exclusively in or through the MAGTF C2 system. Included within this function are actions performed by other functions which may be used to destroy, degrade, deny, or deceive enemy capabilities and actions targeting or affecting MAGTF C2 systems and critical systems. Thus, the MIG has a significant role is coordinating actions across the MAGTF to enable this function. The following tasks are associated with this function.

- The G-2 identifies enemy capabilities and actions which are planned or are in the process of denying, degrading, or destroying MAGTF C2 systems and critical systems
- The G-3 and/or FECC coordinates fires to destroy or degrade enemy capabilities and actions aimed against MAGTF C2 systems and critical systems
- The MIG COC plans and coordinates offensive cyberspace operations and/or electronic attack (EA) to prevent, deny, or destroy enemy capabilities targeting MAGTF C2 systems and critical systems
- The MIG and/or MIG COC provides planning support to G-6 hosted B2C2WGs to inform them of planned IE Ops capabilities and priorities which will affect or will be affected by the health and status of command and control and critical systems
- The MIG provides the G-6 with running estimate information necessary to support both planning and real time network management and defense actions the running estimate provides the G-6 with a comprehensive understanding of the disposition, health, status, and priority of IE Ops assets using or affecting the C2 network and/or critical systems
- The MIG COC supports the G-6 by coordinating and deconflicting electromagnetic spectrum operations to minimize and/or mitigate blue-on-blue electromagnetic interference (EMI), which may affect the MAGTF C2 network and critical systems
- The MIG COC supports the G-6 by coordinating and deconflicting cyberspace operations and any other special capability which may affect the MAGTF command and control network and critical systems
- The MIG COC, in coordination with the G-6 identifies, requests, and coordinates reachback support to obtain and use special capabilities which may directly enhance the resiliency, reliability, integrity, and robustness of the MAGTF command and control network and critical systems
- The G-6 provides the MIG COC with the health and status of the command and control network and critical systems (NETCOP), which is used as input to the IE Ops running estimate
- The MIG HQ and/or MIG COC supports the G-6 and G-2 in the identification of key terrain in the cyber domain as they relate to future plans and current operations
- The MIG COC provides feedback information to the G-6 from organic IE Ops sensors deployed across the battlespace which inform on the health and status of the C2 network and critical systems
- The MIG COC supports the G-6 by coordinating dynamic spectrum management and/or maneuver including the re-tasking and reprogramming of spectrum dependent systems within or affecting the MAGTF C2 network

- The MIG COC supports the G-6 in the identification of critical network vulnerabilities
- The MIG COC provides input to the information management (IM) / knowledge management (KM) plans
- The MIG and/or MIG COC consumes Red Cell teams penetration testing results against facilities and MAGTF networks
- The MIG COC coordinates with the G-6 to update the Joint Restricted Frequency List (JRFL) based on G-2, G-3, and G-6 spectrum access requirements
- The MIG and/or MIG COC provides IE Ops asset spectrum use and access requirements to the G-6

#### FUNCTION #2: PROVIDE INFORMATION ENVIRONMENT BATTLESPACE AWARENESS

This IE Ops function is centered on providing information flows that comprise the IE Ops *running estimate*. This function integrates intelligence and other information which characterizes the physical, informational, and cognitive dimensions of the information environment in order to identify threats, vulnerabilities, and opportunities. Through the IBMCS, the MIG COC consumes threat and environmental information from MEF intelligence sources, and friendly force and environmental information from non-intelligence sources. The running estimate is the fourth central idea introduced on page 2 and is described in more detail on page 18. The following is a breakdown of specific MIG and/or MIG COC tasks required to enable this function:

- The MIG and/or MIG COC provides intelligence requirements to the G-2
- The G-2 and/or IOC provides the MIG COC with *threat intelligence* and indications and warnings (I&W) regarding technical, organizational, or human targets, target system parametrics, target command and control networks and nodal dependencies, threat cyberspace operations capabilities and actions, threat space capabilities and actions, threat EMSO capabilities and actions, battle damage assessments (BDA), and re-attack recommendations
- The G-2 provides the MIG COC with *environmental information* from formal intelligence products and data sources. Environmental information includes: foundational geospatial intelligence, meteorological (METOC), electromagnetic environment, cyberspace physical layer, cyberspace logical layer, cyberspace social layer information, and civil information, etc. The MIG COC also consumes environmental information from non-intelligence sources (e.g., Intrepid Tiger II pods, RadioMap, Civil Information from Civil Affairs forces, etc.)
- The MIG COC consumes *friendly force information* from across the MAGTF through the command and control system, and from plans, orders, and coordination instructions. Through the IBMCS the MIG COC pulls data about the health and status of the C2 network (NETCOP), overall MAGTF signature picture, and the position, location, payload, and mission of IE Ops assets across the battlespace
- The MIG COC provides *running estimate* overlays which are the resultant visualization and decision support aids from fusing and analyzing threat, environmental, and friendly force information relevant to IE Ops and shares this information across the MAGTF

#### FUNCTION #3: ATTACK AND EXPLOIT NETWORKS, SYSTEMS AND INFORMATION

This function represents those actions conducted to exploit or attack enemy networks, systems, signatures, and information in order to create advantages for the MAGTF. This includes planning, integrating, and synchronizing IE Ops activities across all domains in a mutually reinforcing manner. The MIG COC, using the running estimate and IBMCS, enables the overall success of this function by assisting the FECC, COC, and IOC in coordinating and deconflicting attack and exploit capabilities in near-real time across the deep, close, and rear areas. *This function involves non-lethal actions occurring in and through the IE as well as fires and maneuver, and thus requires integration into existing targeting and fires planning processes. The MIG provides the MEF additional personnel and subject matter experts who will be available to participate in existing targeting and fires planning processes.* Additionally, the MIG and/or MIG COC use IBMCS tools and services to support the planning of capabilities used in this function, over multiple time horizons, including near-real time. The following is a list of specific MIG and/or MIG COC tasks required to enable this function:

• The MIG and/MIG COC conducts planning in support of the G-3/FECC's MAGTF concept of fires

- The MIG and/or MIG COC deconflicts the electronic warfare plan, offensive cyberspace operations plan, collection plan, and communications plan to identify potential EMS fratricide; recommends possible alternative COAs or combined arms solutions
- The MIG and/or MIG COC coordinates with theater and/or national level agencies to ensure a shared situational awareness with a focus on human dynamics, social network links and nodes, atmospherics, environmental characteristics, and personal intent
- The MIG and/or MIG COC coordinates with the G-2, G-3, and G-6 to plan and execute IE Ops missions which target specific enemy networks, systems, and information in support of the operational scheme of maneuver
- The MIG and/or MIG COC coordinates with the G-2, G-3, and G-6 to identify systems that support the attack and exploit mission, and template the logical topology that supports these systems
- The MIG COC supports the G-3 and G-2 with running estimate information that visualizes the topological structure, including key terrain in the cyber domain, and potential named areas of interested (NAIs)
- The MIG COC ensures Cyberspace Effects Requests Forms (CERFs) are submitted and deconflicted throughout the targeting process as appropriate
- The MIG COC ensures Electronic Attack Requests Forms (EARFs) are submitted and deconflicted with the C2 communications architecture, intelligence collection plan, planned cyberspace fires, airspace control order (ACO) and the JRFL as appropriate
- The MIG submits the IE Ops plan to the MEF Staff Judge Advocate (SJA) for legal review

#### FUNCTION #4: INFORM DOMESTIC & INTERNATIONAL AUDIENCES

This function involves actions taken to truthfully communicate with domestic and foreign audiences in order to build understanding and support for operational and institutional objectives. It also seeks to reassure friends and allies, and deter and dissuade adversaries. It is conducted both in garrison and while deployed. While inform operations are largely led and planned by the CommStrat and Civil Affairs Occupational Fields, they are executed and supported by MAGTF commanders, staffs, and Marines in addition to the CommStrat and Civil Affairs capabilities. The MIG COC enables the overall success of this function by coordinating and de-conflicting inform capabilities in real-time or near-real time across the deep, close and rear areas in close collaboration with the MEF CommStrat Section, FECC, COC and IOC. Additionally, the MIG and/or MIG COC supports the planning of capabilities used in this function, over multiple time horizons, and plans. The following is a list of specific tasks required to enable this function:

- The MIG, in coordination with the G-2 and MEF CommStrat Section, conducts continuous research and analysis to understand the information environment and key publics to inform planning and operations
- The MIG supports the MEF CommStrat Section in the development of the Annex F (Public Affairs), Annex C Appendix 9 (Combat Camera), and Annex Y (Communication Strategy), and public affairs guidance (PAG)
- The MIG, in coordination with the CommStrat Section and FECC, conducts inform operations planning, integration and synchronization with the MEF, MSCs, MARFORs, interagency organizations, and regional partners
- The MIG, in coordination with the CommStrat Section and FECC, provides inform operations planning support to MEF B2C2WGs
- In coordination with and support from the MIG, the CommStrat Section facilitates the MEF's communication with internal, domestic, host-nation, coalition, other international, and adversary audiences through a variety of mediums, to include the traditional news media, social media, community engagement, and key leader engagement
- The MIG coordinates with the MEF CE and CommStrat Section during issue management and crisis communication
- The MIG acquires imagery and content, and provides production support to the CommStrat Section, other MEF sections, and MIG subordinate commands. Production includes written and visual information products for public release or internal use
- The MIG, in coordination with the CommStrat Section, disseminates communication products (written and imagery) in electronic and print formats through traditional and digital means

- The MIG, in coordination with the CommStrat Section, assesses inform operations measures of performance (MOPs) and measures of effectiveness (MOEs), and modifies plans as necessary based on feedback and changes in the information and/or operating environment
- The MIG attaches Operational Support Teams from the CommStrat Company to the MEB, MEUs, and other units, as required
- The MIG provides inform operations training support to the MEF, MEB and MEU CEs
- Civil Affairs forces establish relationships and build rapport with key leaders in civilian networks to inform the populace of CMO activities, correct misinformation and hostile propaganda, and help legitimize a host nation government during MAGTF operations

#### FUNCTION #5: INFLUENCE FOREIGN TARGET AUDIENCES

This function embodies the *Influence Operations* operational capability area. These operations are associated with *information operations* as they are commonly understood and practiced in the Marine Corps today. *However, it is important to note that while this function includes MISO and other technical capabilities, a broader notion of influence is required which incorporates any MAGTF capability or physical action (e.g., fires and maneuver) which <i>must be integrated into a broader influence plan.* The MIG COC, using the running estimate and IBMCS, enables the overall success of this function by assisting the FECC, COC, and IOC in coordinating and deconflicting attack and exploit capabilities in near-real time across the deep, close, and rear areas. This function involves non-lethal actions occurring in and through the IE as well as fires and maneuver, and thus requires integration into existing targeting and fires planning processes. Additionally, the MIG and/or MIG COC supports the planning of capabilities used in this function, over multiple time horizons, and plans. The following is a list of specific MIG and/or MIG COC tasks required to enable this function:

- The MIG, in coordination with the G-2, identifies non-adversary relevant actors and other target audiences affecting or affected by MAGTF operations and the scheme of maneuver
- The MIG will work with the MEF G3 in the development of Appendix 3 (Information Operations) to Annex C (Operations) and the corresponding appropriate Tabs
- The MIG and/or MIG COC coordinates with the military information support operations (MISO) Company, the G-2, and appropriate B2C2WGs to de-conflict message and theme dissemination, and provide leadership with multiple methods – including fires and maneuver – to achieve influence effects, and to jointly assess the effect of ongoing and previous influence efforts
- In coordination with the G-2 and G-3, the MIG COC coordinates the ongoing assessments of MOPs and MOEs for all Influence Operations
- The MIG and/or MIG COC provides planning support to the MISO Company and MAGTF G-2 to develop messaging for KLE and other G-3 planned engagements with relevant actors
- The MIG and/or COC nominates effects against approved target audiences for review in the targeting process and maintains awareness of the target list
- The MIG and/or MIG COC ensures MOP and MOE of selected information capabilities are analyzed in combination with intelligence derived feedback
- The MIG COC consumes responses to MAGTF messaging throughout the IE IOT create conditions favorable to operational objectives
- The MIG COC coordinates operations with Expeditionary MISO teams (EMT) and organic capabilities for the dissemination of audio, visual, and audio-visual messages, including by loudspeaker, leaflet and other print products, dissemination, face-to-face engagements, and radio broadcast operations
- The MIG COC monitors civil affairs forces

