ranges and faster speeds than U.S. ATGMs, and several of them can be equipped with blast warheads for use against defensive positions. Consequently, it is possible for a U.S. ATGM gunner and an enemy ATGM gunner to engage each other at the same time, in which case the enemy missile would hit first. Thermal sights for ATGMs are also being offered for sale.

Indirect fire munitions include obscurant-filled projectiles, guided projectiles, submunitions, fuel air explosives, and flechettes. The Russians offer a 120mm gun, mounted on the 2S9, 2S23, and 2S31 self-propelled gun vehicles. It can put direct fire out to 800 meters, HE fragmentation mortar rounds to 7.1 kilometers, HE-FRAG howitzer rounds to 8.7 kilometers, and HE-rocket-assisted projectile (HE-RAP) rounds to 12 kilometers. The Russians offer for sale 122mm and 152mm flechette rounds that could be extremely effective against unprotected positions.

Potential counter-countermeasures include shooting and then moving to alternate positions, conducting effective counterreconnaissance operations, using camouflage and concealment to prevent detection, and using overhead cover to protect against indirect-fire munitions.

Given all of these potential ATGM countermeasures, it is clear that all antiarmor personnel must become familiar with them and then practice and train against them. Toward that end, the Infantry School is updating Field Manual 7-91, *Tactical Employment of Antiarmor Platoons, Companies, and Battalions.* Additionally, the school, along with the National Ground Intelligence Center, is developing an ATGM countermeasure video that should be available some time this year.

Enemy ATGM-CMs on the battlefields of today and tomorrow could severely affect the way this country fights antiarmor battles. In terms of the availability of potential ATGM-CMs, almost every enemy armored vehicle will have smoke grenade launchers and use camouflage. Most enemy tanks could have explosive reactive armor, many could have laser warning receivers, and some could have ATGM jammers and hard-kill active protection systems. Some may even have laser weapons.

Since the Persian Gulf war, ATGM countermeasures have received new priority in many of the armed forces of the world, and many countries are likely to develop them or otherwise acquire them on the international arms market. Although most of these ATGM countermeasures have yet to prove their combat effectiveness, there is little doubt that ATGM combat will continue to become more difficult.

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LRS Missions

What Generates the Need for Them?

MAJOR KEVIN A. HYNEMAN

Soldiers always perform their missions better when they understand how those missions fit into the overall operation. We often send our soldiers out with such instructions as, "Man OP 3," or "Observe NAI 9." But we don't clarify *why* they need to conduct reconnaissance or how important the information they gather may be to the commander. Soldiers who understand the big picture will better understand the need to collect and report information quickly, and will give their commanders more accurate and timely reports.

If our long-range surveillance (LRS) leaders are to fully understand, they must be familiar with the three tools of the tactician: The troop-leading procedures (TLPs); the estimate of the situation; and the intelligence preparation of the battlefield (see accompanying box).

Our noncommissioned officer education system does a good job of exposing our NCOs to the TLPs, but few of the leaders I have seen know much about the estimate or the IPB. None of us can become experts on these three tools in a day, but LRS leaders need to be exposed to the basics and know how they apply to the generation of reconnaissance and surveillance missions.

The need for information begins immediately after step one of the TLPs, and usually upon receipt of the warning order. The commander and his staff conduct a mission analysis, and the IPB process begins. An infantry division will illustrate the process:

The division commander begins his mission analysis after receiving the warning order and completes it shortly after receiving the operations order. When the

mission analysis is complete, he gives his staff initial planning guidance, along with the restated mission.

According to Field Manual (FM) 34-10, *Division Intelligence and Electronic Operations,* planning guidance often includes the following:

- Specific courses of action to consider.
- Critical information and intelligence requirements.
- Special IPB considerations.
- Electronic attack targets and objectives.
- Operational security considerations.
- Deception opportunities.

At this point, the commander directs the intelligence effort by selecting information requirements and assigning priorities to them. These requirements, called the commander's critical information requirements, include information on both friendly and threat forces (FM 34-1, *Intelligence and Electronic Warfare Operations,* p. 2-17):

- Friendly forces information requirements (how I see myself).
- Priority intelligence requirements (how I see the enemy).
- Essential elements of friendly information (how I prevent the enemy from seeing me).

Division information and intelligence requirements concerning the threat are expressed in terms of information requirements (IRs) and priority intelligence requirements (PIRs). The IRs are specific items of information needed to satisfy intelligence requirements. The PIRs are those intelligence requirements for which a commander has an anticipated and *stated* priority in his task of planning and decision making (FM 34-10, p. 4-3). The commander and his staff evaluate the IRs immediately to determine which requirements will be upgraded to PIRs. This is done during Step 3 of the TLPs while the commander and staff are conducting their estimate of the situation.

Because the estimate and the IPB are continuous, the staff may generate additional IRs in support of the concept of the operation and targeting as the TLP process continues. As these new IRs become known, the staff prioritizes the requirements and recommends which should be considered PIRs. (The commander must approve all PIRs.)

TOOLS OF THE TACTICIAN

TROOP-LEADING PROCEDURES
- **Receive the mission.**
- **Issue warning order.**
- **Make a tentative plan.**
- **Reconnoiter.**
- **Start movement.**
- **Complete the plan.**
- **Issue the plan.**
- **Supervise.**

ESTIMATE OF THE SITUATION
- **Analyze the mission.**
- **Analyze the situation and develop courses of action (COAs).**
- **Compare COAs.**
- **Decide on a COA.**

INTELLIGENCE PREPARATION OF THE BATTLEFIELD
- **Define the battlefield environment.**
- **Describe the battlefield's effects.**
- **Evaluate the threat.**
- **Determine the COAs.**

For an IR to become a PIR, it must confirm or deny an enemy capability, course of action, or characteristic of the battlefield that significantly affects the commander's tactical decisions. Additionally, the commander must be willing to commit more than one collection asset to the gathering of PIRs to ensure the needed information is collected. The G-2 allocates most of his efforts to meeting the requirements that have been designated PIRs and develops a collection plan. The plan is later integrated with the synchronization matrix and the decision support template or matrix.

