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Operational Intelligence in a Changing World

By

Jean MacIntyre
Major, USAF

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

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: Jean MacIntyre

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Abstract

Without a stable and known threat focusing years of intelligence work, an operational intelligence support plan today must consider factors not only such as what intelligence will be needed and where that intelligence can be produced, but also how much of it is currently available and whether the remainder can be acquired within the time constraints of the planned operation. Operators and planners today cannot assume that critical intelligence products will always be available for every part of the world, and must take this into account when planning operations. Because the intelligence community does not, and will not, have the resources to collect, analyze, process, produce, and disseminate all the intelligence that could be needed for military operations in any location in the world, the President issued priorities to focus their efforts and resources in Presidential Decision Directive 35. This directive acknowledges that many parts of the world will not have U.S. government intelligence resources directed at them. Unfortunately, these gaps are also likely to be the places where unexpected contingencies arise. To minimize the effect these gaps have on military operations, intelligence staffs must ensure planners and operators are aware that such a situation exists and could affect them. In addition, the intelligence community needs to better develop the resources they have by focusing analyst on one area for the long term instead of moving every few years, and by reaching out to open sources and outside expertise such as in academia to cover areas beyond the current scope of military intelligence.

The changing world situation and growing capabilities of the information age have radically altered the operational intelligence support landscape. A decade ago, there was a known threat: the Soviet Union and the expansion of Communism. The intelligence community had studied that threat in detail for forty years, and had long since worked out which organizations were going to provide what intelligence to the operational commanders and at what cost. The seriousness with which the country took that threat insured that significant resources were employed to provide this intelligence. Every unit conducted hundreds of exercises that ran through drills that measured the adequacy, timeliness, and usefulness of the intelligence provided, refining the process of providing intelligence support to operational commanders until it was second nature.

Since then, however, everything has changed. There is no certain, known threat; crises appear all over the globe with little-to-no warning. There have not been years of exercises testing intelligence support to operations for specific weapons systems or scenarios prior to employment; some systems, such as the Joint Surveillance Target Attack Radar System (JSTARS), have now been deployed to combat operations while still experimental.[1] Finally, the nation does not take an unknown, almost random threat with the same seriousness with which it faced the Communist threat; defense resources have been reduced along with the threat to the nation's survival. The drawdown of military forces affected the intelligence community as it did most other parts of the U.S. military, leaving far fewer analysts to provide intelligence support to the operational commander.

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[1] Project Air Force Team, Project Air Force Assessment of Operation Desert Shield: The Buildup of Combat Power, Project Air Force report no. 356, (Santa Monica, CA:RAND 1994), p. 40.

The intelligence support required and the ways to acquire it have also changed. During the Cold War, requirements were fine-tuned for years between operations and intelligence staffs. Today, the first time the intelligence community hears of a new priority on collection, analysis, and production requirements is often a matter of weeks, if not days, before forces are employed, making us reactive vice proactive. Since there are not enough resources to collect, analyze, and disseminate information ahead of time on all the potential threats and hot spots the United States may become involved in today, these priorities are of critical importance. If a target area is not in the top two or three current priorities, it is unlikely that an analyst or collection resource will ever even have the luxury of looking at information on it, let alone producing finished intelligence on it. The result of this situation is that we are not able to produce the background intelligence ahead of time as we would like, hence, we are always playing catch-up.

In the first few years after the demise of the Soviet Union and subsequent end of the Cold War, intelligence personnel were able to rely on the large databases and libraries of intelligence products produced up to that time. They could respond to requirements relatively quickly because the tasking, collecting, processing, and analyzing had already been done before the question was asked. From approximately 1995 on, those products rapidly lost value as the resources required to maintain the databases were no longer available and the intelligence reports became dated. By this time also, operational planners had noted that "rather than being able to draw upon a regularly replenished and updated stock of information at any time, planners on the Air Staff found themselves specifically requesting each piece of information."[2]

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[2] David. E. Thaler and David A. Shlapak, Perspectives on Theater Air Campaign Planning, Project Air Force Report no. 515, (Santa Monica, CA: RAND, 1995), p. 20.