#### FUNCTION #6: DECEIVE FOREIGN TARGET AUDIENCES

This function involves MAGTF actions executed to deliberately mislead adversary decision makers, thereby causing the adversary or target to take specific actions or inactions that if successfully executed will contribute to the accomplishment of MAGTF objectives. *The MIG and MIG COC supports and enables the overall success of this function by coordinating and deconflicting various technical and non-technical capabilities during planning, and operations across the deep, close, and rear areas—in close collaboration with the FECC, COC, and IOC.* 

Additionally, the MIG and/or MIG COC supports the broader MAGTF plan for deception which involves a wide variety of capabilities, actions, inactions, and signatures implemented over multiple time horizons. The following is a breakdown of specific MIG and/or MIG COC tasks required to enable this function:

- The MIG coordinates and ensures MAGTF deception actions are nested under higher level joint plans
- The MIG and/or MIG COC coordinates the planning and employment of deception in support of OPSEC (DISO) and, in particular, *Tactical Deception*
- The MIG COC coordinates the timing and tempo of deception actions in support of tactical-level commanders, and ensures deception actions are deconflicted and/or synchronized with other MAGTF operations which may affect or be affected by deception actions (e.g., EMSO, CO, fires and maneuver)
- The MIG and/or MIG COC maintains awareness of counterintelligence (CI) personnel in their efforts to protect against threats from outside the unit
- The MIG COC provides running estimate information needed to support the development of deception plans
- The MIG supports the MEF staff during the development of CONPLANs and OPLANS to ensure deception is included
- The MIG and/or MIG COC provides running estimate information needed to support the development of MILDEC plans and the writing of Annex C, Appendix 3, Tab A Military Deception
- The MIG COC coordinates with the G-2, G-3, G-4, and G-6 to manage signatures using administrative, physical, and technical means
- The MIG COC coordinates with the DCO team's efforts to monitor networks in garrison based on identified key systems that are likely targets for exploitation
- The MIG and/or MIG COC coordinates across the staff to assess friendly force signatures and advise the commander on ways to modify these signatures
- The MIG and/or MIG COC coordinates across the staff to develop the required Signature Management Plan
- The MIG and/or MIG COC supports the G-3s operational risk evaluation of the Signature Management Plan

## FUNCTION #7: CONTROL OF INFORMATION ENVIRONMENT OPERATIONS CAPABILITIES, RESOURCES AND ACTIVITIES

The IE Ops control function is the MIG commander's primary task and responsibility to the commanding general. This distributed function uses IBMCS tools and services which provide operational feedback and control mechanisms to conduct and coordinate IE Ops across the MAGTF's AOI. In performing this function, the MIG COC uses the IE Ops *running estimate* to support planning, mission execution, and assessment activities. In addition to MIG COC tasks listed on page 8, the following is a breakdown of MIG and/or MIG COC tasks required to enable this function:

- Through the running estimate, the MIG COC provides near-real time re-tasking and re-programming recommendations based on knowledge of the mission, emergent conditions in the battlespace, and knowledge of the capabilities and disposition of friendly force assets
- The MIG COC coordinates the timing and tempo of CO and EMSO actions in support of MAGTF maneuver elements and supporting agencies
- The MIG and/or MIG COC requests and obtains required authorizations through documentation (i.e. OPORD, EXORD, WARNORD, FRAGO, PLANORD)
- The MIG and/or MIG COC maintains awareness of relevant ongoing DoD operations in the information environment
- The MIG and/ or MIG COC maintains an updated list of IE Ops related authorities available to the commander
- The MIG and/or MIG COC assists in the development of the EMS Coordination Order (ECO)
- With the assistance of the SJA, the MIG COC coordinates OCO execution timing support of the plan and operational scheme of maneuver
- The MIG COC coordinates DCO response actions (DCO-RA) execution timing in support of G-3 requirements as appropriate

- The MIG COC coordinates across staff sections to deconflict CO and EMSO capabilities with fire support, intelligence collection plans, spectrum management, and maneuver elements
- The MIG and/or MIG COC support the G-6 in the compilation/coordination of the Joint Restricted Frequency List (JRFL) and supports the resolution of any conflicts during planning and execution
- The MIG and/or MIG COC supports the G-6's EMS deconfliction efforts and responsibilities (e.g., EARF deconfliction with G-2 collections, Annex K execution, etc.)
- The MIG COC coordinates requests for IE Ops capabilities from across the MAGTF, including major subordinate commands (MSCs)
- The MIG COC in coordination with the FECC delegates electronic warfare coordination authority (EWCA) (conduct on station coordination, employment, targeting, and deconfliction of EA and ES assets) to the commander's fires and effects coordinator that adequately manages battlespace appropriate to the effects produced by the EW asset
- The MIG and/or MIG COC responds to emergent requirements and identifies, requests, and coordinates reachback support as required
- The MIG and/or MIG COC requests space based resources
- The MIG promulgates the SIGMAN plan and procedures
- The MIG and/or MIG COC monitors Civil Affairs forces in coordination with the G-9

# AGILE DISTRIBUTED C2 – TACTICAL SERVICES ORIENTED ARCHITECTURE (TSOA)

Agile distributed C2 is one of four central ideas introduced on page 2 and has been discussed throughout this document using the TACC and MACCS model analogy. Similar to Marine aviation, IE Ops will employ a wide range of capabilities that are distributed and controlled across the MEF's MSCs. In the case of IE Ops disparate capabilities such as sensor pods on aircraft, electronic warfare support teams with infantry battalions, electronic protection assets with resupply convoys, and activities like key leader engagements (KLE) will all need to be planned and integrated coherently to achieve MAGTF objectives. While the MIG commander is responsible to the commanding general for ensuring IE Ops actions are effectively planned, integrated, and executed across the MEF, the sheer number and dispersion of IE Ops related ground and air capabilities across the battlespace will require a whole-of-MAGTF approach to effectively command and control IE Ops. *The whole-of-MAGTF approach is enhanced through an agile distributed command and control (C2) family of services, built upon a services oriented architecture (SOA) that enables at a minimum: (1) real-time data sharing across MSCs and the CE, (2) customizable situational awareness views (all aspects of the IE), (3) collaborative planning and decision making, (4) near-real time course of action (COA) generation, (5) near-real time mission execution coordination and deconfliction, (6) dynamic network and bandwidth management, (7) agile spectrum management, (8) IE visualization, and (9) dynamic retasking and re-programming of multi-functional assets.* 

#### **IBMCS - TACTICAL SERVICES ORIENTED ARCHITECTURE (TSOA)**

To comply with Marine Corps policy and to ensure maximum flexibility and interoperability, the *Information Battle Management and Control System* must involve software services and applications developed within and/or integrated through the Tactical Services Oriented Architecture (TSOA). TSOA compliant IBMCS services will provide Marines the ability to discover, subscribe to, shape, filter, modify, and visualize data that aids their assessment of a situation, enabling timely and informed decisions within the information environment. Additionally, TSOA provides a modular suite of government owned software components that enable the sharing of tactical data across disparate data systems within the MAGTF's command and control centers across all levels. TSOA will be used throughout the full spectrum of operations and environments in which Marines are expected to deploy and operate. The family of IBMCS services will be distributed and available for use by the whole-of-MAGTF to enable integrated distributed IE Ops across the MEF's area of interest. TSOA software developers will be present within each MEF to provide MEF commanders and MSCs with direct input on C2 requirements. Figure 5 illustrates the TSOA concept from disparate authoritative data sources (ADSs) on the left of the diagram to fused, meaningful, and actionable information on the right.

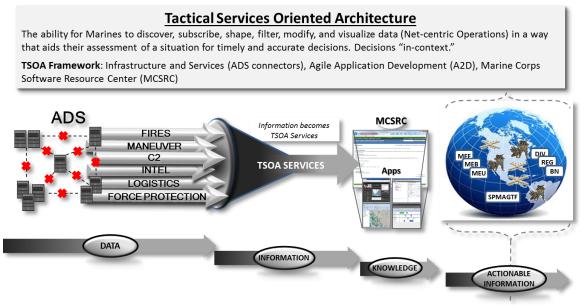


Figure 5. TSOA Framework for MAGTF Command and Control

# **INFORMATION ENVIRONMENT OPERATIONS RUNNING ESTIMATE**

The IE Ops running estimate is one of four central ideas introduced on page 2 and has been discussed throughout this document. The IE Ops running estimate is envisioned as future advanced analytical and decision support capability that uses innovative algorithms, high end computing power, and artificial intelligence (AI) to identify and predict threats, vulnerabilities, and opportunities in the IE. The IE Ops running estimate produces information and decision support products used and displayed by the COP/CTP, integrated mission planning tools, C2 systems, and mission assessment and feedback mechanisms. The IE Ops running estimate is envisioned as a required capability for the MAGTF to sense, understand, and act effectively in and through the information environment. It is not synonymous with or a replacement for the COP/CTP, and is better thought of as the analytical "engine" within an IBMCS which enables the MAGTF to coherently plan, conduct, and assess operations in and through a contested information environment. Additionally, the IE Ops running estimate is a distributed capability used by the whole-of-MAGTF such that services and applications are used by major subordinate commands (MSCs), the MEF staff (e.g, G-2, G-3, G-4, G-5, G-6), and MAGTF's C2 centers (e.g., MEF COC, MIG COC, IOC, FECC, TACC, DASC, and the MAGTF Communications Control Center (MCCC)), etc. This capability is intended to specifically address the crux of the problem identified on page 1 - the need for a commander to have a single "place" to go and gain or maintain a comprehensive understanding of the information environment, and to rapidly determine options for changing course, or engaging in new actions to achieve objectives in and through the IE.

#### IE OPS RUNNING ESTIMATE INFORMATION FLOW

The IE Ops running estimate is a component of the IBMCS and encompasses a family of software services. These services enable IE relevant information to flow to whichever staff section or functional process requires it. Thus, it represents a distributed MAGTF capability, integral to command and control. The IE Ops running estimate pulls/pushes information from/to National, Combatant Command, and Joint Force authoritative sources, as well as any MAGTF C2 center involved in planning or executing IE Ops. As an illustrative example, the MAGTF *spectrum running estimate* (which is an IE Ops running estimate sub-component provided by the spectrum services framework (SSF) in FY-19), will allow the MAGTF to create tailorable views from the global *spectrum running estimate* (SRE). This global estimate will be provided by Strategic Command (STRATCOM) through the Joint Electromagnetic Spectrum Operations Cell (JEMSOC). Other global or theater level running estimates (e.g., cyberspace) may be provided in the future which will be available for use by the MAGTF through the IBMCS. Figure 6 provides a simple information flow diagram for the IE Ops running estimate.

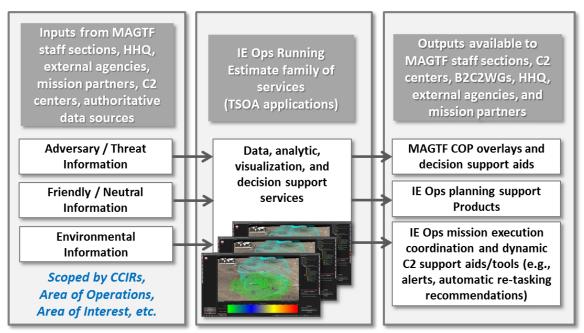


Figure 6. IE Ops Running Estimate

#### INFORMATION ENVIRONMENT OPERATIONS RUNNING ESTIMATE KEY CHARACTERISTICS

While the MAGTF currently takes advantage of numerous capabilities that use the EMS and cyberspace domain to affect IE Ops across all warfighting functions, integrating the rapidly increasing numbers of these capabilities in the future creates an inherent technical complexity that poses a growing challenge to the MAGTF. *The IE Ops running estimate enables an agile distributed command and control mechanism by leveraging automation, advanced algorithms, and artificial intelligence to foster near-real time collaborative planning and execution coordination environments that span the MAGTF.* This will enhance collective awareness, operational tempo, agile command and control, and will increase options for combined arms solutions. To achieve this, the IE Ops running estimate is envisioned as a capability upon which commanders and their staffs at all echelons may rely upon to help plan, execute, monitor, and assess integrated IE Ops actions.

#### Common Example of a Running Estimate - Smartphone Navigation Application

A simple example of a running estimate understood by almost everyone is a navigation application on a smartphone. In near-real time, and with no training required, this intuitive and simple application produces possible routes (COAs), highlights the predicted optimal route based on the current traffic situation, and provides continuous monitoring of the traffic situation during the course of travel. As conditions in the traffic situation change, the application automatically presents alternate routes to the driver based on rules which favor time, road type, or other priorities. It also predicts and presents an assessment of changing or staying on course (e.g., time saved, additional distance to be traveled, updated ETA, etc.) At this point, the driver makes a decision based on the analysis and visual presentation.

