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Of the seven intelligence disciplines, OSINT is least appreciated, understood, or employed by staffs and organizations supporting the operational commander despite past successes at the strategic and tactical levels. These staffs and organizations tend to favor classified collection methods and information, and neglect to consider and integrate OSINT into their efforts.

The causes of this neglect are many, ranging from previously mentioned predisposition toward classified intelligence sources to the technical challenge of information excess that overloads the users with irrelevant information. Nonetheless, the main reason stems from inadequate joint doctrine on OSINT. Existing joint doctrine recognizes OSINT's value, but provides little guidance on employment. Additionally, doctrinal coverage is minimal relative to the other intelligence disciplines – suggestive of lesser value, and dissuading meaningful allocation of resources to OSINT. It is time to reconsider OSINT as an operational intelligence force and resource multiplier, and revise doctrine to reflect on the growing importance of OSINT in the all-source analysis process. Doctrine can no longer be vague; it must provide guidance to encourage meaningful allocation of resources to OSINT.

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OPEN SOURCE INTELLIGENCE – DOCTRINE'S NEGLECTED CHILD

by

Tuan N. Pham
LCDR, USN

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

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

Signature: _____

3 February 2003

CDR Richard J. F. Buckland, RN
Faculty Advisor

Preface

Ninety percent of intelligence comes from open sources. The other ten percent, the clandestine work, is just the more dramatic. The real intelligence hero is Sherlock Holmes, not James Bond.[1]

Lieutenant General Sam Wilson, USA (Ret)
former Director, Defense Intelligence Agency

More than eighty percent of intelligence is obtained from open sources.[2]

Allen W. Dulles
former Director, Central Intelligence Agency

Open source intelligence (OSINT) is one of seven intelligence disciplines used in the all-source analysis process.[3] Before proceeding, it is necessary to first distinguish between open source information and open source intelligence. Open source information is merely unclassified data available to the public, while OSINT results from applying analysis to validate this information as relevant, accurate, and actionable for use by the consumers. This distinction is important because while open source information may be obtained quickly, easily, and cheaply, it must first be valid to be of intelligence value.[4] Thus, corroboration and integration with the other intelligence disciplines is imperative - likened to the "outer pieces of a puzzle, without which you can neither begin nor complete the puzzle; while classified information is essential to fill in the hardest to understand middle of the puzzle, and to complete the picture."[5] To do otherwise undermines the all-source analysis process.

OSINT is not a new phenomenon. It has a long history. During the American Civil War, both sides actively collected each other's newspapers to obtain information for exploitation. In recent years, peacekeepers in the former Yugoslavia used OSINT to stay abreast of how the local populace perceived them.[6] Nowadays, Saddam Hussein is undoubtedly paying close attention to the world media to determine America's intentions and resolve against his regime.

OSINT itself, will rarely provide the complete answer. Nevertheless, it does offer several advantages. Open source collection allows costly classified collection capabilities to focus on

critical intelligence gaps. Allied and coalition partners, non-governmental organizations (NGOs), and private volunteer organizations (PVOs) can share OSINT – making it particularly useful for military operations other than war (MOOTW) and interagency coordination. Open sources can provide indications and warnings (I&W) for developing threats and crises[7]; and may be the only alternative for responding quickly to critical information requirements of aforementioned crises, or those requirements not given priority for classified collection. OSINT will provide political, economic, and military context to classified information.[8]

OSINT has shortcomings as well. OSINT may contain inaccuracies, biased perspectives, irrelevant information, or even disinformation. OSINT may unintentionally expose areas of intelligence interest to the public and potential enemy. Open source collection is labor intensive (time and cost associated with searching for exactly the right information within the vast volumes of public information)[9], and technological innovations such as the "Internet" have the potential to saturate consumers with information.[10] The flood of information now available means that collection is no longer the principal problem. The greater challenge is analysis.

Finally, the value of open sources will depend on the nature of the society in question. In an open society, much open source information will be available with data on political, economic, and military affairs. In a closed society, much less open source information will be available, and the media will be subject to control and propaganda.[11]

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OPEN SOURCE INTELLIGENCE – DOCTRINE'S NEGLECTED CHILD

> *The technical miracle has greatly reduced the burden on the secret agent. Lives need not now be risked in gathering facts that can easily be seen by the eye of the camera…Instead the agent concentrates on gathering ideas, plans, and intentions, all carried in the minds of men and to be discovered only from their talk or their written records. Nobody has yet taken a photograph of what goes on inside people's heads. Espionage is now the guided search for the missing links of information that other sources do not reveal.*[12]

Of the seven intelligence disciplines, OSINT is least appreciated, understood, or employed by staffs and organizations supporting the operational commander (refers to commander of unified command, sub-unified command, or joint task force) despite past successes at the strategic and tactical levels.[13] These staffs and organizations tend to favor classified collection methods and information, and neglect to consider and integrate OSINT into their efforts.