While the coming of the information age and precision weapons were increasing the theater commander's intelligence requirements, the drawdown was reducing the number of intelligence personnel available to do the detailed analysis required. Today, the stockpile of current, detailed intelligence products, especially databases, of the type needed for conducting operations or planning is, in many cases, simply nonexistent. With each new operation, intelligence analysts will probably be starting from scratch. Without a stable and known threat focusing years of intelligence work, an operational intelligence support plan today must consider factors not only such as what intelligence will be needed and where that intelligence can be produced, but also how much of it is currently available and whether the remainder can be acquired within the time constraints of the planned operation.

The first factor that must be considered when developing a plan to provide intelligence support to operations is the requirements of that operation and the weapons that will be used to accomplish it. Representative intelligence requirements of a Joint Force Commander are listed in Joint Pub 2-01, Appendix B.[3] These requirements are generic, and must be reviewed and adapted for each operation and new weapon system to be valid.

Intelligence requirements at the operational level can be divided into two broad categories: those that can be done ahead of time and those that must be done in near-real-time. Obviously, the more intelligence preparatory work that can be done before engaging the enemy, the better. In fact, there is a direct correlation between the amount of intelligence work done on an area in peacetime and the amount lacking at the start of a crisis.

Although all intelligence is ultimately perishable, different intelligence products have longer useful lives than others. For example, the useful life of intelligence saying a certain

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[3] Joint Chiefs of Staff, Joint Intelligence Support to Military Operations, JP 2-01, (Washington, DC: 1996), p. B-1 – B-14.

mobile radar is emitting in a certain location is about five minutes. On the other hand, intelligence on the building materials and methods used to construct a major highway bridge would still be useful twenty years later should we want to drive tanks or trucks across it, or destroy it. In this case, it is clearly worth studying the bridge prior to the onset of hostilities requiring one to target it because doing so saves a significant amount of time during the crisis when time is short.

At the operational level, the intelligence that could theoretically be done ahead of time includes many of the representative requirements listed in Joint Publication 2-01. Generic intelligence such as maps, orders of battle, infrastructure analysis, and capabilities analyses are especially conducive to peacetime production. Other intelligence that should be produced prior to a conflict includes targeting lists, targeting graphics, overhead imagery, leadership analysis, nodal analysis, etc. New weapons, such as nonlethal weapons now being considered, will also require new types of background intelligence. One such example might be the need for planners of an acoustical wave weapon to know what type of rock or soil an underground command post is built in.[4]

This background material is the basis from which mission-specific and time-critical intelligence will later be derived and upon which much of it depends. An example of this is the Automated Tactical Target Graphic (ATTG) and Basic Target Graphic (BTG). These analyst-intensive intelligence products will be required for most air-ground strikes.[5] They provide annotated imagery, mensurated, or precisely measured, points for selected targets, critical nodes, and aim points. These graphics are generally developed for generic missions in

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[4] Edward P. O'Connell and John T. Dillaplain, Nonlethal Concepts: Implications for Air Force Intelligence, (Maxwell AFB, AL: Air University, 1994), p. 6.

[5] Myron Hura and Gary McLeod, Intelligence Support and Mission Planning for Autonomous Precision-Guided Weapons, Project Air Force, no. MR-230-AF (Santa Monica, CA: RAND, 1995), 14.

high-priority plans, and were readily available during the Cold War. Although the standardized graphics must later be revalidated and tailored to specific missions, this is far simpler and faster than starting from scratch.