While the smartphone example is overly-simplistic, it illustrates some of the key characteristics and utility of using advanced technologies to gain and maintain a continuous understanding of threats, vulnerabilities, and opportunities in a situation or environment. By gathering and fusing disparate data sources and analyzing them against mission objectives and priorities, the easy to use application provides a running estimate of route progress and the traffic situation using near-real time analytics. It gives the decision maker alerts and options to change course based on mission priorities, obstacles, and available alternatives. Extending this idea to support IE Ops in the future will require incorporating existing and forthcoming advanced technologies which are designed to enable a continuous and comprehensive understanding of all relevant facets of the IE, and to improve IE Ops decision making across the MAGTF's AOI. *The IE Ops running estimate is envisioned with the following characteristics:* 

#### Continuous

The information environment is an increasingly consequential, ever present space that requires constant monitoring, understanding, planning, and maneuvering. The MEF produces and consumes large amounts of information and leverages communications which are continuously subject to threat activity or interference. This occurs regardless of whether the MEF is in garrison, training, or conducting military operations. Under all circumstances, the MEF must maintain a continuous IE Ops running estimate, including in areas relevant to deployed subordinate MAGTFs (i.e., Marine Expeditionary Units (MEUs), Marine Expeditionary Brigades (MEBs), and Special Purpose MAGTFs (SPMAGTFs). This estimate provides real-time and/or near-real time threat, vulnerability, and opportunity assessments as well as near-real time effectiveness assessments of current MAGTF operations in the IE. Moreover, because significant portions of the IE are used by everyone (i.e., the EMS and Cyberspace Domain), the MEF can use the IE Ops running estimate to maintain a current understanding of not only relevant enemy actions, but also of friendly and neutral/host nation actions which may cause interference or otherwise affect the mission.

#### Predictive

The running estimate provides real-time predictive analysis to enable *decision superiority* by leveraging "big data" analytics and artificial intelligence which process large amounts of disparate, structured and unstructured IE Ops related data; and by identifying hidden patterns, unknown correlations, trends, and other useful information. Decision superiority is defined by this concept as the comparative advantage gained by executing better and faster decision cycles at the lowest levels of the MAGTF, relative to an adversary's decision cycles and levels. Predictive

analysis is based on using advanced algorithms and pattern analysis to reveal the probability of a future occurrence, or to predict likely risks to the force or to operational tempo. This information is crucial to enhancing decision speed and adjusting planned actions to meet emergent conditions in the battlespace. To develop predictive analytics the IE Ops running estimate's analytic core services ingest data derived from relevant sources, including machine to machine communications, and then analyzes these data within the context of planning and/or executing MEF and Joint Force operations to reveal imminent threats, vulnerabilities, and opportunities. This analytical capability is designed to scale from MEF to MEU and will continue to operate in austere bandwidth constrained environments by using cached data.

#### Holistic

The IE Ops running estimate is holistic by providing analytical and decision support services to the MIG COC and all other MAGTF C2 centers. *In other words, the IE Ops running estimate enables the whole-of-MAGTF approach by being available to the entire MAGTF at all echelons.* The MEF IE Ops running estimate also provides a source of reachback for deployed MAGTFs. The running estimate serves as the MEF's primary means for visualizing, understanding, and deciding on IE Ops actions in a dynamic, integrated, and intuitive way. *These displays and decision support aids are integral with the COP/CTP* and are displayed in any of the MEF's command centers. Additionally, the running estimate provides tactical level information to theater and national level organizations to enhance the fidelity of higher level operations and understanding. A critical feature envisioned for the IE Ops running estimate is its ability to show how friendly, enemy, and neutral/host nation actions within the IE interact within one another and how they affect MEF capabilities and actions in the traditional domains. *This capability is required to ensure IE Ops actions are not planned and conducted for achieving objectives in the IE only, but are integrated to enhance or enable non-IE objectives in the physical domains.* 

#### **Multi-functional**

The IE Ops running estimate must be multi-functional and tailorable as it provides numerous software applications which analyze each component of the IE, and produce derivative products to support MEF planning, execution, and assessment processes. The IE Ops running estimate directly feeds the MEF's COP/CTP, modeling and simulation capabilities, and collaborative planning tools. As a collection of services within an IBMCS, it produces a wide variety of useful information products such as:

- Graphical overlays and decision support aids for the common operational picture (COP/CTP)
- Alerts of changing conditions in the information environment
- Automated textual narrative generation for written operational plans and/or reports
- Displays of analytics and planning results such as recommended IE Ops courses of action (COA), asset configurations, routes, and payloads as a result of ingesting and analyzing finished formal intelligence products and analysis, mission objectives, friendly force information, environmental information
- Displays correlation of spectrum and emitter data to support target development, intelligence surveillance and reconnaissance (ISR) planning, electronic and/or cyber battle damage assessment (BDA)
- Assessment support products resulting from automated comparison of advanced IE models with sensor and human reported feedback
- Message sets for tasking spectrum and cyber assets and/or reprogramming assignments
- Display analytical results of relevant actors, population trends, perceptions, and responses to MEF
  operations and messaging, and support the development and reporting of measures of
  effectiveness (MOEs)

# KEY TERMS AND SUPPORTING IDEAS

The information environment spans the operational environment, and as such, affects operations in the physical domains, the electromagnetic spectrum, and the cyberspace domain. Thus, operationalizing the IE as a maneuver space requires a conceptual framework that considers all aspects of the operational environment. Figure 7 provides context for establishing the overall conceptual hierarchy of IE Ops actions using the commonly understood "levels of war" model.

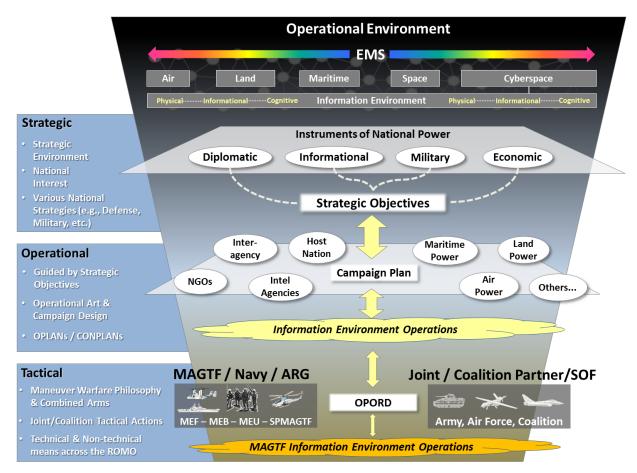


Figure 7. Conceptual Model for Information and Related Activities

The operational environment (OE) is defined in Joint Publication 3-0 Joint Operations as the "composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of commanders." It encompasses physical areas and factors of the air, land, maritime, and space domains, as well as the information environment (which includes the cyberspace domain). Additionally, the OE encompasses portions of electromagnetic spectrum (EMS) – a critical OE component which many IE Ops capabilities depend upon to perform their functions. The *Informational* instrument of power is one of four primary instruments of national power – and thus it sits atop a strategic-to-tactical hierarchy which highlights information as a strategic resource vital to the national interest. Previously considered in the context of traditional nation-states, the concept of information as an instrument of national power extends to non-state actors—such as terrorists and transnational criminal groups—who are using information to further their causes and undermine those of the United States and our allies.

#### INFORMATION ENVIRONMENT OPERATIONS

The information environment is defined as the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information. With its function as a conduit for influence on decision-making, and command and control, the IE is a key component of the commander's assigned operational environment and battlespace. Our ability to rapidly obtain, share, and apply information or knowledge about the environment is core to operating effectively in this space. The IE spans from the strategic to tactical levels and provides a medium for affecting actions across the physical domains. Additionally, the electromagnetic spectrum (EMS) defines a pervasive physical medium spanning the IE through which vast quantities of information flow. The IE is composed of three interrelated dimensions: the *physical*, which includes command and control systems, the supporting infrastructure, as well as human terrain; the *informational*, which includes the manner and flow by which information is collected, processed, stored, disseminated, and protected; and the *cognitive*, which includes the knowledge, attitudes, beliefs, and perceptions of people. *Information Environment Operations* represents a broad set of activities occurring in or through the IE which are conducted at the operational or strategic level to achieve operational or strategic objectives. The MAGTF may support theater or national/strategic objectives by conducting tactical level IE Ops.

#### INFORMATION ENVIRONMENT OPERATIONS VS. INFORMATION OPERATIONS

MAGTF IE Ops, defined on page 1, represents a broad set of activities occurring in or through the information environment *at the tactical level* to enable MAGTF operations and to achieve mission objectives. While recognizing current Joint terms and definitions for Information Operations (IO) and related activities, IE Ops involves a broader set of activities framed by seven functions identified in figure 1, and implemented through the six IE Ops operational capability areas (see figure 8 on page 23). The Marine Corps will continue to align to, recognize, and work with joint and partner organizations conducting IO, but will evolve the way the MAGTF traditionally applies IO. This evolution is based on the notion of normalizing IE Ops as an integral part of combined arms maneuver by holistically commanding and controlling actions within the information environment to achieve unity of effort.

From "Information Operations" to "Influence Operations"

Traditionally, Marine Corps IO has focused on integrating *information related capabilities* to affect adversary decision making – hence to achieve *cognitive* effects yielding operational advantage. Seeking cognitive effects correspond to seeking *psychological advantage* – which is one of the four types of advantages defined in MCDP 1 *Warfighting*. IE Ops includes the notion of seeking cognitive effects and psychological advantage by integrating information capabilities, but it also seeks to integrate information capabilities to achieve the other three types of military advantages identified in MCDP 1: *temporal, spatial, and technological*. These advantages differentiate IE Ops from IO justifying its broader description. IE Ops are conducted to achieve all four types of advantages defined in our maneuver warfare doctrine. *This concept of employment asserts that IO in the traditional sense should continue as an integrating function, but should be referred to as Influence Operations. These operations are conducted for the primary purpose of achieving <i>psychological advantage as a "1st order cognitive effect" – using all available means - including fires and maneuver. This COE defines a first order effect as the intended primary, immediate effect imposed on a target through the application of a capability. A second order effect is defined by this COE as the derivative, subsequent, unintended, or cumulative effect, of one or more first order effects (e.g., mission endstate)* 

#### INFORMATION ENVIRONMENT OPERATIONAL CAPABILITY AREAS

IE Ops are planned and executed in accordance with the seven functions, and grouped by operational capability areas: *Electromagnetic Spectrum Operations (EMSO), Cyberspace Operations, Space Operations, Influence Operations, Deception Operations, and Inform operations.* While the MIG is responsible for ensuring the seven functions are integrated across the MAGTF using all available capabilities, it also has a primary responsibility for ensuring the six operational capability areas are aligned to functional objectives. These areas must be integrated and applied with other MAGTF capabilities and physical actions (e.g., fires and maneuver) to most effectively achieve mission objectives. The MIG staff will participate in MAGTF planning to present integration and coordination requirements to achieve functional objectives. This COE highlights operational capability areas not as an exhaustive list, but to identify well understood existing capability portfolios which are immediately available for use to conduct IE Ops. *The following sections summarize the operational capability areas illustrated in Figure 8.* 

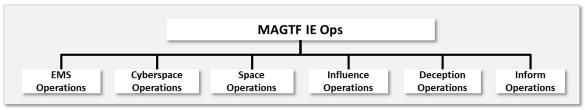


Figure 8. IE Operational Capability Areas

#### ELECTROMAGNETIC SPECTRUM OPERATIONS

The electromagnetic spectrum (EMS) is a natural phenomenon governed by physics, influenced by technology, and is a common medium making up a significant portion of the information environment. All activity within the EMS can be distilled into two functions: *transmission* and *reception*. With physical properties that can be measured spatially, temporally, and parametrically, the EMS represents *maneuver space* within the physical dimension of the IE, in which military forces compete against adversaries and neutral audiences for access. *Electromagnetic spectrum operations* represent the total of military activities conducted within the EMS. In practical terms, EMSO encompasses *electronic warfare (EW)* and *spectrum management*, and involves activities to closely plan and coordinate these with other EMS-dependent disciplines such as Signals Intelligence (SIGINT), certain cyberspace operations, space operations, and any other EMS-dependent capabilities. *The MIG will conduct EMSO C2 through the MIG COC's EMSO Center (EMSOC) – which is a team of EMSO SMEs, equipped tools and applications, dedicated to processing, analyzing, and sharing EMS data with across the MAGTF. The EMSOC provides a critical capability for enabling EMSO planning and near-real time EMSO coordination, deconfliction, and platform reprogramming. The EMSOC also enables radio frequency-enabled cyberspace operations planning and coordination.* EMSO provides essential capabilities to functions 1-3, and 5-7 (see figure 1).