The causes of this neglect are many, ranging from previously mentioned predisposition toward classified intelligence sources to the technical challenge of information excess that overloads the users with irrelevant information, often containing inaccuracies, biased perspectives, or even disinformation.[14] Nonetheless, the main reason stems from inadequate joint doctrine on OSINT. Existing joint doctrine recognizes OSINT's value, but provides little guidance on employment. Additionally, doctrinal coverage is minimal relative to the other intelligence disciplines – suggestive of lesser value, and dissuading meaningful allocation of resources to OSINT.

It is time to reconsider OSINT as an operational intelligence force and resource multiplier, and revise doctrine to reflect on the growing importance of OSINT in the all-source analysis process. Doctrine can no longer be vague; it must provide guidance to encourage meaningful allocation of resources to OSINT. Considering the explosive growth and accessibility of open source information and the new threat paradigm[15], operational staffs and

organizations can no longer neglect OSINT. To do so invites disaster. This paper will examine the inconsistent operational employment of OSINT to highlight the inadequacy of existing doctrine; scrutinize the doctrine to identify gaps for revision; derive lessons learned to improve OSINT support to the operational commander; and thereby justify a greater emphasis on OSINT in joint doctrine.

Current Operational Employment of OSINT

> *OSINT is critical to all military operations and should be exploited...NIPRNET can be a powerful tool for real world open source information assisting in the compilation of analyzed intelligence.*[16]
>
> Exercise Tandem Thrust 1997/2001
>
> *A significant amount of unclassified information exists to support providing greater information on a port's security environment and other force protection issues.*[17]
>
> PHIBRONFOUR Mediterranean Deployment (1999)
>
> *Unclassified information from non-traditional intelligence sources is the main source of intelligence for humanitarian operations.*[18]
>
> Operation Avid Response (1999)
>
> *OSINT is a necessity and should be incorporated into the force structure during the planning phase of operations.*[19]
>
> Operation Joint Endeavor (1997)

Current operational employment of OSINT is inconsistent, and varies by staffs and organizations. These staffs and organizations lack adequate doctrinal guidelines to facilitate consistent employment. In general, the various Joint Intelligence Centers (JIC) and Joint Task Force (JTF)/fleet staffs exploit OSINT as I&W and analysis tools – traditional applications. Open sources – particularly CNN – can provide advance notice of developing threats and crises not given priority for classified collection for the JIC and JTF/fleet watch centers.[20] OSINT is also pervasive amongst the JIC analysts who provide political, economic, and military context to classified information. Most JIC analysts now manage their time and effort between the physically separated unclassified (Open Source Information System – OSIS and Non-classified Internet Protocol Router Network - NIPRNET) and classified systems (Joint Worldwide

Intelligence Communications Systems - JWICS and Secret Internet Protocol Router Network - SIPRNET). JTF/fleet analysts, on the other hand, are less likely to use OSINT. They often do not have the time or the resources for detailed analysis or for fusing OSINT with the other intelligence sources, and tend to rely on their JIC counterparts for finished all-source intelligence products.

The above generalizations do not imply that OSINT employment is limited to only I&W and analysis. On the contrary, OSINT has greater utility.

- OSINT is a force and resource multiplier for operational intelligence - "source of first resort."[21] Initial employment of OSINT will identify critical intelligence gaps, and focus the collection requirements of the other intelligence disciplines (collection strategy). The object is to obtain "good enough" answers from open sources so as to avoid tasking classified collection systems at all (economy of effort - minimize competition for limited collection resources).
- OSINT can facilitate "speed of command" – ability to rapidly collect information, assess the situation, develop a course of action, and immediately execute with overwhelming effect. OSINT is often the only intelligence discipline able to provide the operational commander with quick orientation adequate for dealing with rapidly developing crises during the intelligence preparation of the battlespace (IPB) process.[22]
- OSINT can protect classified intelligence sources and methods by serving as a cover for information sharing with multinational forces, NGOs, or PVOs – making it particularly useful for MOOTW and interagency coordination.[23]
- Although admittedly not an intelligence issue in traditional terms, open sources linkage with information operations (IO) has an intelligence flavor, and warrants a discussion. Open sources are the primary media for IO, particularly psychological operations (PSYOPS) and deception

operations. Open sources can disseminate key psychological themes to support PSYOPS, and inaccuracies or disinformation to facilitate deception operations. Key to both endeavors is media management. Media management can deny enemy – and ensure friendly – exploitation of OSINT. This linkage is not yet a mainstream concept in the intelligence community (IC). The IC characterizes OSINT as the passive exploitation of opens sources - conversion to actionable intelligence. Nevertheless, the active exploitation of OSINT in terms of support to IO is gaining favor in the IC.

Operational staffs and organizations lack formalized employment guidelines. If they had such guidelines, the following real-world incident - illustrating the operational potential of OSINT - would be more common vice an isolated case. Otherwise, OSINT employment will continue to vary from staff to staff and organization to organization.