If this type of intelligence work is not accomplished in peacetime, the mission-specific intelligence support will be much harder, if not impossible, to provide during combat operations. An example of this problem would be the Joint Force Air Component Commander (JFACC) targeting shop producing targeting materials for bombers during an operation. If the analysts do not have a database of the communications infrastructure at hand, they will have to spend days, weeks, or even months to create it before they can determine which target's destruction will have the desired effect on enemy communications, much less on enemy operations. Even then, such an analysis is unlikely to be complete and is much less reliable than it would be had the intelligence system had time to run through the intelligence cycle and perform in-depth, all-source analysis. However, if such a database is already in existence, analysts can determine the critical target quickly and reliably with the information at hand. It is much faster and less manpower intensive to verify and update existing intelligence products than it is to create them in the first place.

The current system is used to assuming such databases and finished intelligence products exist and are reliable, but this is no longer the case. With the personnel and budget reductions that took place throughout the intelligence community after the end of the Cold War, the databases for much of the world could no longer be maintained in peacetime due to resource constraints. Military intelligence products are not produced annually for every country in the world as they were for the Soviet Union.

In 1995, when it had become apparent to everyone involved that not all areas of the world could be covered, President Clinton issued Presidential Decision Directive 35 (PPD-35) to give the intelligence community the priorities by which their limited resources would be allocated. President Clinton described those priorities in an address to the Central Intelligence Agency on the event of that organization's 50th anniversary as follows:

> 1 - Supporting our troops and operations, whether turning back aggression, helping secure peace or providing humanitarian assistance.
> 2 - Providing political, economic, and military intelligence on countries hostile to the United States so we can help to stop crises and conflicts before they start.
> 3 - Protecting American citizens from new trans-national threats such as drug traffickers, terrorists, organized criminals, and weapons of mass destruction.[6]

The world was then divided up in accordance with these priorities. As an example, those countries in which U.S. troops were currently operating were given the highest priority. Hence, intelligence resources were dedicated first to these countries. Any resources still available were then dedicated to the second priority, countries hostile to the U.S., and so on.

Thus, as required, the intelligence community responded to PDD-35 by dedicating resources to meeting the consumers' needs on the highest priority issues at the expense of maintaining basic coverage on lower tier issues. However, it soon became apparent that perhaps this PDD method of imposing national priorities was not the answer to the problem of limited resources. In 1996, a Study Team for the House Select Committee on Intelligence noted "to fulfill top PDD-35 requirements, the intelligence community may be creating intelligence gaps in other areas... that could be harmful to the intelligence community's future capabilities." As an example, the Study Team went on to note that as "four of the last five

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[6] William Clinton, Remarks by the President at the 50th Anniversary of the Central Intelligence Agency, Central Intelligence Agency, Langley, Virginia, September 16, 1997, The White House Office of the Press Secretary, available at http://www.fas.org/irp/offdocs/pdd35.htm.

deployments of U.S. military forces for other military operations (OMO, or MOOTW) were to countries/regions that were, at best, 'lower-Tier,' the ability of the intelligence community to provide intelligence support to OMO in the future is called into question if the preponderance of resources is almost entirely on 'top-Tier' issues."[7] This is precisely the situation we are faced with today.

Since military operations today are highly likely to continue to be in "lower-tier" regions, databases and intelligence on them must be either initiated or the data must be reviewed and substantiated at the start of each crisis. It is impossible to overestimate the amount of time, manpower, and resources such an effort entails for even a medium-sized country such as Iraq or Bosnia. Since unlimited amounts of time, manpower and resources are rarely available, intelligence analysts and the operators they support will often have to make do with somewhat less-than-complete data.

Intelligence that must be done in near-real-time is usually mission-specific or time-critical. This type of intelligence often needs input from years of earlier analysis to be put into context. Examples of time-critical intelligence requirements are more often seen at the tactical level, but can arise at the operational level. This is especially the case where the employment of single weapons can have significant effects on the theater as a whole. An example of such intelligence would be the location of the enemy leadership, or the location and status of enemy weapons of mass destruction. Other near-real-time requirements that are seen at the operational level are those in support of precision-guided weapons (PGWs), in