#### **CYBERSPACE OPERATIONS**

Cyberspace is a global domain within the information environment consisting of the interdependent networks of information technology (IT) infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers. MAGTF cyberspace operations are the employment of capabilities where the primary purpose is to support MAGTF objectives in or through cyberspace. Cyberspace operations include three types of operations: (1) Department of Defense information network (DODIN) operations, (2) defensive cyberspace operations (DCO), and (3) offensive cyberspace operations (OCO). DODIN Ops and DCO are the most common types of cyberspace operations conducted by the MAGTF and are used to assure C2 – hence they are critical to functions 1, 2, and 7 (see figure 2). DODIN Ops provide the *network common operational picture* (NETCOP) and the foundational technical and procedural means to enable DCO. OCO authorities are now evolving and will likely be extended to the MAGTF commander in the near future. *As this occurs, there must be a command and control mechanism in place for the MIG and MIG COC to plan and execute OCO as a type of MAGTF fires.* This capability will be conducted under MIG commander delegated authority and is essential or related to functions 3, 5, and 6 (see figure 1).

#### SPACE OPERATIONS

Space operations are those operations impacting or directly utilizing space-based assets to enhance the potential of the MAGTF and mission partners. Space systems are comprised of three related segments: ground, user, and space. To maintain freedom of action in the space domain, the Marine Corps needs to leverage the five missions of space operations: (1) space situational awareness (SSA); (2) battle management command and control (BMC2); (3) space control; (4) space support to operations; and (5) space services support. Of the five missions, the MAGTF relies primarily on *space support to operations* which provides services and capabilities such as position navigation and timing (PNT)/navigation warfare, missile warning, satellite communications (SATCOM), intelligence surveillance and reconnaissance (ISR), and environmental monitoring. In all cases space-based assets utilize the EMS as the medium for transmitting and receiving signals. The electromagnetic frequency bands that space-based systems use, however, have finite capacity. Therefore, it is vital that the MAGTF achieve the required level of EMS control to ensure freedom of action for space assets. Like the air, land, and maritime domains, space is a physical domain within which military, civil, and commercial activities are conducted. The relationship between the space domain and the cyberspace

domain is unique as space operations depend on cyberspace, and a critical portion of cyberspace can only be provided via space operations. The space IE Ops capability area is unique in that the Marine Corps does not have organic space capabilities and must in all cases request capabilities from external agencies or departments which own and operate space assets. This operational capability area provides essential capabilities to functions 1-3, and 5-7 (see figure 1).

#### **INFLUENCE OPERATIONS**

Influence Operations represent specific MAGTF actions taken to affect adversarial or relevant actor decision making to create operational advantage. This IE Ops capability area is heavily focused on the cognitive dimension of the information environment and ensures MAGTF operations incorporate elements of this dimension such as the decisionmaker's culture, life experiences, relationships, outside events, ideology, and the influences of those inside and outside the decisionmaker's group. Influence Operations are ultimately designed to shape perceptions in the IE of both the adversary and/or other relevant actors. Added to these variables are the perceptions built on information collected on current events and the plans and beliefs of others. IE Ops and/or IE capabilities most often associated with influence operations include but are not limited to Operational Security (OPSEC), military information support operations (MISO), signature management (SIGMAN), Civil Affairs (CA), and other special technical capabilities. Influence Operations also incorporate physical MAGTF actions such as fires and maneuver. This operational capability area provides capabilities that specifically align to function 5 (see figure 1).

#### **DECEPTION OPERATIONS**

Deception Operations are MAGTF actions executed to deliberately mislead adversary decision makers, thereby causing the adversary or target to take specific actions or inactions that if successfully executed will contribute to the accomplishment of MAGTF objectives (JP 3-13.4). Deception Operations involve all MAGTF elements and capabilities, and require significant planning and integration efforts across the entire MAGTF. IE Ops capabilities most often associated with Deception Operations include but are not limited to OPSEC, space operations, MISO, SIGMAN, and other special technical capabilities. Deception Operations also incorporate physical MAGTF actions such as fires and maneuver. This operational capability area provides capabilities that specifically align to function 6 (see figure 1).

#### **INFORM OPERATIONS**

Inform Operations use accurate and timely information and imagery to communicate with a variety of audiences in order to build understanding and support for MAGTF operations and activities while deployed and in garrison. Through the official release of information via traditional media, social media, and face-to-face engagements, Inform Operations facilitate informed perceptions by establishing first facts and putting MAGTF actions in context; correcting inaccuracies and misinformation; and discrediting adversary propaganda with counter narratives. Inform operations involve communication with internal, domestic, host-nation, coalition, other international, and adversary audiences. In all cases, Inform operations are crucial to enhancing situational awareness and command and control, and must be incorporated within the MAGTF planning process to ensure its seamless integration in support of MAGTF objectives and a whole-of-MAGTF approach. While all commanders, staffs, and Marines contribute to Inform operations, primary responsibility for planning and execution resides with the "Communication Strategy and Operations" (CommStrat) Occupational Field (OccFld), Information and Knowledge Management OccFlds, as well as the Civil Affairs OccFld. This operational capability area provides capabilities that specifically align to function 4 (see figure 1).

#### IE OPERATIONS IN SUPPORT OF COMBINED ARMS MANEUVER

Under the MAGTF IE Ops construct, the IE is viewed in a way similar to the physical maneuver domains – such that it represents a "maneuver" space where military advantage can be gained or lost. However, the IE adds complexity not typical of the physical maneuver domains – *a dichotomy of continuously evolving threats, vulnerabilities, and opportunities versus a requirement to plan and execute long-lead time deliberate actions (applicable whether in garrison or deployed).* These contrasting IE characteristics correspond to managing the daily battle rhythm for operating and defending an effective command and control system, and planning and executing deliberate shaping actions to support the scheme of maneuver during operations. Figure 9 illustrates continuous activities and episodic shaping actions within the IE which enable decisive combined arms action.

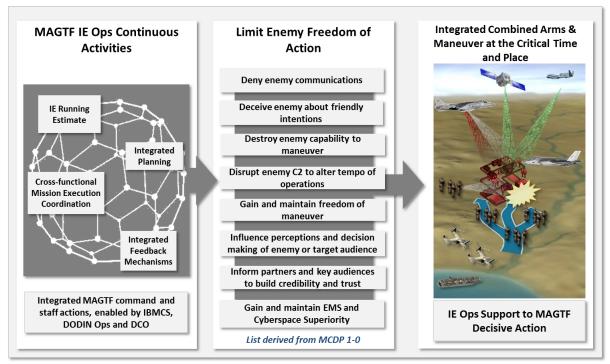


Figure 9. IE Ops within MAGTF Operations

#### **CONTINUOUS MAGTF IE OPS ACTIONS**

The MEF will plan and conduct IE Ops continuously, whether in garrison or deployed because the IE is always contested and is crucial for shaping the operational environment. Recognizing the IE encompasses both technical and non-technical means for communication (e.g., cyberspace, EMS, visual, face-to-face, etc.) and is always contested and potentially consequential; the MEF conducts continuous IE Ops to sense, understand, and act in the information environment to assure command and control and to set conditions for future discrete IE Ops activities. Continuous actions occur during steady state operations and through all phases of a named operation. *The purpose of continuous IE Ops actions, as depicted in Figure 9, is to illustrate the MAGTF's need to sense and understand relevant threats, vulnerabilities, and opportunities within the IE to ensure the MAGTF can act decisively when needed.* 

#### MAGTF SHAPING ACTIONS

This COE asserts that continuous IE Ops actions are necessary for creating the conditions and opportunities for planning and executing specific shaping actions. While IE Ops shaping actions (see figure 9, 2<sup>nd</sup> column) are specific to the IE, a whole-of-MAGTF approach to IE Ops requires IE related plans, capabilities, and actions are integrated with fires, maneuver, and other non-IE Ops MAGTF activities to shape the battlespace and set the conditions for mission accomplishment. IE Ops support to MAGTF shaping actions are planned and employed using technical and non-technical means to achieve shaping objectives over multiple time horizons, and in accordance with available authorities. Many shaping actions will involve the use of non-organic assets and will thus require the MIG to conduct planning and coordination through their respective Marine Corps Forces (MARFOR), JTF, Component Commands, or National Technical Means (NTM) to access and coordinate the use of higher level capabilities.

#### PHASE 0 – STEADY STATE ACTIVITIES AND CONSIDERATIONS

Deployed MAGTFs are supported from garrison in accordance with existing authorities during any phase of operations. However, opportunities available during phase 0 – steady state operations – must be leveraged to ensure long-lead time planning activities and conditions are set to enable phase III operations. Joint doctrine is currently being drafted which describes the importance of operationalizing phase 0, as a matter of necessity, to facilitate mission success across the range of military operations and achieve objectives in later phases. The MIG, as a standing

organization, operationalizes phase 0 for the MEF in two primary ways: (1) conducts planning to regularly update the MEF's IE Ops CONOPS within the broader theater CONPLANs and OPLANs, and (2) conducts or coordinates IE Ops in support of forward deployed MAGTFs. Within these two broad categories the MIG may conduct at a minimum the following activities during Phase 0:

- Develop staff relationships with appropriate MARFORs, Combatant Commands, and associated Joint Headquarters
- Coordinate identification of both physical and cyber key terrain
- Develop the electromagnetic operational environment (EMOE)
- Maintain the IE Ops running estimate
- Inform Joint Task Force (JTF) level military deception plans (MILDEC)
- Run or support operational planning teams (OPTs)
- Task site surveys
- Establish, disseminate, and refine KM/IM requirements and procedures
- Develop and integrate Key Leader Engagement (KLE) operations
- Develop standard operating procedures (SOPs)
- Maintain awareness of externally provided capabilities, associated authorities, and policies and procedures for requesting capabilities
- Observe and participate in exercises
- Support pre-deployment training of subordinate MAGTFs
- Support force protection planning and operations

#### **MAGTF – MARFOR RELATIONSHIP**

STRATCOM's global spectrum running estimate (see page 18) exemplifies the MEF and subordinate deployed MAGTFs need to be engaged with Combatant Commands (CCMDs). This is accomplished through the MAGTF's respective MARFOR. The MARFOR plays a critical role in facilitating strategic-to-tactical IE Ops capabilities and activities with adjacent and supporting organizations. Because the IE is becoming increasingly complex, and due to the Joint nature by which we fight, makes this complexity even more challenging. The MARFOR's role of working with adjacent Service partners (as well as Coalition/Combined partners) is crucial. The MARFOR's ability to support the MAGTF during planning, and to assist in coordinating, deconflicting, and synchronizing effects in the IE will be paramount to the overall MAGTF's success. Additionally, MARFOR planners must ensure that our MAGTFs are aligned with our Service headquarters and with our adjacent component commands. To organize for the future operating environment and to holistically support the single-battle concept, MARFOR headquarters should identify a primary staff lead for IE Ops, and ensure staff leads (e.g., G-2, G-3, G-6, CommStrat, etc.) are aligned with the seven IE Ops functions.

#### CURRENT MARFOR CHALLENGES AND LIMITATIONS

Current design/structure and componency roles must be reviewed if the MARFORs are to adequately support the MAGTFs in this role. In active theaters, the MAGTF will normally fight as part of the Joint Forces Maritime Component Command (JFMCC) under a Naval Forces Component (NAVFOR), or Joint Forces Land Component Command (JFLCC) under an Army Forces Component (ARFOR). MAGTFs may require regular, direct links with those Joint Component Commands during phase 0/day-to-day operations to adequately present IE capabilities during crisis and contingency (a MEU is typically OPCON to the JFMCC and should coordinate all IE Ops actions through the JFMCC, not the MARFOR). If the MARFORs are to execute an expanded role, that will change the nature of the MARFOR and necessarily draw it deeper into the immediate current ops of the CCMD J2, J3 and J6. At present, the MARFOR cannot adequately execute the proposed IE tasks without severe risk to already assigned roles and responsibilities. Additionally, if IE Ops/IE coordination is not conducted through the assigned Joint Component, the risk of uncoordinated effects within that component's conventional (air/sea/land) domain is high.