In 2002, open sources provided operational I&W of escalating India-Pakistan tensions. Consequently, the U.S. Pacific Command (PACOM) tasked Seventh Fleet (the potential JTF) to conduct contingency planning for potential non-combatant evacuation operations (NEO) of American citizens and designated foreign nationals from India. The time factor complicated matters for the planners. PACOM required the mission analysis for consideration in short order. The tasking occurred over the weekend, marginalizing support from the national and theater intelligence organizations. Fortunately, OSINT met much of the crisis action planning information requirements – not all, but enough to proceed with NEO planning. OSINT also provided valuable political, economic, and military context to the nature of the operation. Additionally, OSINT helped develop the collection requirements for subsequent planning support. Finally, the unclassified nature of OSINT allowed possible early incorporation of

requisite multinational forces, NGOs, and PVOs into the planning process, thereby enhancing unity of effort and increasing the likelihood of operational success.

Historical Operational Employment of OSINT

> *Those who cannot remember the past are condemned to repeat it.*[24]
> George Santayana (1863-1952)

Operational employment of OSINT generally increased over time as OSINT became more developed, understood, and appreciated. Nonetheless, employment was inconsistent through the years due to inadequate doctrine. The following is a selective review of historical employment – in increments of five to seven years - from the Falklands Conflict to the Global War on Terrorism.

The Falklands Conflict (1982)

The Falklands Conflict was predominantly a naval operation that occurred at the dawn of the Information Age. OSINT was a force and resource multiplier for British operational intelligence.

Open sources formed the foundation of British IPB, and identified critical intelligence gaps for exploitation by the other intelligence disciplines.[25] Unfortunately for the British, this was more out of necessity than design. British intelligence was focused on the Cold War and support to NATO, and ill prepared to deal with the rapidly developing crisis. Much of the initial planning relied on open sources for intelligence.

Open sources gave context to British classified information, and thereby provided insight into the Argentine military junta's decision-making cycle. The British believed that the Argentines were not totally committed to keeping the Falklands based on their strategic goals,

perceptions of British intentions, and pre-occupation with Chile – factors influencing strategic support in terms of resource allocation.[26] Hence, the British correctly assessed the Argentine operational scheme, and developed an effective campaign plan to first isolate the Argentine occupation force, and then to retake the islands.

Media coverage of British deployed forces changed the Argentine operational scheme.[27] Prime Minister Thatcher's public statements on submarine deployments and exclusion zones influenced Argentine operational movement and maneuver, logistics, and protection.[28] Conversely, lax control of the media compromised British plans to the Argentines for what proved to be a costly assault on Goose Green by the Parachute Regiment.[29] Additionally, the Argentines continued the air campaign - despite heavy losses - due to television reports providing battle damage assessments of their air strikes against British maritime targets.[30]

Operation Just Cause - Panama (1989)

Operation Just Cause was primarily a land operation, and the first major joint operation following the Goldwater-Nichols Department of Defense Reorganization Act of 1986. PSYOPS played a key role in the operation.

The rapid establishment of President Guillermo Endara's post-Noriega government was a vital operational objective. Fundamental to this objective was the PSYOPS campaign to win public support for Endara, and to persuade resisters to lay down their arms. Open sources disseminated key psychological themes, and facilitated the successful "weapons for dollars program."[31] Unfortunately for the United States, General Manuel Antonio Noriega also enjoyed success in this field. His ability to sustain troop loyalty and domestic support was based on the

success of his PSYOPS efforts, and the effectiveness of his psychological themes in summarizing Panamanian attitudes and perceptions.[32]

U.S. commanders took great efforts to maintain operational security. Planning, rehearsals, and deployments were low-key, and away from media coverage. They did not want Noriega and the Panamanian Defense Force (PDF) alerted until it was too late.[33] SOUTHCOM established a Joint Information Office (JIO) as the chief coordinator and release authority for operational news.[34] SOUTHCOM also established the Joint Information Bureau (JIB) to answer media queries, and to manage the media pool. The JIO and JIB regained the initiative in the psychological struggle. During the crisis, Noriega closed all independent media, and barred outside newspapers from distribution – enabling his propaganda machine to influence the Panamanian people uncontested.[35]

OSINT gave context to U.S. classified information, and provided insight into Noriega's decision-making cycle. Noriega rose to power as an intelligence officer in the service of dictator Brigadier General Omar Torrijos. Throughout his career, Noriega demonstrated mastery in understanding and using PSYOPS in furtherance of his political career. Noriega even wrote a manual on PSYOPS that provided insight into the mind of Noriega the man, his philosophy, and his perception concerning U.S. foreign policy. The manual revealed the theory and some of the strategies Noriega has used in the past to consolidate his power, and to outmaneuver foreign and domestic threats to his power base.[36] U.S. commanders prudently read Noriega's manual, fused the insight gained with classified information, and put the knowledge to good operational use.[37]

Evidence suggests that non-DOD agencies, NGOs, and PVOs were not involved in the planning process due to intelligence and operational security concerns.[38] Consequently, these organizations were ill prepared to assume responsibilities from DOD civil affairs units during

post-hostilities operations.[39] There was no unity of effort. OSINT could have provided plausible cover for much of the classified information, and facilitated more interagency involvement in the planning process.