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[7] Congress, House, Permanent Select Committee on Intelligence, Executive Summary, X. Intelligence Community "Surge" Capability, IC21: The Intelligence Community in the 21st Century, Staff Study, 104th Cong., http://www.access.gpo.gov) Page #IC21010 June 5, 1996 [26 Nov 00].

particular those autonomous PGWs with target-imaging sensors. These weapons require recent imagery based on a significant amount of earlier analysis to locate and prioritize targets.[8] GPS-guided weapons also require near-real-time threat data that includes information on GPS-jammers in addition to conventional air defense threats.[9] The baseline electronic order of battle database and its maintenance are both operational-level intelligence tasks. Tactical intelligence platforms then carry this forward and provide real-time updates to the data as operations progress.

Another example of intelligence that cannot be done ahead of time, but is still heavily reliant on preliminary work, is battle damage assessment (BDA). By definition, this information must be collected and analyzed after a battle, and it is usually imperative to get quick answers in case the target is not fully incapacitated. BDA generally requires the full resources of imagery collection and functional analysis available at the JFACC. This work is usually performed by the targeting shop, which reduces even more the time they have available to research and analyze potential targets. It is also heavily dependent on intelligence work performed years in the past when a target such as an underground command center was being built, as well as just prior to the strike, to have the information necessary to determine BDA. BDA requirements for PGWs will be even more involved and difficult to reliably produce because there is usually less general destruction in evidence.[10] Hence, optimum intelligence support to BDA requires a complementary combination of "background" and "time-critical" intelligence. However, due to resource constraints and the lack of a known threat, we are unlikely to find the "background" intelligence we need.

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[8] Hura and McLeod, p. 3.
[9] Hura and McLeod, p. 9.
[10] Hura and McLeod, p. 21.

Once operational planners have determined their intelligence requirements, they then must concern themselves with the second factor, determining where those requirements can be filled. In the days of the Cold War, the theater commander had organic intelligence collection and processing organizations to deal with tactical intelligence requirements. Operational, or theater-strategic, requirements were often collected on and processed by national-level intelligence organizations. These national-level intelligence organizations also maintained the databases, produced maps, targeting materials, and major analytical works. Since there had been a known threat for years, the world-wide priorities had long since been worked out to the point that the operational commander, as long as he was working the known threat, received the intelligence he required from the intelligence system on a routine basis. Intelligence units in theater generally used the products from national organizations, ordering hard copies of intelligence products and maintaining them in theater, then pulling intelligence from them to satisfy operational requirements. Although the intelligence in them may not have been real-time, the situation was static enough that this was often not a problem. Also, many military intelligence analysts worked the same issue, the Soviet threat, from different angles such as the inner-German border or the Pacific rim, throughout their careers. This gave the military ample opportunity to develop experts on this threat who could deduce the larger situation from small pieces of intelligence. This situation also conditioned commanders to expect quick returns on intelligence requirements and questions, since the information had already been collected and analyzed and was sitting there on the shelf waiting for someone to ask for it. In this way, it appeared that these units met the vast majority of his intelligence requirements with people and resources under his direct control.

Today, this is no longer the situation. Now, the theater commander has a legitimate need to request immediate tasking for significant amounts of intelligence to be produced by people and organizations outside his control. With a less-predictable threat environment, long-term studies and threat databases are no longer sitting on the shelf waiting to be used. Now, more often than not, each new crisis requires that intelligence analysts go through the entire intelligence cycle of planning and direction, collection, processing and exploitation, production, dissemination and integration, and evaluation anew at the start of the crisis.[11] Obviously, it takes the analyst much longer to answer the same types of requirements today than it did when he could simply reach for a book or a file.

The first group of intelligence assets to consider in planning today, however, are still those directly under the theater commander. Internal capabilities, such as they are, should be used first, both to make efficient use of resources throughout the intelligence community and because these organizations will give a higher priority to fulfilling his operational requirements. Additional expertise and capabilities that are needed but not available within the theater will have to be requested from national agencies. However, it must be remembered that whenever the J2 has to go beyond the Unified Command for resources and intelligence support, there is always the risk that a higher priority requirement will come out of another Unified Command to take precedence.