#### INTELLIGENCE SUPPORT TO INFORMATION ENVIRONMENT OPERATIONS

Intelligence supports IE Ops the same as it does other MAGTF operations and missions. Over time, as the IE grows in scope and consequence, new intelligence requirements will drive an increasing demand for intelligence support to all aspects of the IE. The Marine Corps Intelligence Surveillance and Reconnaissance Enterprise (MCISR-E) is the Marine Corps' intelligence mechanism designed to support the distributed and complex nature of IE Ops. MCISR-E projects the intelligence warfighting function forward, seamlessly linking distributed intelligence nodes at the tactical edge with decision makers at all levels through a robust network and knowledge base. Moreover, the MCISR-E is an enterprise that supports MAGTFs through every phase of operations by leveraging modern methodologies and systems in a deliberate architecture. This architecture defines a family of services which include advanced analytics and processing, exploitation, and dissemination (PED) capabilities needed as input to the IE Ops running estimate. Within the context of this COE, function #2 - Provide Battlespace Awareness - is identified as an IE Ops function specifically to assert a broad notion of "awareness", which is the fusion of formal intelligence estimates, products, and information provided through the MCISRE-E with friendly force information, and other IE related environmental information provided by non-intelligence sources and organizations. Combining both formal intelligence and nonintelligence sourced information creates a comprehensive and continuous operational picture of the information environment to the commander and staff. Additionally, fusing formal intelligence with non-intelligence sourced information to form IE layers of the MAGTF common operational picture (COP) asserts that IE Ops command and control services (e.g., IBMCS etc.) and organizations (e.g., MIG, MIG COC, etc.) are consumers of intelligence, not producers of intelligence.

#### **CIVIL AFFAIRS SUPPORT TO MAGTF INFORMATION ENVIRONMENT OPERATIONS**

Civil Affairs (CA) forces drawn from the Reserve Component (RC) that are specially trained to conduct Civil Affairs Operations (CAO); and plan, coordinate, and enable Civil-Military Operations (CMO) conducted by the MAGTF to support accomplishment of its overall objectives. Properly executed CMO and CAO enable MAGTF commanders to create effects in their battlespace maximizing the support of indigenous populace for their objectives and minimizing the negative effects that indigenous populace can have on MAGTF operations. *CMO and CAO are critical components of MAGTF IE Ops as they provide a conduit for shaping the environment, as well as a capability that greatly enhances the MAGTF's understanding the IE's human/cognitive aspects.* 

#### CIVIL MILITARY OPERATIONS (CMO)

CMO are activities performed by designated CA or other military forces to establish, maintain, influence, or exploit relationships between military forces and indigenous populations and institutions. This is accomplished by directly supporting the attainment of objectives relating to the reestablishment or maintenance of stability within a region or host nation. The G-9, as a primary MEF staff officer, is responsible for the planning, integration and assessment of CMO considerations into the Marine Corps Planning Process (MCPP). As there is no standing G-9, this role is typically assigned to the reserve Civil Affairs Group Commanding Officer when mobilized.

#### CIVIL AFFAIRS OPERATIONS (CAO)

CAO are planned, executed, and assessed by civil affairs forces to enhance the awareness and management of civil component interactions within the operational environment. These operations are intended to identify and mitigate underlying causes of instability within civil society and to facilitate the application and integration of functional specialty skills within civil government.

#### **KNOWLEDGE AND INFORMATION MANAGEMENT (KM/IM)**

Information provides context for decision and action; knowledge enables decision and action directly. There are two primary types of knowledge – explicit and tacit – where the prior is an expression (e.g., written order, verbal command, etc.) that can be easily shared or transmitted, and the latter is an accumulation of experiences and patterns that cannot be easily shared or transmitted (e.g., "gut instinct", commander's judgment of risk, etc.). When relevant timely information or *explicit* knowledge is provided to an experienced commander and staff with a large amount of *tacit* knowledge, the potential for fast high fidelity decision making increases. The art and science of knowledge management is determining the most effective ways to ensure relevant information or explicit knowledge to reach the right decision maker at the right time.

#### THE COMMANDER AND STAFF

The commander prioritizes his/her commander's critical information requirements (CCIRs). Knowledge and information management (KM/IM) facilitates knowledge and information flow (internally, externally, vertically, and horizontally) to optimize and support the commander's decision cycle. A SOA approach to IE Ops C2 drives a need for an KM/IM capability which effectively mobilizes and integrates distributed MAGTF workflows and processes (i.e., boards, bureaus, centers, cells, and working groups (B2C2WGs)) by providing people and systems with access to required information. A comprehensive approach to KM/IM within the MAGTF includes the integration of knowledge and information resources and processes associated with each of the warfighting functions, including intelligence. With respect to *intelligence* KM/IM, the MCISRE-E today provides a mature and robust KM/IM capability that must be integrated with the overall MAGTF KM/IM effort. Effective KM/IM ensures timely, relevant, and prioritized information is organized, accessible, and useable to the commander, staff, and MAGTF elements. Effective management of mission-critical knowledge and information requires clear processes that are understood and practiced by staff members and leadership who will enforce KM/IM policies.

#### INFORMATION MANAGEMENT OFFICER

The Information Management Officer (IMO) plays a significant role in organizing, managing, and sustaining the B2C2WGs that consume and produce information in support of continuous mission planning and execution. The IMO's primary responsibility is to manage this cycle from an information flow perspective. The IMO is therefore tasked with developing and implementing effective tools and procedures to optimize the flow of information from external and MAGTF sources to those who need it.

#### KNOWLEDGE MANAGEMENT OFFICER

Knowledge management supports the commander's decision cycle and efficient day-to-day operations by aligning command processes, information requirements, and available technology to facilitate staff synchronization, information exchange, and collaboration. Knowledge management enhances decision-making by supporting shared situational awareness, enabling a common understanding of the commander's intent, and enhancing the speed and quality of decision-making. The KMO has responsibility for knowledge and information management operations across the staff. The Knowledge Management Officer (KMO), working in close coordination with the IMO, plays a critical role in creating a holistic integrated approach to improving the MAGTF's ability to quickly learn and adapt to evolving operational circumstances. This is accomplished by establishing KM policies and procedures that integrate people (i.e., from MAGTF commander to individual Marine and mission partner personnel), processes (e.g., planning process, B2C2WGs, Battle Rhythm Management, etc.), and technology (e.g., IBMCS, running estimate), to enhance overall performance and improve decision making. The KMO is responsible for: (1) ensuring all staff members and battle rhythm participants are aware of which battle rhythm is in effect, (2) recommending organizational structures that facilitate KM/IM within the command, (3) identifying role-based responsibilities for KM/IM tasks and product production, (4) delineating business rules for information flow to and from organizations external to the MEF, and (5) coordinating the information flow strategy to track, control, and fuse the vast amount of information used by the MEF, while optimizing the KM/IM infrastructure. The KMO oversees the development of the KM/IM plan, represented by Annex U of an operations order.

#### FOREIGN DISCLOSURE OFFICER

The foreign disclosure officer (FDO) serves in an advisory role to the KM/IM working group to ensure classified and controlled unclassified information that is appropriately disclosed to coalition partners. Therefore, the FDO serves in an advisory role to the KM/IM working group to ensure that foreign disclosure processes are understood and integrated into the knowledge management plan (KMP).

# PLANNING, EXECUTION, ASSESSMENT

Commanders and their staffs plan, execute, and assess operations. Planning envisions a desired endstate and effective methods to achieve that endstate. Execution is the implementation of the plan that causes changes in the battlespace. Assessment tracks the changes and determines impacts to plan as a basis for subsequent decisions. Information Environment Operations is integral to all three of these recurring, integrated, and often parallel staff processes.

#### PLANNING

Planning is an essential and significant part of the broader field of command and control. Planning supports decisionmaking by helping the commander and staff appreciate the larger environment and understand the true nature of the problem. It supports execution by identifying and detailing the specifics of implementation. For a planning process to be effective and enable the command's ability to understand and adapt to changing situations, the commander must ensure *feedback pathways* are in place that connect ongoing planning with execution results and other sources of information. While IE Ops activities may often include specific actions taken to achieve attack, exploit, influence, or deceive objectives in and through the information environment, many IE Ops capabilities are dual-use and should be employed as feedback mechanisms to inform the overall situation and planning. Additionally, these capabilities should always be planned in accordance with IE Ops tasks that specifically support MAGTF objectives and the scheme of maneuver.

#### EXECUTION

Mission execution is the concerted action of the commander and his forces to conduct operations based on the OPLAN or OPORD, modified as the current tactical situation dictates, to achieve the commander's intent and to accomplish the mission. Planning is largely a centralized effort, and execution is decentralized to allow commanders on the scene the latitude to deal with the unfolding situation in accordance with commander's intent. Planning and executing IE Ops adheres to this centralized planning and decentralized control paradigm. The MIG COC enables a decentralized approach to IE Ops execution by sharing information through various collaborative environments and *running estimate* information products (e.g., visualization, dynamic re-tasking alternatives, and decision support tools) across the MEF staff, MSCs, and joint or coalition mission partners.

#### ASSESSMENT

Assessment is the continuous monitoring and evaluation of the current situation and the progress of an operation. Monitoring is the continuous observation of the current situation to identify opportunities for the force, threats to the force, gaps in information, and progress according to the plan or order. Evaluation compares relevant information about the situation or operations against criteria to judge success or progress. Planning and executing IE Ops capabilities must consider two aspects – the first is determining how to measure and ascertain the effectiveness of IE Ops actions, using all available resources from the MAGTF or externally. The second is determining how to use IE Ops capabilities for the purpose of measuring and ascertaining the effectiveness of non-IE Ops actions which are part of the overall MAGTF operation. The IE Ops running estimate supports assessment.

#### **STAFF INTEGRATION**

Effective staff integration results from the collaboration of functional expertise from across the staff and from external stakeholders in direct support of the commander's decision-making process. The KMO plays a central role in staff integration by working across functional area boundaries to optimize applications and data structures, eliminate redundancies, facilitate collaboration, and generally serve as the command's information referee, to ensure the integration of relevant and meaningful content into the command's knowledge repositories. The key aspect of staff integration involves the creation, management, and use of an effective staff battle rhythm. Boards, bureaus, centers, cells, and working groups can be facilitated with virtual collaboration tools; enhance staff coordination and support planning, monitoring, and assessment activities. With the introduction of the MIG and MIG COC organizations, the MEF staff must consider how these and the other MEF staff sections with IE Ops responsibilities are incorporated into the battle rhythm and B2C2WGs to support IE Ops planning, execution, and assessment.

#### MEF COMMAND AND CONTROL CENTERS

Command and control centers are established to support the commanders of all units of battalion size or larger. Each battlestaff function may also be supported by one or more C2 centers. From these centers, watch officers and cells from the various staff sections plan, monitor, coordinate, control, and support the day-to-day activities of the unit. These centers include the personnel, software, hardware, shelters, and ancillary equipment needed to support command and control. With respect to IE Ops, as a distributed concept requiring a whole-of-MAGTF approach, various command and control centers may use IBMCS services and the IE Ops running estimate help coordinate to synchronize IE Ops.

#### Maneuver

The *MEF Combat Operations Center (COC)* is the command's "nerve center" where information is fused to provide situational awareness for the commander and his staff. For the wide ranging and complex battle in the information environment, the MIG COC provides the COC with critical information and tailored services to ensure the COC remains the "nerve center" after envisioned IE Ops capabilities and resources are fully implemented. Current operations are directed from the command's COC, which is typically manned by representatives from each battlestaff section. The COC is the location for watch officers, and this COE asserts an IE Ops watch officer should be provided as additional battlestaff to the COC as well. This watch officer would bear the same responsibilities as other watch officers, but would focus on IE Ops, the timely satisfaction of the IE Ops related friendly force information requirements (FFIRs), and the dissemination of IE *running estimate* products and information.

#### Intelligence

The **MEF Intelligence Operations Center (IOC)** is established to provide centralized cognizance for the overall intelligence effort. The IOC is a MCISR-E node and is organized to respond to the tasking and priorities of the MEF G-2. The IOC serves the MEF by consolidating, validating, and prioritizing intelligence requirements from all elements of the command. The MIG and/or MIG COC engages in a close continuous communication with the IOC and its subordinate elements in person or virtually via IBMCS to share information on matters related to IE Ops. The IOC links the command to theater, national, and coalition intelligence resources. The IOC also operates the MEF Operations Control and Analysis Center (OCAC) -- which provides centralized direction, management, and control of signals intelligence (SIGINT) and electronic warfare (EW) activities within the command. It also links to external theater and national assets. Concentration of specialized intelligence capabilities in the radio battalion, the intelligence battalion, and the force reconnaissance company under this centralized direction facilitates unity of effort, effective employment of limited assets, and the collection and production of all-source intelligence. The MIG COC supports the OCAC by ensuring all SIGINT and EW activities are coordinated across air and ground platforms, and are deconflicted with the MAGTF's use of other spectrum-dependent systems. The IOC also coordinates and integrates all-source intelligence operations with other Service components, JTF joint intelligence support element (JISE), theater joint intelligence center (JIC) or joint analysis center, and national intelligence agencies and operations to include all aspects of intelligence reach back support. The MIG COC supports the OCAC by ensuring all SIGINT and EW activities are coordinated across air and ground platforms, and are deconflicted with the MAGTF's use of other spectrum-dependent systems. The MEF Surveillance and Reconnaissance Center (SARC) is also established by the intelligence battalion at the direction of the MIG commander to supervise the execution of the integrated organic, attached, and direct support intelligence collection and reconnaissance operations. The MIG COC supports the SARC by ensuring surveillance and reconnaissance planning and execution across all domains are closely and continuously coordinated to enhance situational awareness and responsive support for IE Ops and the IE Ops running estimate.