Operation Provide Relief/Restore Hope/Continued Hope - Somalia (1992-1995)

Somalia was a major humanitarian assistance operation, and a test of the interagency coordination process. OSINT employment for this operation was generally poor.

OSINT did not significantly contribute to the IPB process. Evidence suggests that journalists with indigenous contacts and in-country experience were not debriefed for their knowledge or assessment. These journalists could have provided valuable insight into the factional Somali clans, social climate, and various warlords controlling the country.[40]

Although the operating environment and threats were unsophisticated, collection strategy favored classified intelligence systems and methods. Consequently, there was great concern that sensitive intelligence sources and methods might be compromised. Guidelines were developed and followed to limit intelligence flow to coalition partners, NGOs, and PVOs.[41] OSINT could have provided the plausible cover for much of the intelligence derived from classified sources.

The predisposition toward classified intelligence sources was not the sole reason for the poor information exchange. Organizational culture also contributed to the problem. Evidence suggests that DOD cooperation and coordination with the various relief organizations was insufficient to accomplish the humanitarian assistance mission. Most of the food items were not getting to those that needed them. It was not until the establishment of the Civil Military Operations Center (CMOC), which served as the "clearing house" for all information to and from the various NGOs and PVOs that conditions improved. Although intelligence gathering

was not its function, the CMOC also proved to be a valuable source of OSINT from the NGOs and PVOs.[42]

Media management was poor. The JIB was not established until well into the operation. U.S. commanders did not understand or appreciate the power of the media to influence the perception of the mission at the tactical, operational, and strategic levels.[43] For example, the vivid television scenes of U.S. soldiers' bodies dragged through the streets of Mogadishu caused a domestic public debate of the mission in Somalia - resulting in the eventual withdrawal of U.S. forces.

Operation Enduring Freedom - Global War on Terrorism/Afghanistan (ongoing)

Analysis of Operation Enduring Freedom is still ongoing, particularly the prosecution of the land campaign in Afghanistan. Hence, discussion will focus on the various operations conducted by the supporting combatant commanders – specifically PACOM where lessons learned have developed. OSINT employment was generally poor, and in some cases misguided.

Seventh Fleet facilitated several coalition operations in support of Operation Enduring Freedom:

- Strait of Malacca Escort Operations. U.S. Navy, Indian Navy, Republic of Singapore Navy, and Royal Malaysian Navy shared escort duties of vulnerable high value assets transiting through the Strait of Malacca.
- Japan Maritime Self Defense Force (JMSDF) / Republic of Korea Navy (ROKN) Logistical Support. JMSDF and ROKN ships provided tanker, surveillance, and sealift services to U.S. naval forces operating in the Arabian Sea.

- Defense of Diego Garcia. Australian F/A-18 fighter aircraft provided land-based air defense of Diego Garcia, a critical forward operating base.

In all cases, OSINT was not the preferred informational choice to facilitate operations, and consequently delayed their execution. Seventh Fleet working with JIC Pacific (JICPAC) went through the laborious and time-consuming task of declassifying information in order to release it to coalition partners – resulting in two undesirable consequences. Firstly, the coalition partners felt slighted that it took so long to provide them with information, especially considering that the United States was the one requesting assistance. Secondly, the requirement for multiple releasable versions lengthened production time.

Pacific Fleet (PACFLT) and Seventh Fleet unsuccessfully tried to use OSINT for tactical I&W. Both organizations established or integrated into existing watch organizations a separate Force Protection Cell that monitored classified and unclassified sources for tactical tippers – a fundamentally flawed approach. They eventually realized that these cells were redundant efforts, and undermined the efforts of JICPAC. It would have been better to redirect their efforts to work with JICPAC to separate the "chaff from the wheat" in order to provide actionable intelligence to the staff planners.