Each Unified Command has its own intelligence organization that has the responsibility for providing intelligence support to military operations.[12] This organization is the Joint Intelligence Center or, in EUCOM, the Joint Analysis Center at RAF Molesworth. This is a fair-sized organization with access to raw data and the capability to produce

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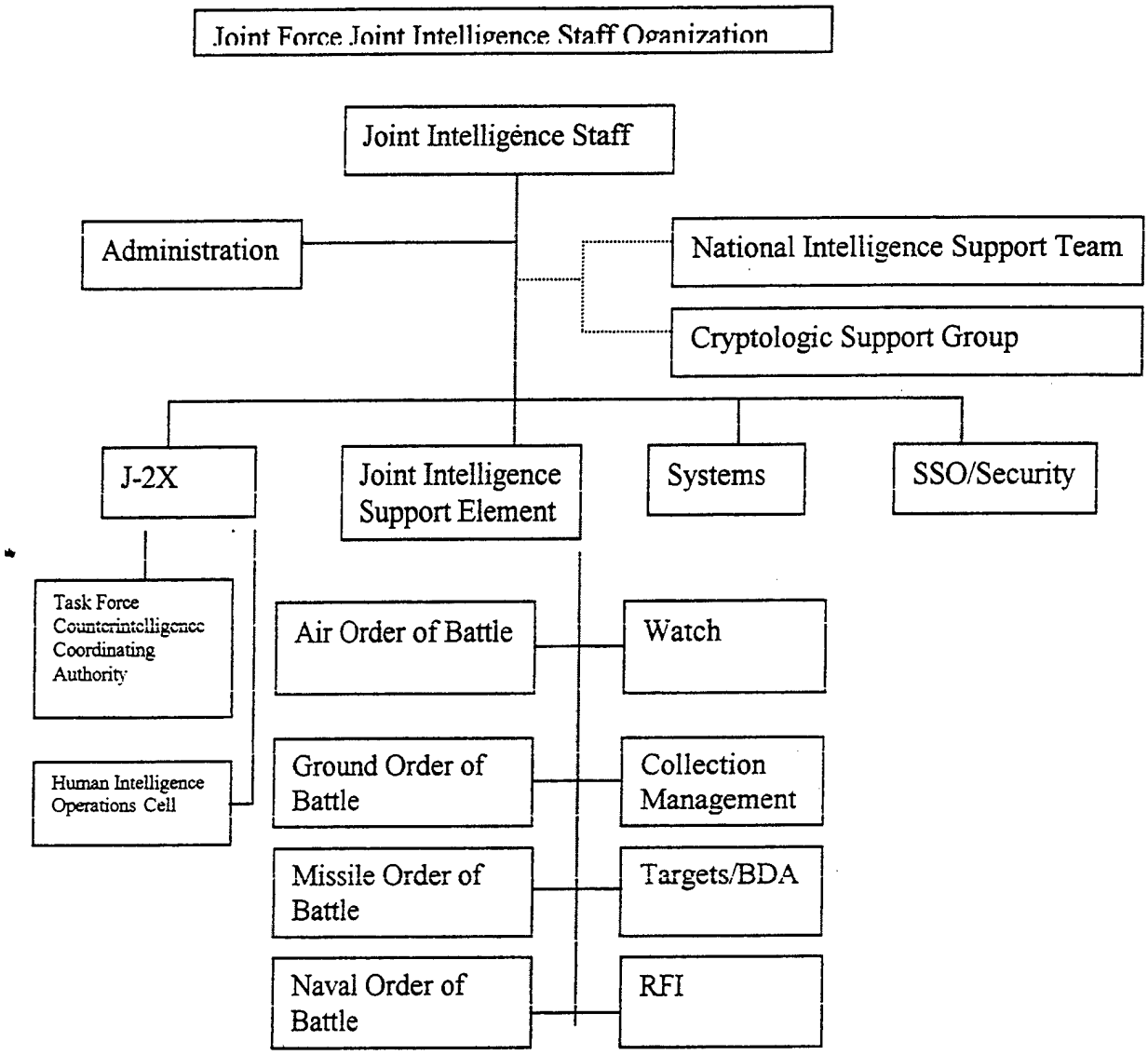
[11] JP 2-01, Chapter III The Intelligence Cycle, p. III-1.
[12] JP 2-01, III-4.