#### Communications

The **MAGTF Communication Control Center (MCCC)** is established by the G-6 as the primary systems control capability to plan, monitor, and direct action in the MAGTF Information environment – to include cyber and space domains. The MCCC has a directive relationship, referred to as communications control, with the subordinate commands of the MAGTF as well as the communications battalion. The MCCC also serves as the central control center to monitor activity on information networks supporting MAGTF operations. This includes providing the NETCOP and the ability to sense and assess anomalous actions on the network that may inform the range Defensive Cyberspace Operations. Coordination with the MIG COC will be necessary to fuse cyberspace intelligence collected

by the G2, and cyberspace threats observed and registered on the MAGTF network by the G-6. Manage and coordinate the use of DCO as it affects DODIN Ops.

#### Fires

The *Fires and Effects Coordination Center (FECC)* plans, coordinates, integrates, directs, and monitors organic and supporting lethal and nonlethal fires. The MIG COC supports the FECC by providing planners to participate in the targeting process, contribute to the development of the fire support plan, and to support non-lethal fire support coordination. The introduction of the MIG and MIG COC within the MEF does not change the process by which the MEF plans, conducts, and integrates lethal and non-lethal fires during combat operations. In this process the FECC will provide tasks to the MIG for detailed planning and to provide the desired action and effect. As the MEF's capacity to support and/or coordinate with the MARFOR (and by extension combatant commander) increases, actions taken from garrison or deployed could include creating or coordinating effects in support of theater objectives during phase 0. This may require a MIG/MIG COC to coordinate with external agencies and deployed MAGTF's chopped to a theater and to create or coordinate effects across one or more assigned boundaries. Additionally, the MIG may establish a MIG COC capability physically or virtually within the FECC, depending upon the situation, to ensure close coordination, support, and integration of IE Ops capabilities within the targeting and fires planning processes. However, because of the MIG COC's wide ranging responsibilities associated with IE Ops, many MIG COC activities are external to the targeting process; therefore, this COE asserts the situation and commander's priorities and direction should dictate how the MIG COC physically or virtually supports the FECC.

#### Aviation

The Aviation Combat Element (ACE) provides many capabilities and C2 systems to the MAGTF that are critical to enabling IE Ops in support of the overall MAGTF operation. The ACE is uniquely positioned to deliver a wide variety of distributed assets to achieve IE Ops mission objectives because of the types of platforms and coverage they provide to the MAGTF. The ACE commander uses the Marine Air Command and Control System (MACCS) and its family of C2 capabilities to plan, direct, and control aviation operations in a distributed integrated manner. Aviation C2 is distributed across MACCS agencies including TACC, DASC, and the tactical air operations center (TAOC), as well as air traffic control (ATC) facilities. The ACE provides the MAGTF with robust IE Ops capabilities in areas of electronic warfare, intelligence, MISO, OCO, communications relay, spectrum management, as well many other MAGTF digital interoperability (DI) capabilities needed to enhance situational awareness, establish mesh networks, and enable the dynamic agile C2. IE Ops C2 functionality will be incorporated into the MACCS due to the fact that many IE capabilities will be delivered by aircraft.

#### The Common Aviation Command and Control System (CAC2S)

The common aviation command and control system (CAC2S) provides C2 capabilities for the ACE commander and the MACCS C2 agencies. It provides services to fuse weapons and sensor data into a single integrated display, and will serve as a waveform gateway between the ACE and GCE. The *Marine TACC is the senior MAGTF air C2 agency, and is the primary agency with direct coordination requirements with the MIG and/or MIG COC.* The MIG and/or MIG COC must have a close and continuous relationship with ACE planners and ACE operators controlling IE Ops payloads, communications equipment, and intelligence collection assets since many IE Ops capabilities will reside on air platforms under the direct control of the ACE. The DASC will play a crucial role in facilitating IE Ops actions, while maintaining a close relationship with the senior fires center in support of the ground scheme of maneuver. The TAOC's fusion capability of multiple radar feeds and sources of data link information will contribute to the IE Ops running estimate, with systems such as the TPS-80 G/ATOR and its ability to parse F-35B sensed data via datalink. Under Future Force 2025, new structure for IE Ops is provided to the Marine Aircraft Wings (MAWs) for planning and mission coordination support of aviation based IE Ops. This includes intelligence related aviation IE Ops command and control found within a Marine Air Information Environment Operations Squadron, which includes an IE Ops planning cell to coordinate planning and execution with the TACC, TAOC, DASC, and MIG COC.

#### **Digital Interoperability**

DI is the seamless integration of Marines, systems, and data, across all domains and networks throughout the MAGTF, naval, joint, and coalition forces. This includes communications in degraded or denied environments. MAGTF IE Ops, as a collaborative, agile, and distributed activity depends heavily on the existence of a reliable and robust communications network provided in large part through DI. In the future MAGTF IE Ops tasks, capabilities, and other actions will be collaboratively planned and dynamically executed through the interconnection of software defined radios, dynamically re-programmable assets, advanced waveforms, mesh networks, and airborne and ground gateways provided through DI. The MIG and MIG COC require the ability to consume, analyze, or affect IE Ops information provided by the ACE through the MACCS, CAC2S, and DI.

#### Logistics

The Logistics Combat Element (LCE) COC serves as the hub for future and current operations planning within the LCE. There are many ways to organize the LCE COC dependent on situation and mission. At a minimum, each function of logistics (supply, maintenance, transportation, engineering, health services, and services) is represented in the LCE COC along with warfighting function representatives, liaisons (LNOs), and enablers. Under the supervision of a watch officer, these personnel monitor current operations and maintain status displays of friendly and enemy situations. Additionally, LCE COC personnel process requests from subordinate units and keep the MAGTF command element informed of the combat service support situation and its general support logistic posture. The LCE commanders may choose either a centralized or decentralized configuration for their COCs. The MIG COC maintains communication and supported by IE Ops forces because logistics operations involve the movement of equipment and supplies across the battlefield. In many instances, combined arms solutions involving IE Ops and traditional fires are required to provide force protection and counter attack capabilities in support of logistics operations. Additionally, the movement of logistics forces across the battlespace employs vehicles and people equipped with sensors and self-protection capabilities that must be integrated into IBMCS.

#### **IE OPS WITHIN MSCs AND SUBORDINATE MAGTFs**

While this concept is focused primarily on the MEF, the ideas captured herein are applicable to the MSCs and/or any MAGTF. As this concept is developed and implemented in the coming years, future force development initiatives may provide additional manpower to other Marine Corps units as required. Applying this concept at the MSC or MEB and MEU level is achievable in the near term by leveraging existing agile distributed C2 mechanisms that integrate people, information, and processes across down to the lowest level possible. Just as the MACCS is integrated and employed within the ground combat element (GCE) to enable procedural command and control of Marine aviation at the lowest level possible, so too must IE Ops be distributed and coordinated at the lowest level possible. This COE recommends MSCs and/or MAGTFs consider the following actions at a minimum to begin implementing this concept:

- Identify within the staff and/or request assignment of an appropriately trained lead planner responsible for ensuring the holistic integration of IE Ops capabilities into planning and operations
- Identify within the staff and/or request assignment of appropriately trained personnel capable of conducting detailed functional planning of available IE Ops capabilities
- Establish an IE Ops Support Cell and develop standard operating procedures (SOPs) based on knowledge of existing practices associated with the Marine Corps Planning Process, targeting and fires planning, cyberspace operations support requests, electronic warfare support requests, intelligence operations, communications, and the development of battlespace coordination measures
- Integrate the IE Ops Support Cell into the existing B2C2WGs and participate in continuous communication and information sharing among G-2/S-2, G-3/S-3, and G-6/S-6 staffs
- Leverage existing C2 mechanisms and communications to facilitate IE Ops C2
- Establish liaison with higher headquarters IE Ops Support Cell and/or the MIG COC
- Exercise IE Ops during training

# **FUTURE EXPERIMENTATION AND CONCEPT REFINEMENT**

This COE establishes a starting point for experimentation and for the Marine Corps to determine in detail what capabilities and practices are required to achieve the overall vision for IE Ops. Senior Marine Corps leadership, including the Commandant of the Marine Corps, has given clear direction to implement change and drive the institution toward the overall framework discussed in this document. However, details matter and future experimentation and discovery for this concept must reveal detailed capability requirements and gaps across the *doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P)* framework. Because of the unique organizational and technological dynamics presented herein, it may be several years before the capabilities needed to implement this concept are sufficiently mature. This COE is at risk of not being sufficiently understood and implemented if time and resources are not given to develop and integrate key organizational, functional, and technological enablers. Areas requiring future experimentation, development, and discovery include:

#### COMMAND RELATIONSHIPS AND ROLES AND RESPONSIBILITIES

By introducing the role of a MIG as an MSC-like command <u>within</u> the MEF command element, familiar MEF staff roles and responsibilities may need to become more dynamic and flexible depending upon the situation. This creates a potentially significant variation in the way the MAGTF traditionally approaches planning and mission execution. The gaps and unknowns associated with the new command organization and the implications for staff relationships will not likely to be understood fully in the near term (i.e., 1-5 years). Moreover, the discovery process associated with this facet of the concept must be conducted as a function of the critical enabling technologies discussed throughout (i.e., IBMCS and running estimate).

### **KEY ENABLING TECHNOLOGIES**

This ideas contained within this COE are significantly enhanced by using an agile distributed command and control family of services (i.e., IBMCS) powered by a scalable framework of *visualization, analysis,* and *decision support* software applications (i.e., running estimate). As the Marine Corps experiments with this concept in the coming years, capability developers should become aware of, and begin to integrate through TSOA the many available technologies that already exist within specialized communities. The unique benefits of TSOA include the acceleration of cybersecurity accreditation, the instantaneous distribution of new applications via a storefront known as the Marine Corps Software Resource Center (MCSCRC), and the de-coupling of tightly bound hardware / software solutions. This last benefit is noteworthy because de-coupling software from hardware allows for C2 systems to be frequently updated with the latest applications (apps) without having to re-certify the entire system. This will save the Marine Corps money and will increase the "speed to market" of new services and applications.

### BOARDS, BUREAUS, CENTERS, CELLS, AND WORKING GROUPS (B2C2WGs)

The process for planning, deconflicting, synchronizing, and coordinating starts with the Marine Corps Planning Process and extends into the MAGTF's B2C2WGs which are responsible for cross-functional collaboration to enhance decision-making. The MAGTF's B2C2WGs and Operational Planning Teams (OPTs) are together responsible for achieving cross-functional synergy to achieve the MAGTF mission. From an IE Ops perspective, the MIG commander is the senior subordinate commander with overall responsibility for ensuring the effective coordination, integration, and employment of IE Ops capabilities in support of MAGTF operations. To enable effective IE Ops, future experimentation and exercises should examine in detail how the MIG and MIG COC support, host, or integrate into the following:

- IE Ops Working Groups that support the MAGTF Battle Rhythm
- Commander's Update Brief
- Commander's Decision Board
- Communication Synchronization Working Group
- ISR Working Group
- Collections Working Group
- IOC's planning and execution of intelligence operations

- Current Ops Cell and Combat Operations Center
- Knowledge and Information Management (KIM) Working Group
- Future Ops/Plans Working Group(s)
- IO Working Group (IOWG)
- Targeting Working Group and/or Board
- Fires & Effects Collections Board
- FECC with liaisons who coordinate non-lethal fires
- Sustainment Working Group
- MCCC's planning, execution, and defense of MAGTF communications with liaisons or virtually
- TACC's planning and execution of aviation assets employed IE Ops capabilities
- Movement Control Center (MCC) planning and execution of movement
- Effects Working Group
- Effects Assessment Board

#### KM/IM

The MAGTF will typically generate a large amount of unstructured data associated with its interactions across all security domains. This includes a variety of network data (authentication events, bandwidth utilization, packet flow to nodes within the network, etc.), social network data, and other indicators of the state of the IE and the conduct of all IE Ops functions. As this information is gathered and processed within the context of enemy, friendly, and neutral actions in the IE, a more comprehensive understanding of the IE is possible. Therefore, IM/KM functions or technologies are essential for providing an understanding of threats, vulnerabilities, and opportunities within the IE. Moreover, given the envisioned increased role the IMO/KMO will play in supporting the MAGTF's battle rhythm and B2C2WGs; future experimentation should focus on discovering and integrating state-of-the-art IM/KM tools, techniques, and procedures to give the IMO/KMO the ability to better affect the MAGTF's operational tempo and advantage. Another area in need of development is finding ways to help IE Ops planners discover external agency data sources and subject matter experts. In many instances, MAGTF planners are unaware of available data and other resources or capabilities that might be available if they were requested. Solving this problem requires an advanced searchable catalog or database that planners can use across security domains to discover relevant data or people who can help the planner fulfill a requirement.

