Military Intelligence: A Primer

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Abstract: A battle is a physical activity that requires force. The victor could only employ the forces necessary to achieve victory through the advantage of foreknowledge. Winning a war also requires foresight, analysis, and the development of strategies on how to win—it takes intelligence. From time immemorial, intelligence has been a key factor in security planning. Intelligence has received increasing attention over the last decade. This paper provides a primer on military intelligence.

Keywords: *Military Intelligence, Defense Intelligence, Intelligence Analysis*

I. INTRODUCTION

The US Department of Defense (DoD) was created in 1949. It comprises the Department of Army, Office of the Secretary of Defense, the Joint Chiefs of Staff, the military departments (Army, Navy, and Air Force, each under the authority of a civilian Secretary), 16 "defense agencies" which were created by the Secretary of Defense to perform particular functions, nine "Unified Commands" responsible for the conduct of military operations, civilians, and contractors [1].

Modern warfare requires an integration of military and intelligence forces. Military intelligence is crucial and central to planning a victorious campaign. Before the commander could determine how to employ his forces, he first has to know whether he can attack and where he should attack.

II. WHAT IS MILITARY INTELLEGENCE?

Military intelligence is a military branch that uses information collection and analysis approaches to provide guidance and direction to assist commanders in their decisions. As an academic field, military intelligence is multidisciplinary area that combines language, political theory, economics, sociology, and psychology. Military intelligence includes information on other nations' military forces, plans, and operations which is collected through a variety of means. The term intelligence is often used for an agency that gathers such information.

Military/naval intelligence is as old as warfare itself. In biblical times, Moses sent out twelve men to spy the Canaanites in order to learn about their the strategies, attitudes, strengths, and weaknesses. The development of modern intelligence agencies dates back to the end of the 19th century. Today, nations have at their disposal information gathering systems such as radio, TV, satellites, ultramodern aircraft, human sources, cameras, and electronic devices. The United States government has devoted enormous resources to the creation and maintenance of a national intelligence system. The national intelligence includes the National Security Agency (NSA), Central Intelligence Agency (CIA), National Intelligence Strategy (NIS), Federal Bureau of Investigation (FBI), Defense Intelligence Agency (DIA), elements within the Department of Defense. The FBI is responsible for countering the activities of foreign intelligence services within the United States. The CIA is responsible for coordinating US counterintelligence activities abroad. The DIA produces some human intelligence and measurement and signatures intelligence. The NSA produces signals of intelligence.

As mentioned earlier, US intelligence has two broad functions: collection and analysis. Using various means, intelligence agencies collect information about foreign nations, persons, places, events, and activities. Analysis consists of assessment of an adversary's capabilities and vulnerabilities. It helps an analyst to know the capabilities of common types of military units. Intelligence analysts use information collected and produce "all source" analysis for the customer [2]. They support military operations by providing critical intelligence, finished intelligence products, and crucial information to commanders. Collecting information in itself does not result in obtaining intelligence. Information must be properly evaluated before it can be acted upon. Thus [3]:

$$Information + Evaluation = Intelligence$$

Intelligence involve the collection, evaluation, analysis, integration, collation, inference development, and dissemination of all available information which concerns areas of planning and operations. The intelligence cycle is usually presented graphically as a circular process, as shown in Figure 1 [3].
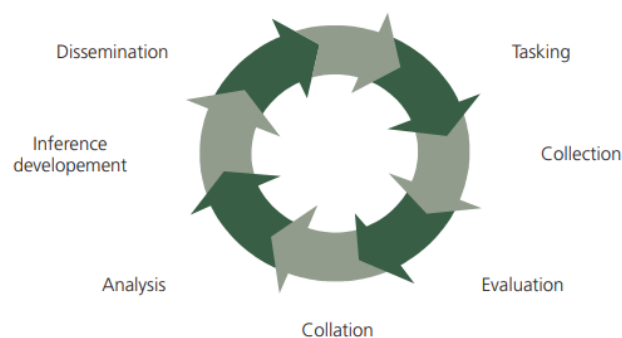

Figure 1: The intelligence cycle [3].