finished intelligence products in accordance with their assigned production responsibilities, or "lanes of the road." They also generally have representatives from national organizations serving on site as liaison officers to facilitate coordination between the national organization and support to the operational commander. In addition to the JIC/JAC, when a crisis arises and a Joint Task Force is set up, a dedicated intelligence support organization is developed to provide operational support.

A generic version of a subordinate joint force J-2 operational support organization is shown below. This organization, known as the Joint Intelligence Support Element or, more commonly, the JTF J-2, will vary from operation to operation, but generally includes these elements.[13]

[13] JP 2-01, III-4.



This can be a large organization, and difficult to man. In fact, any time a JISE is stood up, most of the manpower is sent there on temporary duty from the Unified Command's JIC/JAC, worsening the existing resources/requirements mismatch. As an example of the extent of this type of situation, Air Force intelligence officers have been told to expect to be deployed 3-4 months each year on average throughout their career.[14] The

[14] Intelligence Officer Career Guide1998, available on at afas.afpc.randolph.af.mil/ofcr-cpguide/ch4-2.htm. The current edition of the Career Guide, at the same web address, has changed this to "Most contingencies for intelligence officers are at least 120 days in length. Every intelligence officer should try to do at least one contingency a year."

immediate question that comes up is, who is doing that person's in-garrison intelligence support job at the JIC/JAC while they are deployed? The answer is, no one. There is so much to be done and so many people deploying, that those remaining behind can no longer "do more with less." In Desert Storm, for example, USCENTAF Rear functions for C3I "overwhelmed" the USCENTAF staff remaining at Shaw AFB. They had to shift their functions to the Tactical Air Command battle staff at Langley AFB.[15] In an attempt to solve this problem, the JIC/JACs also tap the Reserves and Services for augmentation. Such augmentation brings its own problems, however, especially in the form of high and repetitive learning curves as new personnel continually cycle through the JTF.

Ultimately, much of the needed intelligence resources and expertise are not available within the Unified Command, but are resident at national level organizations outside the theater. Thus, the next group to be tapped are national organizations, which are all now tasked to provide support to operational commanders. National support provides additional collection capability, high-tech analysis and production capability, and personnel with functional and geographic area expertise. National organizations can provide additional manpower to the CINC or JTF in the form of a National Intelligence Support Team (NIST), Cryptologic Support Group, Counterintelligence Support Officer, HUMINT Support Element, or even a Joint Space Support Team.[16] Unfortunately, they face the same problem as the JIC/JAC: it is sometimes questionable whether an individual can support an operational commander more by deploying than by staying in his or her normal job.

The final factor to be considered here is how much of the needed intelligence is already available and how much can be acquired in time for military operations. Operations

[15] Project Air Force Assessment of Operation Desert Shield, p. 43.
[16] JP 2-01, II-6.

in the Persian Gulf and Bosnia clearly pointed out that we could not afford to let intelligence production go on the back burner indefinitely without operations paying a price for it. Since crises today frequently erupt in parts of the world that do not normally rate a high enough priority to have resources dedicated to them in peacetime under PDD-35, it is possible that not much intelligence will be available, or what is available will be so old as to be useless.