# **CONCLUSION**

The notion of conducting Information Environment Operations is not new or unfamiliar to Marines. Commanders in battle since 1775 have well understood the physical, psychological, and moral factors of war, and have sought innumerable and creative ways to win. *IE Ops* therefore does not represent something new or unusual; instead it represents the natural extension of *Maneuver Warfare*, as our highest calling and organizing principle, into the information environment. What has changed since 1775, and perhaps since the 20<sup>th</sup> Century, is the character of the information environment. This environment is now dominated by the internet, the expansion of information technology, the widespread availability of wireless communications, and the far-reaching impact of social media. This presents complex challenges for MAGTF operations.

This highly networked information environment has enabled both state and non-state actors to employ activities in the IE to achieve their objectives effectively. They use various capabilities to exploit, disrupt, and disable command and control systems and other critical infrastructure; to disseminate propaganda and disinformation; to foster internal dissent; to recruit and solicit financing; and to promote legitimacy for their actions while discrediting the legitimacy of others. The IE's increasing significance poses significant challenges and presents great opportunities for the Marine Corps. Fundamentally, it is now necessary to organize, operate, and fight integrally within the IE, just as we do in the physical domains, to enhance the Marine Corps single-battle and provide the defensive, offensive, and exploitative effects needed to gain and maintain military advantage across the operational environment. Otherwise, the MAGTF is at serious risk of losing competitive advantage across the range of military operations.

The key to operating effectively in the information environment is to operationalize it like a maneuver space, not unlike the physical domains. This requires a few key ideas such as mobilizing a whole-of-MAGTF approach to IE Ops, establishing primary organizing functions, and building a distributed agile and secure command and control system. This COE describes these key ideas as a starting point for a Service level discussion.

## LIST OF ACRONYMS

A2D – Agile Application Development ACE – Aviation Combat Element ACO – Airspace Control Order ADS - Authoritative Data Source ANGLICO – Air Naval Gunfire Liaison Company AOI – Area of Interest AOR - Area of Responsibility ARFOR - Army Forces Component Command ATC – Air Traffic Control ATO - Air Tasking Order B2C2WG - Boards, Bureaus, Centers, Cells, Working Groups BDA – Battle Damage Assessment BLOS – Beyond Line of Sight BMC2 – Battle Management and Control **BN** – Battalion C2 - Command and Control CA – Civil Affairs CAC2S - Common Aviation Command and Control System CAO – Civil Affairs Operations CCIR – Commanders Critical Information Requirement CCMD - Combatant Command CE - Command Element CERF – Cyberspace Effects Request Form **CESAS – Communications Sensing and Attack System** CEWCC - Cyberspace and Electronic Warfare Coordination Cell CHOP - Change in Operational Control CI - Counterintelligence CMO - Civil Military Operations COA - Course of Action COC - Combat Operations Center COE - Concept of Employment CommStrat – Communication Strategy and Operations **CONOPS** – Concept of Operations **CONPLAN – Concept Plan COP** – Common Operational Picture **CTP** – Common Tactical Picture DASC - Direct Air Support Center DCO – Defensive Cyberspace Operations DCO-IDM – Defensive Cyberspace Operations Internal Defense Measures DCO-RA - Defensive Cyberspace Operations Response Actions DI – Digital Interoperability DISO - Deception in support of OPSEC DNA – Deoxyribonucleic Acid DODIN - Department of Defense Information Network DOTMLPF-P – Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities, Policy EA – Electronic Attack EAC – Expeditionary Analysis Cell EARF - Electronic Attack Request Form EFEC – Expeditionary Forensic Exploitation Capability **EMI – Electromagnetic Interference** EMS – Electromagnetic Spectrum

EMSO – Electromagnetic Spectrum Operations EMSOC - Electromagnetic Spectrum Operations Center EMT – Expeditionary MISO Team EOTG – Expeditionary Operations Training Group EW – Electronic Warfare EWCA – Electronic Warfare Control Authority EWST – Electronic Warfare Support Team EXORD - Execution Order FDO - Foreign Disclosure Officer FECC - Fires and Effects Coordination Center FECC – Force Fires Coordination Center FRAGO – Fragmentary Order GAP-CIE – Global Adaptive Planning Collaborative Information Environment GCE – Ground Combat Element HN - Host Nation HQ – Headquarters HHQ - Higher Headquarters IBMCS – Information Battle Management and Control Service ICO – IE Operations Coordination Order IE - Information Environment **IM** – Information Management IMO – Information Management Officer I&W – Indications and Warnings IO – Information Operations and/or Influence Operations IOC – Initial Operational Capability **IOC** – Intelligence Operations Center ISO - In support of ISR - Intelligence Surveillance and Reconnaissance IT II – Intrepid Tiger II IE Ops – Information Environment Operations JEMSOC – Joint Electromagnetic Spectrum Operations Center JFLCC – Joint Force Land Component Command JFMCC – Joint Force Maritime Component Command JRFL – Joint Restricted Frequency List JTF - Joint Task Force JTFHQ – Joint Task Force Headquarters KLE – Key Leader Engagement KIM – Knowledge and Information Management KM – Knowledge Management KMP – Knowledge Management Plan LCE - Logistics Combat Element LE – Law Enforcement LNO - Liaison MACCS – Marine Air Command and Control System MAGTF – Marine Air Ground Task Force MARFOR – Marine Forces Component Command MAW – Marine Aircraft Wing MCCC – MAGTF Communications Control Center MCDP – Marine Corps Doctrinal Publication MCISR-E – Marine Crops ISR Enterprise MCPP – Marine Corps Planning Process MCSRC – Marine Corps Software Resource Center MEB – Marine Expeditionary Brigade MEF – Marine Expeditionary Force

METOC - Meteorological MEU – Marine Expeditionary Unit MHG – MEF Headquarters Group MIC - MEF Intelligence Center MIG - MEF information Group MIG COC - MEF Information Group Combat Operations Center MILDEC - Military Deception MISO - Military Information Support Operations **MOE – Measure of Effectiveness** MOP - Measure of Performance MSC – Major Subordinate Command NAI – Named Area of Interest NAVFOR - Naval Forces Component Command NETCOP – Network Common Operational Picture NTM - National Technical Means OCAC - Operations Control and Analysis Center OccFld – Occupational Field OCO – Offensive Cyberspace Operations **OE** – Operational Environment **OPT – Operational Planning Team OPSEC** – Operations Security **OPCON** – Operational Control **OPLAN** – Operations Plan **OPORD** – Operations Order **OPT – Operational Planning Team** PAG – Public Affairs Guidance PAO – Public Affairs Officer PED – Processing, Exploitation, and Dissemination PLANORD – Planning Order PNT – Position Navigation and Timing **RF** – Radio Frequency **ROMO** – Range of Military Operations SARC – Surveillance and Reconnaissance Center SATCOM – Satellite Communications SDS – Spectrum Dependent System SI – Special Intelligence SIGINT – Signals Intelligence SIGMAN – Signature Management SME – Subject Matter Expert SOA – Services Oriented Architecture SOM - Scheme of Maneuver SOP – Standard Operating Procedure SPMAGTF – Special Purpose MAGTF SRE – Spectrum Running Estimate SSA – Space Situational Awareness SSE - Sensitive Site Exploitation SSF – Spectrum Services Framework SST – SIGINT Support Team STRATCOM - Strategic Command TACC – Tactical Air Command Center TAOC – Tactical Air Operations Center TSOA – Tactical Services Oriented Architecture TTP - Tactics Techniques and Procedures WARNORD - Warning Order

# **REFERENCES**

MCDP 1 Warfighting MCDP 6 Command and Control MCWP 3-40.4 Marine Air-Ground Task Force Information Operations MCWP 3-32 Marine Air Ground Task Force Information Operations MCRP 5-12 Organization of Marine Corps Forces MCIP 3-32Di MAGTF Electromagnetic Spectrum Operations MCIP 3-32Ei MAGTF Cyberspace Operations DoD Strategy for the Information Environment JP 13-3.1 Electronic Warfare JP 3-12 Cyberspace Operations JP 6-01 Joint Electromagnetic Spectrum Operations JP 3-13 Information Operations JP 3-14 Space Operations National Military Strategy, 2016 (SECRET) 2016 Chairman's Risk Assessment, 1 Feb 2016 (SECRET//NOFORN) Joint Operating Environment 2035, 14 Jul 2016 2015-2025 Future Operating Environment, Implications for Marines, 2016 Update 36th Commandant's Planning Guidance, 2015 FRAGO 01/2016: Advance to Contact U.S. Marine Corps Service Strategy 2016 Message to the Force 2017: "Seize the Initiative" A Cooperative Strategy for 21st Century Sea Power: Forward - Engaged - Ready, March 2015 Marine Corps Operating Concept; How an Expeditionary Force Operates in the 21st Century, September 2016 Littoral Operations in a Contested Environment, 27 Feb 2017 (SECRET) "MCWP 2-10 Intelligence Operations" MCWP 3-33.3 Public Affairs MCWP 3-33.7 MAGTF Combat Camera DOD Directive 5122.05 Assistant Secretary of the Defense for Public Affairs DOD Directive 5230.09 Clearance of DOD Information for Public Release DOD Instruction 5040.07 Visual Information (VI) Productions DOD Instruction 5042.02 Visual Information (VI) DOD Instruction 5230.29 Security & Policy Review of DOD Information for Public Release DOD Instruction 5405.3 Development of Proposed Public Affairs Guidance MCWP 3-40.1 w/ Change 1 "MAGTF Command and Control"





# Appendix 1: Case Study User's Guide









#### Case Study User's Guide

# "We need every Marine and Sailor to seek creative solutions to today's and tomorrow's complex problems.... to ensuring we can Innovate, Adapt, and Win!" *Marine Operating Concept*

1. Purpose: Provide unit leaders with information on how to lead small group case studies.

#### 2. Intent:

**a. Purpose:** The purpose of case studies is to use historical scenarios as an analytical guide for: 1) professional discussion and debate in pursuit of solutions to current real-world problems and leadership challenges; and 2) developing the critical thinking and creative decision-making abilities of participants. Case studies are also an effective way to rehearse the practical application of leadership and ethical principles (reps and sets), to demonstrate the value of diversity in decision-making, to connect Marines with their legacy of character and competence in a meaningful way, and to strengthen team cohesion.

#### b. Methodology:

(1) Case studies are conducted in a Socratic, student-centered learning environment where the students take the lead in the discovery process, guided by the instructor. Rather than serving as a lecturing "sage on the stage," the instructor functions as a facilitator, moderator, devil's advocate, and fellow-student who guides discussion with thought provoking questions intended to draw out key themes and principles and to exploit teachable moments that emerge from the dynamic interaction. Unlike lectures, case study discussions unfold without a detailed script or pre-determined outcomes -- the aim is to teach participants how to think rather than what to think.

(2) Successful case study discussions rely heavily on both preparation and spontaneity. A precondition for a successful case study is all participants have thoroughly studied and analyzed the associated historic narrative, supporting materials, and assignment questions and are prepared to challenge the group with their unique experienced-based insights. Additionally, the instructor must be prepared to stimulate thought-provoking discussion through targeted, thematic, open-ended questions; all-hands prompting; cold-calls; follow-ups; and summations. Thorough preparation and effective moderation in an environment of mutual respect set the conditions for a rich free-exchange of ideas and unconstrained learning.

(3) Effective case study leaders guide students to discover unchanging principles applicable to current challenges, alternatives to conventional wisdom, and new approaches to problem solving across key themes and focus areas relevant to the Marine Corps. The following are examples of pertinent interest areas which should emerge naturally from case narratives and provide direction for continued discussion and debate:

#### (a) Warfighting Themes

- Nature/Character of Warfare
- Command and Leadership
- Strategic and Military Culture
- Learning and Adaptation
- Maneuver Warfare
- Geography
- Sustainment
- Unity of Effort

#### (b) Advance to Contact -- Five Vital Areas

- People
- Readiness
- Training/Simulation/Experimentation
- Integration with the Naval and Joint Force
- Modernization and Technology

#### (c) Marine Operating Concept – Five Critical Tasks

- Integrate the Naval force to fight at and from the sea
- Evolve the MAGTF
- Operate with resilience in a contested-network environment
- Enhance our ability to maneuver
- Exploit the competence of the individual Marine

c. Desired Outcomes: Case studies are intended to achieve the following goals:

(1) Develop student skills in critical thinking, creative problem-solving, decisionmaking, communication, and leadership.