III. CHARACTERISTICS AND PRINCIPLES

The main characteristics of military intelligence are presented as follows [4]:

- To be effective, military intelligence has to be integrated with weapon systems and personnel to create military capability.

- Intelligence consists of collecting and assessing knowledge which is relevant to all levels of the military and the civilian leaders.

- Gaining information superiority is based on high-quality human capital and technology. • The intelligence mission is hampered by an inherent uncertainty, which may be reduced by good procedures and high-quality human capital, but cannot be eliminated.

- Good intelligence gathering by the rival can reduce the relevance of the nation's own intelligence as well as the

potency of its weapon systems and its overall military capability.

Not bounded by time or changing technology, the principles of intelligence include [5]

1. *Accuracy*: With accurate intelligence on the enemy's location, capability, and intent, planning can lead to victory.
2. *Timeliness*: Timeliness of intelligence contributes directly to the commander's ability to observe, orient, decide, and act and achieve victory.
3. *Usability*: To have value, intelligence must be tailored to meet the needs of the commander and intelligence community. To make intelligence usable, effective marketing must be applied.
4. *Fusion*: Fused intelligence produces the most accurate and complete picture of what is known about an activity. It draws upon the complementary strengths of signals intelligence, imagery intelligence, human intelligence (all be explained shortly).
5. *Relevancy:* Intelligence has relevancy if it contributes to the commander's ability to execute his mission at his level of military operation. It must be geared to meet the needs of commanders across the full spectrum of military operations.
6. *Intellectual honesty:* Intellectual honesty must extend to reporting. Intellectual honesty must drive the intelligence professional to distinguish for the commander information which is solidly grounded in fact. The commander cannot be left with uncertainty in his mind regarding what is fact and what is opinion.
7. *Communication*: It is the responsibility of the intelligence professional to employ the most effective way to inform the commander. Knowing the enemy's intent, capabilities, and location has no worth if the intelligence is not well communicated.

These seven principles form the basics of the art of military operations. They can greatly enhance the conduct of military operations at the strategic, operational, and tactical levels

IV. LEVELS OF MILITARY INTELLIGENCE

Military intelligence activities take place at all levels, from tactical to strategic, in peacetime and during a war.

- *Strategic intelligence:* This is the intelligence required for the formation of policy and military plans at national and international levels.
- *Operational intelligence*: This is intelligence required for planning and conducting campaigns and major operations to accomplish strategic at operational tier. The operational tier is below the strategic level of leadership.
- *Tactical Intelligence:* This is the intelligence required for the planning and conduct of tactical operations. It is needed by military field commanders to plan and conduct combat operations if necessary. It is operational and tactical intelligence, not necessarily numbers or employment of force, that can achieve success is in wartime operations
- *Human intelligence:* This form of intelligence, gathered by spies, is often the only form of intelligence that provides information about an opponent's intentions. When providing on-site

intelligence, planners were aided by human intelligence.

V. SOURCES OF INTELLENGCE

It is customary for the intelligence services of a nation to read the main newspapers and journals of the nations they interested is. This is a basic source of intelligence. It is also common for diplomats and journalists' personnel to have a secondary goal of collecting military intelligence for their nation. Some nations eavesdrop continuously on the entire radio spectrum, TV broadcasts, military traffic, radar emissions, telephone, and satellite traffic [6].

Different factors can be important in military intelligence. These factor leads to the following sources of intelligence [7].

- Communications intelligence is derived from foreign communications that are intercepted by non-intended recipients.
- Electronics intelligence is technical information obtained from foreign electromagnetic radiation.
- Telemetry intelligence is technical information that is derived from intercepting foreign telemetry data.
- Human intelligence is provided by spies, who are usually possess information about a nation's political leaders, strategies, and decisions.
- Biographical intelligence is information collected on the views, traits, habits, and story about the leaders and important individuals of a nation.
- Cartographic intelligence is derived from maps and charts.
- Economic intelligence is information concerning the production, distribution, and consumption of goods and services.
- Energy intelligence addresses the location and size of foreign energy resources.
- Counterintelligence is intended to detect, counteract sabotage, terrorist attacks, or assassinations.
- Geographic intelligence is derived from studying geographic characteristics such as terrain, climate, natural resources, transportation, boundaries, and population distribution.
- Medical intelligence is obtained from studying foreign natural and man-made environments that could affect the health of military forces.
- Sociological intelligence is gained from studying a nation's social stratification, value systems, beliefs, and other social characteristics.
- Transportation intelligence involves assessing a nation's ability to wage war, concerning its highways, railroads, inland waterways, and civil airways.