Current Doctrine on OSINT

> *At the heart of war lies doctrine. It represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and knowledge reinforced by experience, which lays the pattern for the utilization of men, equipment, and tactics. It is fundamental to sound judgment.*[44]
>
> General Curtis E. Lemay, USAF (Ret)
> former Chief of Staff, USAF

Inadequate doctrine keeps OSINT from realizing its full potential at the operational level, and is the reason why operational employment of OSINT has been and will continue to be

inconsistent. Existing joint doctrine does not sufficiently reflect OSINT's growing importance to the all-source analysis process, and provides minimal coverage relative to the other intelligence disciplines. The entire discussion of open sources is limited to a few short paragraphs in Joint Pub 2-01 (Joint Intelligence Support to Military Operations)[45], and a few sentences scattered throughout the other publications.[46] There is little meaningful guidance on employment, and no dialogue on advantages and disadvantages. The following examples are indicative of the superficial--and often obvious--guidance pervasive throughout joint doctrine:

- "Intelligence sources are grouped according to one of seven intelligence disciplines…Information is sought from the widest possible range of sources to avoid any bias that can result from relying on a single source of information, and to improve the accuracy and completeness of intelligence…The operations of all collection sources must be synchronized and coordinated to allow cross-cueing and tip-off among collectors." Joint Pub 2-0 (Doctrine for Intelligence Support to Joint Operations)
- "Open source media such as local newspapers, radio, television, and the Internet may be a valuable information source." Joint Pub 3-07.3 (Joint Tactics, Techniques, and Procedures for Peace Operations)
- "The joint task force and combatant command staffs should make every attempt to exploit open source information in preparing and executing interagency operations." Joint Pub 3-08 (Interagency Coordination During Joint Operations)
- "Intelligence collection for offensive IO includes all possible sources, from national-level covert operations through local open sources such as news media, commercial world contacts, academia, and local nationals." Joint Pub 3-13 (Joint Doctrine for Information Operations)

- "The most numerous and generally useful means to conduct PSYOPS are open sources of information." Joint Pub 3-53 (Doctrine for Psychological Operations)

Recommended Doctrine Revisions

> *Change is not made without inconvenience, even from worst to better.*[47]
> Richard Hooker (1554-1600)

Joint doctrine must reflect the growing importance of OSINT, and recognize it as an equal to the other traditional intelligence disciplines. Joint publications that address MOOTW, combined operations, and interagency coordination deserve more coverage, as there is little or no mention of OSINT suitability in terms of information sharing with multinational forces, NGOs, and PVOs.[48] Another area is Joint Pub 2-01 (Joint Intelligence Support to Military Operations), where there is minimal discussion on the necessity of connectivity between open source systems (OSIS and NIPRNET) and classified systems (JWICS and SIPRNET) to facilitate the all-source analysis process, and OSINT integration into the crisis action planning process to facilitate "speed of command." Joint Pub 3-13 (Joint Doctrine for Information Operations) and 3-53 (Doctrine for Joint Psychological Operations) require more discussion of the linkage with open sources. Finally, Joint Pub 2-0 (Doctrine for Intelligence Support to Joint Operations) needs a general discussion of OSINT advantages and disadvantages – particularly OSINT's value as an I&W tool for threats and crises not given priority for collection, a force and resource multiplier for operational intelligence, and a provider of political, economic, and military context to classified information.

Lessons Learned – "Just in Time" Initiatives

An idea is a point of departure and no more. As soon as you elaborate it, it becomes transformed by thought.[49]

Pablo Picasso (1881-1973)

Doctrine revision takes time. In the interim, the following "just in time" initiatives should be implemented now by JIC and JTF/fleet staffs to take advantage of the present potential of OSINT.

In 1999, PACOM established the Virtual Information Center (VIC) that utilizes open sources as the basis for creating theater-specific unclassified reports that staff members, subordinate commands, and foreign consumers can access for additional situation awareness. It also responds to specific requests for information by the consumers.[50] This initiative is a step in the right direction, but requires further refinement before emulation by the other combatant commanders. The VIC does not verify accuracy of its sources; every VIC report concludes with that disclaimer. Additionally, the VIC does not have intelligence personnel. Consequently, there is no integration of VIC-produced OSINT with the other intelligence sources, and analysis is left to the consumers. It is recommended that VIC resources be given to JICPAC to support its intelligence analysts in the all-source analysis process. In this way, open source information truly becomes OSINT.

JTF/fleet staffs have roles to play too. They can encourage their combatant commanders to implement a PACOM-model VIC, and in the interim, leverage existing OSINT efforts at the national level where OSINT is an ongoing assessment process under the auspices of the Community Open Source Program Office (COSPO).[51] The J2/N2 should treat OSINT as any other exploitable intelligence discipline. He should ensure his communications architecture supports access to OSIS and NIPRNET, incorporates OSINT into his watch team I&W efforts, and trains his intelligence staff on operational OSINT employment - particularly planning

support to rapidly developing crises, MOOTW, combined operations, and interagency coordination.