(2) Involve more personnel in the pursuit of solutions to current operational and leadership challenges.

(3) Provide personnel with an effective way to rehearse the practical application of leadership and ethical principles (reps and sets)

(4) Demonstrate the value of diversity in decision-making.

(5) Educate Marines on the nature of war and the principles of warfighting.

(6) Encourage students to have more responsibility for their learning, and promote skills, practices, and disciplines that enable lifelong learning and independent problem-solving.

(7) Demonstrate an effective method of teaching that can be replicated by participants with future students.

(8) Connect Marines with their legacy of character and competence in a meaningful way.

(9) Strengthen team cohesion.

#### 3. Case Study Preparation.

**a. Student Responsibilities:** The primary responsibility of students preparing for a case study class is to thoroughly study and analyze the associated historic narrative, supporting materials, and assignment questions. The goal of preparation is not simply to be prepared to regurgitate facts and chronologies but rather to – understand the "big picture" as well as the game-changing "little details"; identify key themes and principles as well as their applicability to current challenges; identify key causal relationships in their complexity; identify the primary problems and dilemmas faced by protagonists; and identify key decision makers, factors which influenced their decision-making calculus, consequences of their decisions, and alternative approaches to their decisions and actions. Drawing from their personal knowledge and experiences, students should prepare to contribute insightfully and creatively to the group learning environment. If possible students should seek opportunities to discuss the materials with other students before the case study session.

**b.** Case Study Leader Responsibilities: In preparing for the discussion, the leader must become fully conversant with the facts of the case, and should conduct the same analysis he/she expects the group to engage in. Beyond that basic requirement, the leader must prepare both content and process, including a clear set of teaching/learning objectives, a call list, a board plan, an opening question, discussion probes, transitions, follow-up questions, and closing comments. The leader must also prepare the discussion venue – audio/visual requirements, seating arrangement/assignments, supplemental materials, etc. Thorough preparation includes learning about the backgrounds of the students (ideally a small group) in order to develop and informed call plan that maximized the richness of their diverse experiences. Case study leaders should be prepared to start and end the session on time while ensuring all-hands participation and adequate time to summarize group outcomes. Finally, case study leaders should have a plan to collect and share post-event critiques.

#### 4. Case Study Execution:

**a. Student Responsibilities:** Students should be ready to start on time and to positively contribute to the learning environment, understanding that there are no passive observers in case study sessions. Effective participation balances active, analytical listening with constructive comments, critique, and debate that draws out and expand upon major learning points. Students must be ready to take intellectual risks and to challenge status quo and group think, while remaining receptive to differing viewpoints and while maintaining mutual respect among participants. Critical thinking must never devolve into cynical thinking, and animated discussions must never become aggravated discussions.

**b.** Case Study Leader Responsibilities: The case study leader (CSL) sets the stage by introducing the material, establishing the learning objectives, explaining the rules of engagement, and starting the discussion pasture. The case study leader actively manages class flow and structure, while responding flexibly to student comments. The CSL poses challenging questions, cold/warm calls, and follow-ups to promote high quality class discussion; stimulates thoughtful student-to-student discussion and encourages participation from all students; draws on student

background information in guiding the class discussion; provides closure to discussion segments with appropriate transitions; and finally, concludes the session with appropriate synthesis, takeaways, and recommendations for further study and actions.

**5. Keys to Success.** The quality of a case study session is determined by the quality of the questions asked and answers given. Harvard Business School Professor C. Roland Christensen described case method teaching as "the art of asking the right question, of the right student, at the right time—and in the right way."

The "right" questions promote learning and discovery, pique student interest, and yield dynamic discussions. Questions themselves cannot exist in isolation, but instead form part of the basic triad of questioning, listening, and responding. Asking a question entails active listening and a thoughtful response—often in the form of another question or follow-up probe. Good questions take into account the specific audience (What are the students' needs, interests, and abilities?), the pedagogical goals of the class (What are the key learning objectives? Why should students care?), and the content and class plan (Which case features are relevant, surprising, confusing, etc.? How is the material sequenced?). Whether it calls for analysis, encourages debate, or solicits recommendations for action, a question is most effective when it fits the needs of a specific class context and helps guide students individually and collectively towards discovery and learning.<sup>1</sup>

The below sample questions (a slightly modified list from Harvard Business School) are provided for consideration.<sup>2</sup> These sample questions are organized into four main categories, which mirror the four major ways in which a discussion leader uses questions:

**a. Starting a discussion:** Framing students' approach to the case study. At the beginning of case discussions, questions involving assessment, diagnosis, or recommendation/action tend to be more effective for stimulating learning than purely descriptive questions such as "What is the situation?" or "What are the issues?"

#### (1) Assessment:

"How serious is the situation? "How successful is this [protagonist]?" "How attractive is the opportunity under consideration?" "What's at stake here?"

#### (2) Diagnosis:

"What is the most significant problem/challenge faced by the [protagonist]?" "Who or what is [responsible/to blame] for the crisis faced by the [protagonist]?" "Why has the [protagonist] performed so well/poorly?

<sup>&</sup>lt;sup>1</sup> "Questions for Class Discussions", C. Roland Christensen Center for Teaching and Learning, Harvard Business School

 $<sup>^2</sup>$  Ibid. Note: The list of questions provided, along with their explanations, are only slightly modified from the above reference, though detailed quoting and footnoting has been omitted to avoid confusion to the reader.

"As [the case protagonist], what keeps you up at night? What are you most worried about?"

#### (3) Recommendation/Action:

"Which of the [three] options presented in the case would you pursue? "What would you recommend to the [protagonist]? "What would be your plan of action?

**b.** Following up: Responding to student comments by probing for more depth (drilling down), opening up the discussion to more participants (moving laterally), or asking for generalization/reflection/synthesis (linking up). Case study leaders should consider that, while follow-ups are necessary to guide the discussion and challenge students, excessive interventions can lead to instructor-focused, hub-and-spoke exchanges. Greater depth of analysis can be achieved through general probes and questions exploring underlying assumptions and boundary conditions.

#### (1) General probes:

"Why?"

"Could you say a little more about that?"

"Could you walk us through your logic/thought process?"

"What leads you to that conclusion?"

"How did you come up with that estimate?

"Do we have any evidence to support that?"

"How did you interpret that exhibit/quote/data/information?"

"Why is that important?"

"What are the implications?"

#### (2) Underlying assumptions and boundary conditions:

"What indicators/measures/criteria are you using to support your analysis?

"What are you assuming with respect to [x, y, z]?

"Do you have any concerns? How might they be addressed?"

"If we assume [x] instead of [y], does that change your conclusion/recommendation?"

"What would it take for you to change your conclusion/recommendation?"

"Was the outcome inevitable?" "Could it have been prevented?"

"To what extent was the [protagonist] just lucky?"

"Is that consistent with [another student's earlier point]?"

"How does this compare with what we discussed/concluded previously?"

(3) To open the discussion to other students: Although the instructor may call on another student without responding at all to the previous comment, it is often helpful to provide some guidance for the subsequent contributor. It is particularly useful to indicate whether the next student should respond directly to the previous comment or not.

#### (a) The questions may be prefaced by framing statements such as:

"Let's stick with this"

"[Student X] is arguing [y]."

"Any reactions?"

"What about that?" "What do you think?" "Is that right?" "Any concerns?" "Do you buy that?" "Any questions for [previous student]?"

"Who would like to build on [previous student]'s point?"

"Does everyone agree?"

"Does anyone see it differently?"

"Can someone help us [work through this analysis, resolve this confusion]?"

"Can anyone address [student x]'s concern?"

#### (b) Broadening the discussion:

"Other perspectives?"

"Are we missing anything?"

"Are there other issues we should consider?"

"Who can reconcile these different interpretations/conclusions/points of view?"

(4) To encourage generalization, reflection, or synthesis: Case study leaders can help students integrate new concepts and internalize takeaways by challenging them to link key learnings to broader leadership issues or experiences from their own lives:

"What do you take away from today's discussion/case?"

"What's the moral of this story?"

"Why should leaders care about these issues?"

"In what other situations would the lessons/principles of today's case apply?"

"Has anyone confronted a similar challenge in their own work experience?"

**c. Transitioning:** Bridging the current situation with the next discussion block, which may include checking for student comprehension before moving on. Transitions are often preceded by two types of questions: 1) comprehension-checking questions that invite questions or final thoughts, and 2) framing questions that link the current situation to the new one.

"Have we missed anything important?"

"Any final comments before we move on?"

"Before we get into [x], are there any questions?"

"Is everyone comfortable moving on to [...]?"

"Now that we've established [x], what about [y]?

"In light of our discussion of [x], what should we do about [y]?"

"What are the implications of [x]?

"So we're clear on [x]—shall we move on to [y]?

"Before getting into the details, how do we think about how we should approach the analysis?"

**d. Handling special challenges:** There are a variety of student contributions that can create challenges for discussion leadership. Examples include tangential, non-sequitur, long, complex, and/or confusing comments. Instructors also may find it difficult to know how best to respond to incorrect answers or the use of offensive or inappropriate language by a student. In many of these instances, it may be difficult to redirect or refocus the comment without interrupting the student. To capture the student's attention and reduce the likelihood of causing offense or embarrassment, it is helpful to begin the response by making eye contact, saying the

student's name, and offering a neutral-to-complimentary observation such as -

"That's an interesting perspective,"

"You're raising some important issues,"

"I hear you saying that [...]."

#### (1) Tangential or non-sequitur comments:

"How does that relate to what [previous student] was saying?"

"Let's hold off on that for the moment. Can we first resolve the [issue/debate] on the table?"

"We'll get to that a little later in the discussion. Let's stay with [previous student]'s question."

"Let's park that [on the side board], and I'll look for you when we get to [later discussion topic]"

#### (2) For esoteric contributions:

"Why don't we take that off-line."

#### (3) Long, rambling comments:

"You're raising a number of issues. Let's focus on [x]."

"It sounds like you're concerned about [x]. Let's explore that."

"So you basically disagree with [the previous student] because [x, y]. [To previous student]: would you like to respond?"

"I hear you saying [x]. Does everyone agree?" "What's the headline?"

#### (4) Complex or confusing comments:

"Let's slow this down for a minute."

"Let's take it one step at a time."

"How would you explain that to someone unfamiliar with technical language?"

"Let's keep it simple."

"Before digging into the numbers/details, let's make sure we understand the basic intuition."

"You mention [x]. I'm not sure everyone is familiar with that concept. Could you clarify?"

"I just want to make sure I understand your argument. You're saying [...]?"

(5) Incorrect answers: Incorrect answers might stem from a lack of preparation, legitimate confusion, or other causes, such as ambiguous questions or lack of clear direction. For factually incorrect comments containing minor inaccuracies not central to the discussion, it is often appropriate for the instructor to respond with a gentle correction. Faulty or incomplete analysis can serve as a learning opportunity for the student and the class. Ideally, the instructor will 1) not abandon the student, 2) not confuse other students by letting incorrect answers pass unchallenged, and 3) address the reason for the misperception, not just the misperception itself. When possible, the instructor should guide the student or his/her classmates to correct the error.

"Where in the case did you find that?"

"Could you walk us through how you came up with that?"

"Did anyone come up with a different answer?" "Let's see if we can reconcile these different results."

"This is a particularly complex analysis. Let's make sure the basic assumptions are clear."

#### (6) Offensive or inappropriate language:

"Would you like to take another shot at/rephrase that?" "Hold on just a second. Do you want to try that again?" "In less colorful language?"

**6. Conclusion:** Past is prologue – history sets the context for the present. Case studies are a highly effective and enjoyable way to learn lessons from the past and apply them to future current and future challenges. Case studies provide valuable reps and sets for the development of critical thinking and creative decision-making abilities, while promoting teambuilding and collaborative problem-solving. Importantly, effective case studies require rigorous preparation and pre-work by all participants. Students must come fully prepared to positively contribute to a dynamic group learning environment through thought provoking commentary, active listening, real-time analysis, and constructive discussion and debate. Case study leaders must be prepared stimulate and sustain fruitful discussion and debate through questioning, while managing the discussion through the artful balance of structure and flexibility. While adroit case study should leave participants with a sense that the discussion has only just begun, and everyone should walk away with heightened interest in autonomous learning and problem-solving.

# Officers are expected to have a solid foundation in military theory and a knowledge of military history and the timeless lessons to be gained from it. *MCDP 1*



Lieutenant General Thomas Holcomb poses with Major General A. A. Vandegrift, Major General Roy C. Geiger, and their commanders and staff on Guadalcanal.