VI. APPLICATIONS

The following are common applications of military intelligence.

- Finding Your Enemy: Military intelligence has to do with knowing your enemies. As long as humans go to war to settle conflict, there will be a need for decision support to military and civilian leaders regarding enemies. Enemies will continue to gain influence, taking advantage of changing conditions in the international environment. The commander needs intelligence about the enemy and the battlespace prior to engaging in operations. Espionages aim at the goal of discovering the enemy's numbers, location, and formations. Secrecy is everything to them.

- *Homeland Security*: Military intelligence services will support the military's use of force at home in case of civil disturbance or terrorist attack on the US homeland. What we do not know is whether an aggressive use of military intelligence at home contributes to current counterterrorism efforts of the FBI and local law enforcement. For example, federal troops were deployed in the 1950s and 60s to help integrate Southern schools and deal with civil disorders in Detroit in 1967 [8]. Since September 11, 2001, terrorist attacks on the American homeland have changed things substantially.

- *Intelligence Organizations:* There are a great number of intelligence organizations at the national and international levels, make significant contributions by providing support to current operations. Producing military intelligence analysis is mainly the responsibility of the US Defense Intelligence Agency (DIA), created in 1983. Other intelligence organizations include the National Security Agency, the Central Imagery Office, and the Central Intelligence Agency. These organizations provide specialized support and advise defense policymakers on political-military matters [1].

- *Military Intelligence Specialists:* To become a military intelligence specialist, one must first join the armed forces. Military intelligence specialists are also required to have college degrees, strong communication and decision-making skills. Their main task is to gather, research, and analyze the information or data necessary for successful military operations. The data helps military leaders determine the most advantageous course of action. Military intelligence specialists can be assigned to various locations and their job includes providing leadership, prioritizing activities, and making presentations and reports to senior staff. They are sometimes trained as interrogators, interpreters, translators, radio announcers, and propaganda writers [9]. Figure 2 illustrates a typical military intelligence training [10].

Figure 2: Military intelligence training [10].

VII. BENEFITS AND CHALLENGES

Military intelligence helps to identify guerrilla combatants as well as "enemy" civilians. It can help lead to victory because it provides information on the adversary's capabilities and vulnerabilities. It reduces the unknowns that planners must face. It provides essential information that often saves the soldiers. If the military commander knows the strength of his opponent and the route of attack, he has the ability to consolidate and position his forces on the most advantageous ground. Yet force alone cannot win the day. Military intelligence gives the commander the knowledge of the battlefield and the understanding of their foe so that they ca focus their forces at the right place to win [11]. Military intelligence also plays an important role in a knowledge race as well as arms race between two nations.

Human intelligence, due to spying, is usually prone to inaccuracy. Battle is always risky. The intelligence field usually involves risking human lives. Illegal surveilling of journalists and government critics has been commonplace in Colombia for at least 15 years. Sometimes, military intelligence fails to provide commanders and policymakers with a good understanding of complex counterinsurgency environments.

VIII. GLOBAL MILITARY INTELLIGENCE

Most national governments have a military intelligence capability to collect information in both specialist units and from other arms and services. Each country has to produce its own military R&D and the intelligence apparatus. We typically consider the following countries and their military intelligence.