Maps are an excellent example of intelligence that could be critical to the conduct and success of a military operation that is often neglected in low priority geographic areas in peacetime. Users and policymakers assume that something as simple as a map will be available in a crisis. Unfortunately, there are large chunks of the globe for which we do not have sufficiently accurate maps and geographic information. For example, the after-action report on Operation Desert Shield found that, although the Persian Gulf "region had been the focus of national security interest for some time, the Air Force found its existing database on facilities and geography in the region to be inadequate. This was true for mapping, charts, and geodesy data, such as basic maps of the region, and for air base information."[17] Many maps were developed years ago when our mapping capabilities were quite different, and do not provide the accuracy of data needed for GPS-guided weapons. In Operation Desert Shield, we had six months to overcome these shortfalls, but we cannot assume that will always be the case.

In fact, depending on the difficulty in acquiring the needed intelligence, there is no guarantee that the intelligence cycle can provide it by the time it will be needed. A prime example of this is imagery. Consider the use of target-imaging PGWs due to concerns over minimizing civilian casualties and other collateral damage. If the target area has been cloud-covered since the contingency arose, the necessary imagery will simply not be available. The

[17] Project Air Force Assessment of Operation Desert Shield, p. 41.

absence of the current, mensurated imagery they require could well bring a halt to the entire operation until cloud-free days allow the collection of the necessary intelligence. Another aspect of the timeliness problem was noted in Somalia, where mission planners and executors "could not afford the time for HUMINT information requests to be approved and sent up channel without a negative effect on mission success."[18] All requests for intelligence take time to process and fill, sometimes more time than is available. Although modern information technology helps this situation by providing new and better communications systems, it does not remedy it completely because so many of the factors influencing the collection of intelligence are beyond friendly control. The potential that such a situation might occur needs to be laid on the table and taken into consideration at the very start of the planning, not just prior to strike time.

In an effort to overcome some of these problems, a major restructuring of theater and Service-level intelligence production took place in the 1990's. It was designed to provide sufficient capability to support most joint military operations by parceling out production responsibilities. The DoD Intelligence Production Program (DoDIPP) assigned specific responsibilities for different functional or geographic areas to different units throughout the intelligence community.[19] The idea was that the areas that would use the intelligence would have a higher interest in producing it and give it a higher priority than could be maintained at the national level. DoDIPP is critical to understanding where intelligence is produced today. One of the main responsibilities that was assigned under DoDIPP was maintenance of the MIIDS/IDB database. This is an analyst-intensive intelligence database that underpins much of the intelligence work done today. Some parts of this production, of

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[18] O'Connell and Dillaplain, p.8.
[19] Office of the Secretary of Defense, Annual Defense Report 1995, Part VI, Command, Control, Communications, Computers, and Intelligence (Washington DC: 1995), 22.

course, actually get accomplished more than others. For a likely example, after ten years of concentrating on Bosnia and the Persian Gulf, EUCOM and CENTCOM's lower priorities probably have not been well maintained. There also was no guarantee that the units receiving this tasking actually had the resources to accomplish it, although this was theoretically taken into consideration, and they were all dependent on access to limited national resources. However, DoDIPP was at least a recognition that something would have to be done.

What else can be done to minimize the negative effects on military operations of a continuing shortage of manpower and resources for intelligence support? The most important thing to start with is to educate everyone involved as to the situation. The U.S. military has "staked much of its future effectiveness on new weapon systems, such as precision-guided weapons and stealthy vehicles, that depend critically on information."[20] However, American military planners can no longer assume they will have all the intelligence they want or need. Just as they do with logistics, communications, tankers, and other factors, planners need to ascertain what intelligence support will be available and consider that as they develop plans. The availability or non-availability of critical intelligence to support operations should be voiced early on, and factored into discussions leading to courses of action. If this is not done, and a given piece of intelligence is critical to a certain course of action but may not be available at the time that action is planned to occur, intelligence could well become a critical vulnerability.

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[20] Glenn Buchan, Information War and the Air Force: Wave of the Future? Current Fad? Rand Issue Paper no. 149, Project Air Force, (Santa Monica, CA: RAND, 1996), available at http://www.rand.org/publications/IP/IP149/#fn9.