In establishing and prioritizing intelligence requirements, the commander and staff should consider these guidelines:

- The collection manager should not accept or propose an IR until he fully understands and can track the friendly action it is designed to support.
- Every IR must be situationally templated and wargamed.
- The G-2 should nominate PIRs for approval only from the list of IRs already planned and coordinated.
- Information that will meet a PIR must be collectable, and the commander must understand how it is to be collected.
- Because of limited collection assets, the commander must restrict his PIRs to his most critical requirements.

Too often, a PIR is expressed in the form of questions: "Will the enemy attack? If so, how, when, where, and in what strength?" Such a PIR is worthless. Among other things, it is too broad, and this one actually contains five significantly different questions. A more useful PIR would be, "Will the enemy reserve tank battalion reach phase line RUGBY before 150900Feb95?" This PIR is more focused; it will confirm or deny any enemy capability or course of action that will significantly affect the commander's tactical decision making process, and it is likely to have a friendly action associated with it.

Having a well-stated PIR is not enough. We now need information that is useful to the infantryman on the ground—that helps him answer the PIR. These are called specific information requirements (SIRs).

The SIRs form the basis for specific orders and information requests. They are derived from particular indicators that the G-2 has identified as being able to satisfy each PIR. These should be tied in to the named areas of interest (NAIs) on the event template or the target areas of interest (TAIs) and decision points on the decision support template; SIRs are usually expressed in the form of a question. Using the example above, the indicators might be "increased tracked vehicle reconnaissance north of PL RUGBY" and "lateral tank repositioning along Highway 8" or "prepositioning of CSS assets to support an attack."

These indicators can now be translated into the more useful SIRs: "Is the enemy conducting platoon-size mounted reconnaissance vicinity NAI 17?" or "Is a tank company element or larger traveling west along Highway 8 vicinity Decision Point 3?" or "Are there refueling sites set up along route BRIAN vicinity NAI 12?"

The development of SIRs also applies to IRs. For example, "Is the enemy planning alternate river crossing sites of the Red Neck River?" is a legitimate IR. It has some effect on the commander's tactical decisions and will have a friendly action tied to it (repositioning of forces or use of indirect fire). Since it does not have a *significant* effect, however, and the

commander is not willing to commit several assets to this requirement, it remains an IR. The G-2 now determines that indications the enemy will plan an alternate river crossing site would be ferries and pontoon bridges in the staging areas north of the river. The G-2 then analyzes where likely locations would be and, based on the enemy composition, what equipment is likely to be there. When this is done, he asks the specific question (an SIR): "Are there vehicle launched bridges and other bridging equipment near NAI 10?"

The formulation of the intelligence collection plan begins immediately after a mission analysis is conducted, and it continues throughout the estimate process. Typical early information requirements are focused on the battlefield environment and the battlefield effects such as the trafficability of a section of restricted terrain or the usability of a landing zone or drop zone. This information is used to refine the division's modified combined obstacle overlay. As the estimate process continues, however, the focus of intelligence requirements moves toward information that may confirm or deny friendly and enemy courses of action.

Even later, information requirements may be oriented to support the commander's decision support template. Examples include surveillance of decision points, or observing a trigger line, or observing the friendly side of a TAI or deep engagement area to confirm the effectiveness of a deep close air support strike (battle damage assessment). Other possible LRS missions in support of division operations include observing TAIs and using laser designators to assist target acquisition. Target acquisition missions obviously occur after a COA has been decided and is being executed.

We know that the SIRs form the basis for directing collection assets. Information is more accurate when the collector understands the indicators, the PIRs, and the friendly actions tied to the collection effort, whenever possible.

The LRS leaders must understand that TLPs, the estimate of the situation, and the IPB are continuous processes that generate information requirements throughout the planning and execution of a military operation. LRS missions can be generated at the following times:

- After the mission analysis.
- During the initial phases of the IPB to determine certain battlefield effects.
- Continuously throughout the IPB process to confirm or deny enemy COAs.
- Throughout the estimate process to assist in the formulation of the best friendly COA.
- After a plan is completed and is being executed.

Because operations are often fast-paced and complex, an LRS unit may employ teams in support of the final phases of one division operation, while also employing teams in support of the initial phases of the next operation. When the LRS leaders understand this—along with the way they fit into the big picture and the source of their given SIRs—the information and intelligence they provide will be accurate and much more useful to the commander.

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Let's Reorganize

The Light Infantry Division

LIEUTENANT COLONEL MARTIN N. STANTON

During the past few years, light infantry units have played a tremendous role in low-intensity conflict or peace operations around the world. In Somalia and Haiti, the strategic deployability and relative combat power of the light divisions have made them our tool of choice for sustained operations of this kind.

At the same time, however, we should not allow the success of light infantry units in these operations to blind us to continuing problems with the J-series table of organization and equipment (TOE).

The light infantry organizations in both Somalia and Haiti had to be augmented with transportation and communications assets. While these cross attachments were readily available, and relatively inexpensive in terms of the Army's overall resources, they reminded us once again that the division TOE is just a bit too austere to operate effectively for long periods of time or over extended distances.