Conclusion

> *A single or multiple intelligence discipline approach will not work. Every possible type of intelligence endeavor must be applied concurrently and synergistically in an all-source collection and all-source analytical environment, so that no stone goes unturned, no opportunity is missed, and no venomous snake is left alive, unless it suits our purpose.*[52]
>
> Lieutenant General Patrick M. Hughes, USA (Ret)
> former Director, Defense Intelligence Agency

Operational staffs and organizations tend not to consider and integrate OSINT into their efforts despite its potential as a force and resource multiplier – "source of first resort". They still favor the other traditional intelligence disciplines. The main reason stems from inadequate joint doctrine. Considering the explosive growth and accessibility of open source information, and the many advantages it offers to the all-source analysis process, a revision in doctrine is warranted. Joint doctrine, while recognizing OSINT as an intelligence discipline, must reflect its growing importance, and acknowledge it as an equal to the other disciplines. Specific employment guidance must replace vague references. Finally, serious consideration should be given to "just in time" initiatives to support the operational commander now, while he waits for doctrinal changes.

ENDNOTES

[1] Richard S. Friedman, "Open Source Intelligence," Parameters (Summer 1998): 159; quoted in David Reed, "Aspiring to Spying," Washington Times, 14 November 1997, Regional News, 1.

[2] Ibid, 160.

[3] The other six intelligence disciplines are signals intelligence, measurement and signature intelligence, imagery intelligence, human intelligence, counter-intelligence, and technical intelligence. U.S. Department of Defense, Joint Doctrine for Intelligence Support to Joint Operations, Joint Pub 2-0 (Washington, DC: Joint Chiefs of Staff, 9 March 2000), II-3.

[4] Wyn Bowen, "Open Source Intelligence: A Valuable National Security Resource," Jane's Intelligence Review (November 1999): 50-54.

[5] "Chapter 1 – Overview of Open Sources and Services," OSINT Handbook, 15 September 1996, <http://isuisse.ifrance.com/emmaf2/96Vol1/Chapter1.html> (23 December 2002), 3.

[6] Wyn Bowen, 54.

[7] Strategic and operational I&W are possible, while tactical I&W are unlikely. "Chapter 5 – Open Sources and Military Capabilities," OSINT Handbook, 15 September 1996, <http://isuisse.ifrance.com/emmaf2/96Vol1/Chapter5.html> (23 December 2002), 3-4.

[8] Wyn Bowen, 50-51.

[9] Ibid, 52-53.

[10] The Internet exemplifies technology that is not yet developed (fundamental anarchy and a potential for disinformation), and subject to manipulation and deception. Richard S. Friedman, 162-163.

[11] Wyn Bowen, 52.

[12] Richard S. Friedman, 164; quoted in Ray Cline, "Introduction," The Intelligence War (London, England: Salamander Press, 1984), 8.

[13] At the strategic level, military sustainability, geographic location, and allies are critical elements of national power. Much of the information required is available through open sources. Additionally, OSINT can provide reliable gauges of national intent (content analysis and comparisons of content over time). At the tactical level, open sources can provide military reliability, geographic terrain (maps, charts, and images), and civil psychology – essential determinants of battlefield success. "Chapter 5 – Open Sources and Military Capabilities," OSINT Handbook, 15 September 1996, <http://isuisse.ifrance.com/emmaf2/ 96Vol1/Chapter5.html> (23 December 2002), 3-4.

[14] Organizationally, the military depends on a classified intelligence community for its intelligence, and does not have an alternate structure for OSINT. Culturally, there exists a strong attitude that information attains a special value only if it is classified. Technically, the existing command and control architecture (including intelligence elements) is not configured for information sharing with allied forces, NGOs, or PVOs. "Appendix A – OSINT: What is it? Why is it Important to the Military?" OSINT Handbook, 15 September 1996, <http://isuisse.ifrance.com/ emmaf2/96Vol1/AppendixA.html> (23 December 2002), 7.

[15] The new threat paradigm, in contrast to the old Cold War paradigm, is generally nongovernmental, asymmetric, dynamic, and nonlinear in development.

[16] "Observation – Theater Strategic Intelligence, Surveillance, and Reconnaissance: Exercise Tandem Thrust 1997," JULLS No. 89542-86087, 12 March 1997. Unclassified. "Observation – NIPRNET: Exercise Tandem Thrust 2001," Lesson Learned No. LL7F0-05813, 16 May 2001. Unclassified. Navy Lessons Learned Database, Available on Naval Warfare Development Command Lessons Learned Database CD-ROM, Newport, RI: Naval Warfare Development Command, November 2002, SECRET.

[17] "Observation – NCIS UNCLAS Threat Assessment: PHIBRONFOUR Mediterranean Deployment 1999," Lesson Learned No. LL6F0-07138, 8 May 1999. Unclassified. Navy Lessons Learned Database, Available on Naval Warfare Development Command Lessons Learned Database CD-ROM, Newport, RI: Naval Warfare Development Command, November 2002, SECRET.

[18] "Observation – NIPRNET Use During Humanitarian Operations: Operation Avid Response 1999," Lesson Learned No. LL6F0-07272, 8 October 1999. Unclassified. Navy Lessons Learned Database, Available on Naval Warfare Development Command Lessons Learned Database CD-ROM, Newport, RI: Naval Warfare Development Command, November 2002, SECRET.