- *US Intelligence:* The US intelligence community is known as the world's largest, with an annual budget of $75 billion. An extensive intelligence system has been a vital part of the United States government since 1941. The primary mission of national military intelligence in the United States Army is to provide timely, accurate, and synchronized electronic warfare support to tactical, operational, and strategic-level commanders. In 1942, the Military Intelligence Division was reorganized as the Military Intelligence Service. It was tasked with collecting, analyzing, and disseminating intelligence. The great military victory we achieved in Desert Storm and the minimal losses sustained by US and Coalition forces can be directly attributed to the excellent intelligence picture we had on the Iraqis. In 1962, the Army Intelligence and Security Branch was established as a basic Army branch to meet the increased need for national and tactical intelligence [12]. The US emerged from the Cold War as the world's only multidimensional (e.g. military, economic, and political) "superpower."

- *Israeli Intelligence:* Israel is the only liberal democracy today where a military intelligence service leads in both military and civilian affairs. Israeli intelligence was outstanding in the Six-Day War in June 1967. Israel could not count on technological superiority to overcome the odds. But Israeli intelligence was superb, having located every Egyptian squadron, revealed the layout of every air base, and mastered Egyptian Air Force operational procedure. Using this information, Israeli intelligence developed a precise targeting scheme. This shows how strategic intelligence can be used in conjunction with operational intelligence to provide senior decision makers information. Yet, just as Israeli intelligence in this case can be viewed as an example of how intelligence operations should be conducted, Cairo's intelligence services opened the door to its own defeat. While Israeli forces were better trained, had superior leadership, and had a far more flexible doctrine, Egypt's army could boast that the majority of its soldiers were combat veterans [11].

- *Canadian Intelligence:* The evolution of a military intelligence system in Canada, developed largely due to the influence the two world wars. Rather than consolidating the wartime intelligence community to serve postwar needs, Canada submitted itself to subordinate partnership in an intelligence alliance with the United States and the United Kingdom [13]. The Canadian Forces (CF) face an uncertain future due to some factors such as its limited size and resources and operational "overstretch." There are few qualified intelligence specialists and they are spread far too thin [14].

- *Chinese Intelligence*: China's civilized history dates back nearly five millennia. However, the People's Liberation Army (PLA) has existed for less than a century. The PLA has been a politicized "party army" from the very beginning. China enjoys growing international standing and influence Its leaders see China's long-term military modernization program as essential to achieving great power status. China's comprehensive national strength, core competitiveness, and risk-resistance capacity are increasing. China realizes that the PLA must be prepared to fight in new realms and adapt to the modern, high-tech battlefield. This realization permeates China's national security strategy. The PLA engages with foreign militaries to demonstrate its growing capabilities and enhance China's image and influence abroad. China's armed forces intend to develop relations with their counterparts in neighboring nations and continue the traditional friendly military ties with their African, Latin American, and Southern Pacific counterparts [15]. Figure 3 depicts Chinese military intelligence [16].

Figure 3: Chinese military intelligence [16].

- *British Intelligence:* The Intelligence Corps is one of the smallest Corps in the British Army. It covers the entire range of potential intelligence from strategic government level to operational contingency planning. It is responsible for gathering, analyzing, and disseminating military intelligence. Operator Military Intelligence soldiers are employed in a variety of roles within the British Army [17].

- *Nigerian Intelligence:* Nigeria is an African country with a land mass of about 923,768 sq. kms. Since 1999, following the end of several years of military rule, Nigeria has been confronted with the problem of national security arising from violent crimes, including armed robbery, assassinations, ethno-religious violence, kidnapping for ransom, and terrorist bomb blasts. Boko-Haram terrorists have

conducted about 136 attacks, largely on police stations, churches, and mosques. The Boko Haram terrorism has negatively affected national security, democracy, good governance, and economic development [18].

CONCLUSION

Looking toward the future, one can imagine a fundamental change in the character of war. Military intelligence will continue to play a decisive role in future battles. It should not be relegated to a secondary status. The defense intelligence community will require many enabling technologies from private industry to help it meet its goals.

Job training for a military intelligence officer requires completing some courses. More information about military intelligence can be obtained from the books in [19-27] and other numerous books available at Amazon.com and books.google.com. One should also consult the journals that are exclusively devoted to it: *Studies in Intelligence* and *Canadian Military Journal.*

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