In addition, the intelligence community needs to investigate new ways to provide the needed intelligence in a timely manner. The most obvious way, of course, is to apply copious amounts of money and manpower. Until this miracle occurs, however, other methods must be sought. One possible improvement is to develop specialists in specific areas where MOOTW are likely to occur, and keep them assigned to that region. This needs to be done in such a way that military personnel can acquire the knowledge and experience to become experts in an area while still being competitive for promotion.[21] The military needs to "establish suitable career paths for personnel with information-related expertise without unduly isolating them."[22] Although this would not solve the problem of providing high-tech intelligence for high-tech weapons, it would at least provide the commander with someone with the background knowledge and in-depth understanding of an area needed to identify the source of a conflict or issue and propose reasoned actions to address it. As one analyst noted, "In every crisis, it always comes down to a few recognized experts providing the core knowledge to decision makers. The generalists do general things, and the experts provide what decision makers and war fighters need."[23] The current system of moving intelligence analysts between theaters every few years does not allow them to become experts on any area. This constant movement could be dealt with when the background intelligence was already done and the new analyst needed only to study it. When the new analyst needs to actually create the background intelligence, the standard three-year assignment rotation system significantly reduces effectiveness.

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[21] National Defense Panel, Transforming Defense: National Security in the 21st Century, December, 1997, as reprinted in Interagency and International Assignments and Officer Career Management, Harry J, Thie, Margaret C. Harrell, and Robert M. Emmerichs, (Santa Monica, CA: National Defense Research Institute, 1999), p. 1.

[22] Buchan.

[23] Jeffrey B. White, Some Thoughts on Irregular Warfare, NWC 3060, reprint, Studies in Intelligence, Vol. 39, No. 5, 1996, pp. 51-59. (Washington DC: Center for Studies of Intelligence, 1996), p. 58.

Another way to improve intelligence support within existing budgetary constraints is to more aggressively tap open sources and outside expertise. Even with the above suggestion, it is unlikely that expert military intelligence personnel will ever be available to cover all possible contingencies. In some cases, looking outside the intelligence community may be an answer. An example of when this method proved viable was the "use of Kuwaiti students studying in the U.S. during the build-up to Desert Storm, when the number of capable Arabic linguists in the U.S. military and the intelligence community proved insufficient to meet the demand." [24] Another potential source of "experts" for unexpected contingency operations is U.S. academia. Academia has many more people who spend their lives studying a particular place or culture than the intelligence community ever will. Convincing such subject matter experts to assist military planning and operations in a crisis could provide the in-depth background knowledge on a situation that may well be unavailable anywhere else. One author went on to suggest establishing a Civilian Intelligence Reserve Corps to allow the intelligence community to draw on very specialized expertise, and to cover more potential threats.[25]

In conclusion, the resource constraints limiting the intelligence community's support to operational commanders today will probably not change in the foreseeable future. In the absence of additional military resources, the intelligence community needs to look at making the resources they have more efficient by keeping analysts in place and developing experts, and by reaching out more aggressively to non-traditional sources such as open-source

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[24] Strategic Assessment: Elements of U.S. Power, Chapter Six Intelligence, (Washington DC: National Defense University, 1996), http://www.ndu.edu/ndu/inss/sa96/sa96ch06.html.

[25] Lara Shohet, "A Report on the Relationships between Intelligence, Academia and Industry," The Final Report of the Snyder Commission, (Princeton: The Woodrow Wilson School of Public and International Affairs, 1997) http://www.fas.org/irp/eprint/snyder/academia.htm.

materials and academia. These sources need to be considered in contingencies as intelligence staffs examine potential operations with a critical eye to determine what intelligence will be needed, where that intelligence can be produced, how much of it is currently available, and how much of it can be produced and disseminated to the consumer by the time it will be needed. Intelligence staffs also need to continue to work closely with operators, and ensure their dialogue includes realistic estimates of the amount and type of intelligence that will be available within given time constraints. Operators in turn need to take into account the fact that intelligence also faces resource constraints that can affect the conduct of operations.

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