[19] "Observation – Counterintelligence Single Source Analysis: Operation Joint Endeavor 1997," JULLS No. 34979-02680, 14 May 1997. Unclassified. Navy Lessons Learned Database, Available on Naval Warfare Development Command Lessons Learned Database CD-ROM, Newport, RI: Naval Warfare Development Command, November 2002, SECRET.

[20] Threats and crises - low-tiered countries, nontraditional threats, transnational dangers, and humanitarian assistance/disaster relief events.

[21] "Chapter 1 – Overview of Open Sources and Services," OSINT Handbook, 15 September 1996, <http://isuisse.ifrance.com/emmaf2/96Vol1/Chapter1.html> (23 December 2002), 3.

[22] The operational commander requires generalizations like port clearances (deepest ship draft), location of the five fathom line (critical to naval gunfire support), or the distance of the objective area from the five fathom line (determines if CH-46 helos can fly there and back with forward area refueling points). Other generalizations include (but not limited to) capabilities of air, naval, and ground forces; cross-country mobility; weather; water availability; bridge loading; and civil communications. "Chapter 2 – Access: Intelligence in the Information Age", OSINT Handbook, 15 September 1996, <http://isuisse.ifrance.com/ emmaf2/96Vol1/Chapter2.html> (23 December 2002), 7.

[23] MOOTW - noncombatant evacuation operations, counter-terrorist operations, foreign internal defense, peace operations, consequence management, and humanitarian assistance/disaster relief.

[24] Robert Andrews, The Columbia Dictionary of Quotations (New York, NY: Columbia University Press, 1993), 406.

[25] IPB - order-of-battle, weapon capabilities, terrain, weather, and biographical data. Intelligence gaps - force disposition, strategies, tactics, and operational/tactical I&W. Theodore L. Gatchel, "Operational Art and Task Force Operations during the Falklands/Malvinas Conflict," (Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2001), 26-27.

[26] Argentine military junta's strategic objectives were to divert attention from its domestic problems (poor economy, human right abuses, and political pressure for a return to civilian rule), and to conduct a regional show of force – particularly directed toward Chile (significant forces deployed to prevent potential opportunism by Chile). They assumed British will negotiate rather than try to retake the islands by force (OSINT suggesting British military decline, pervasive trend toward colonial divestiture, and Prime Minister Thatcher lacked the political will), and gave strategic guidance to Brigadier General Menendez to "hold to negotiate." They expected a diplomatic solution to the crisis, and wanted to negotiate from a position of strength. James Neilson, "Heading Toward an Orderly Retreat," Buenos Aires Herald, 28 February/7 March/28 March/11 April 1982, Politics and Labor Section. Theodore L. Gatchel, 1-2, 19-20.

[27] Operational scheme changed from "occupy in order to negotiate" to "reinforce in order to deter the United Kingdom from retaking the islands by force, and then negotiate." Theodore L. Gatchel, 19-20.

[28] Operational movement and maneuver - reinforced southeastern bases to support defense of Falklands, tactical maneuvers to take advantage of exclusion zones (pincer movements to attack British naval task force). Operational logistics – used small fast boats to reinforce/supply the islands, relied more on air transports, did not lengthen airfield at Port Stanley (British denied operational reach). Operational protection - kept warships outside of exclusion zones, later within territorial seas. Theodore L. Gatchel, 5-7, 23-26.

[29] Argentines reinforced Goose Green when alerted by British media of impending attack. Theodore L. Gatchel, 27.

[30] Argentines had no means of confirming the success or failure of their air attacks except through such information as the British Defense Ministry chose to make public. Theodore L. Gatchel, 28.

[31] Themes put forth by U.S. PSYOPS forces included: U.S. troops deployed to protect the lives and property of U.S. citizens; U.S. troops would help President Endara form a government responsive to the will and aspirations of the people; U.S. differences were with Noriega, not with the Panamanian people; U.S. forces would depart as soon as the new government could take over; the United States would reward those assisting in locating PDF leaders and weapons caches; and a reward for $1 million would be paid for anyone apprehending Noriega, and turning him over to U.S. forces. Thomas Donnelly and others, Operation Just Cause: The Storming of Panama (Boston, MA: Lexington Books, 1991), 53-54, 65.

[32] His tactics and themes characterized him as the victim of U.S. aggression, and he charged that the United States was trying to take back the Panama Canal, abrogate the Carter's Administration agreements, and punish Panama for past deeds. Defense Technical Information Center, Enemy Themes and Friendly Counter-themes in Psychological Operations: A Case Study of Panama, Technical Report (Alexandria, VA: 1990), 31.

[33] To avoid alerting the press, General Powell held the last Joint Chiefs of Staff meeting prior to D-Day at his quarters (Fort Meyer). Lieutenant General Stiner's Headquarters announced an emergency deployment exercise in an unsuccessful attempt to explain the airlift as just another readiness exercise. Secretary of Defense Cheney activated the media pool well after H-Hour for fear of early press disclosure. Ronald H. Cole, "Operation Just Cause: The Planning and Execution of Joint Operations in Panama," November 1995, Joint Electronic Library CD-ROM, Washington, DC: Joint Chiefs of Staff, September 2001; 22, 28, 34, 47.

[34] JIO tasked to deny release of information exploitable by the enemy (current or future operations, intelligence collection activities, friendly order-of-battle, and effectiveness of enemy tactics and techniques). Ronald H. Cole, 23.

[35] Ibid, 34-35, 48.

[36] Defense Technical Information Center, 19.

[37] General Thurman (SOUTHCOM) read the manual, and gained insight into Noriega the man. He prudently recommended limited support to the ill-fated Major Giroldi's coup. He concluded that the coup was poorly motivated, conceived and led; fatally flawed; and potentially a PSYOPS trap by Noriega. Additionally, OSINT of the coup provided Lieutenant General Stiner (Joint Task Force Commander) valuable insights into how the PDF command structure would react to the crisis, and more importantly which units were loyal to Noriega. Thomas Donnelly, 68-72.

[38] Thomas Donnelly, 25.

[39] Post-hostilities operations included but not limited to Promote Liberty (civil-military operations plan for public safety, health and population control), negotiations with the Vatican for the release of Noriega to U.S. custody, and transfer of civil responsibilities to the new Panamanian government headed by President Endara. Thomas Donnelly, 46, 53-62.

[40] Muhammad Farah Aidid was the most powerful warlord, and controlled central Somalia. Muhammad Ali Mahdi controlled Mogadishu. Muhammad Omar Jess controlled the port city of Kismayu, and part of southwestern Somalia. Muhammad Siad Hersi controlled the rest of southwestern Somalia. U.S. Department of Defense, Joint Military Operations Historical Collection – Operations in Somalia, (Washington, DC: Joint Chiefs of Staff, 15 July 1997), VI-1.

[41] Kenneth Allard, Somalia Operations: Lessons Learned (Washington DC: National Defense University Press, 1995), 74-75.

[42] Joint Chiefs of Staff, Joint Military Operations Historical Collection – Operations in Somalia , (Washington, DC: 15 July 1997), VI-2 to VI-3.

[43] Kenneth Allard, 86.

[44] U.S. Department of Defense, Joint Doctrine for Intelligence Support to Joint Operations, Joint Pub 2-0 (Washington, DC: Joint Chiefs of Staff, 9 March 2000), I-1.

[45] U.S. Department of Defense, Joint Intelligence Support to Military Operations, Joint Pub 2-01, Appendix C (SECRET)(Washington, DC: Joint Chiefs of Staff, 20 November 1996), C-E-1,2 (Unclassified).

[46] Joint Pub: 2-0 (Doctrine for Intelligence Support to Joint Operations), 2-01.3 (Joint Tactics, Techniques, and Procedures for Joint Intelligence Preparation of the Battlespace), 2-02 (National Intelligence Support to Joint Operations), 3-07.3 (Joint Tactics, Techniques, and Procedures for Peace Operations), 3-07.6 (Joint Tactics, Techniques, and Procedures for Foreign Humanitarian Assistance), 3-08 (Interagency Coordination During Joint Operations), 3-13 (Joint Doctrine for Information Operations), and 3-53 (Doctrine for Joint Psychological Operations).

[47] Robert Andrews, 129.

[48] Joint Pub: 3-07 (Joint Doctrine for Military Operations Other Than War), 3-07.3 (Joint Tactics, Techniques, and Procedures for Peace Operations), 3-07.5 (Joint Tactics, Techniques, and Procedures for Noncombatant Evacuation Operations), 3-07.6 (Joint Tactics, Techniques, and Procedures for Foreign Humanitarian Assistance), 3-16 (Joint Doctrine for Multinational Operations), 3-08 (Interagency Coordination During Joint Operations), and 3-57 (Joint Doctrine for Civil-Military Operations).

[49] Robert Andrews, 438.

[50] PACOM Virtual Information Center Homepage, <http://www.vic.pacom.mil> (23 December 2002).

[51] It was COSPO that created OSIS, a firewall-protected network for accessing and sharing open source information and value-added services among the intelligence agencies and related organizations. “Chapter 7 – Overview of Open Sources and Services,” OSINT Handbook, 15 September 1996, <http://isuisse.ifrance.com/emmaf2/96Vol1/Chapter7.html> (23 December 2002), 1-2.

[52] Lieutenant General Patrick M. Hughes, “Statement,” U.S. Congress, Senate, Committee on Governmental Affairs, Intelligence Issues Affecting Homeland Security, Hearings before the Committee on Governmental Affairs, 116th Cong., 2nd sess., 26 June 2002, 2.

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