

Force projection, as the central element of our US military strategy, usually begins as a contingency operation—a rapid response to a crisis. The deployment of continental US (CONUS)- and European-based heavy units in support of Operations Desert Shield and Storm, Somalia, Haiti, responses to continued provocations by Iraq, contingency requirements in Korea and ongoing operations in Bosnia demonstrate that all forces, not just light, must prepare for contingency operations.

This article discusses challenging areas of contingency operations for units during rotations at the Joint Readiness Training Center (JRTC), Fort Polk, Louisiana. Although primarily light infantry units train at the JRTC, mechanized forces also need to be prepared for contingency operations.

Initial Entry Operations—Planning Ahead

Contingency operations will not provide the luxury of casualty “re-key” (automatic replacements) the Combat Training Centers (CTCs) provide. We

Fire Support Challenges in Contingency Operations

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have to get it right from the start. Units fail to appreciate how battlefield conditions affect their ability to accomplish the mission in initial entry operations.

Mission Transition. A common shortfall is a focus on producing “things”—FA support plan (FASP), radar deployment order (RDO), jump tactical operations center (TOC) or tactical command

post (TAC)—without identifying the tasks critical for the success of the mission. For example, a unit may recognize a requirement for a jump TOC during initial entry operations but fail to identify the critical tasks the jump TOC needs to execute to provide command and control and who accomplishes the tasks. A unit often plans the initial movement in great detail, yet fails to plan for contingencies, redundancies in case of catastrophic equipment failure, restrictive rules of engagement (ROE), civilians, weather and enemy activities.

The problem isn't in understanding principles or producing a fairly complete plan—it's in mastering the mental process of “mission transition”—*visualizing* how the plan will unfold, *anticipating* impacts inherent with operations on a fluid battlefield and *remembering* Murphy will always be alive and well. A real, unscripted opposing force (OPFOR) in a truly new environment will be a tremendous challenge for leaders and planners, highlighting the requirement to master mission transition.





Units can practice the challenges of ammunition resupply in contingency operations by training with inert rounds and powder cannisters the same weight and size as the actual projectiles shown here.

To visualize the battlefield, leaders and planners need in-depth knowledge and understanding of threat tactics, doctrine, patterns, capabilities and limitations, and vulnerabilities. These are critical to early success and require a more thoughtful approach than “just getting there.” This intelligence focus must be carried throughout the fight by the FA battalion S2.

Part of visualization includes realistic wargaming. JRTC experience shows four critical factors in contingency operations that must be considered during course-of-action development: weather, communications, equipment and leadership. At some point, the weather and (or) level of light seem to work against the unit. During the operation, communications *will* be lost and a key piece of equipment *will* break. Last, a key leader will die or be injured early. Without taking these critical factors into consideration, a plan can look good on paper and fall apart in execution.

Leaders and planners must transition their mind-set to encompass the impact of civilians on the battlefield (friendly and not-so-friendly) and ROE. They should objectively assess doctrine against their unit’s capabilities and vulnerabilities. They first identify the critical tasks to accomplish the mission. Next, they determine the details from the critical tasks: who does what, when, where and how. Then they can articulate equipment and personnel requirements, taking into account the need for flexibility and redundancy in continuous operations. Although units never have enough time for planning, they need to build in a healthy respect for the impact of the battlefield on the mission

from the beginning—planning time only gets shorter after they leave home station.

Just as intelligence preparation of the battlefield (IPB) and targeting remain a continuous process, so do mental visualization and anticipation of the battlefield. The mind-set transition requires a clear read of all the battlefield conditions and a firm understanding of the effects of these conditions on friendly unit operations. This is critical to ensure adjustment of tactics, techniques and procedures (TTP) to mitigate risk, maximize staff planning effectiveness and provide timely support to subordinate batteries.

Logistics. Everything entering an immature theater must arrive by air and (or) sea lines of communication. In response to crisis situations, personnel and equipment are brought from home

station or through an intermediate staging base (ISB) using strategic and (or) theater airlift. Because units are not deploying into in a mature logistical theater, commanders are forced to make resource decisions they normally don’t have to make during training.

Units accustomed to having their ammunition required supply rate (RSR) equal their controlled supply rate (CSR) soon find that ammunition management is paramount. Planning requirements, such as when to send the supporting naval gunfire ship off station to refurbish or moving mortar ammunition from the forward flight landing strip to troops in contact, stress fire supporters in new ways, often pointing out training shortcomings. For example, units can practice the challenges of ammunition resupply in contingency operations by training with inert rounds and powder cannisters the same weight and size as actual projectiles to more realistically stress resupply vehicles and personnel. Other conditions that can aggravate ammunition resupply and dictate fire planning parameters in contingency operations, such as ambushed convoys or canceled resupply planes, should be built into training.

Loading Aircraft. Problems associated with using an air line of communications include getting equipment on the aircraft. All loads must go through a joint inspection with the Air Force. Often, loads do not pass and are sent to the rear of the line. Other loads then may be moved up or back in the air flow and might not arrive in theater when expected.



Units must remember the paperwork for hazardous cargo. Several soldiers must be trained and have the forms or the Air Force won’t accept the loads on the aircraft.

Also, units must remember the paperwork for hazardous cargo. Several soldiers must be trained and have the forms or loads won't be accepted on the aircraft.

Using airlift also means that a unit's entire equipment package doesn't arrive at the same time. A priority vehicle list must be made but kept flexible enough to get a firing capability and command and control vehicles in theater as soon as possible. Units used to having all their equipment when they train at home station need to learn to "make do" with what they get in the air flow.

The Battlefield—Taking It into Account

The most likely battlefield scenario contingency forces will face in the future is certain to involve stability and support operations. These operations include peace operations, support for insurgencies and counterinsurgencies, noncombatant evacuation operations (NEO), drug interdiction, disaster relief and shows of force. Units should never lose sight of the fact that contingency operations that begin with a peaceful purpose, such as noncombatant evacuation (NEO) or peacekeeping, can escalate into combat.

Major threats to fire supporters are not tons of artillery rounds dumped on firing positions or air strikes. Our most likely adversary is a Third World force with an organized insurgency, limited air capability and an army with older armored weapons systems. The OPFOR knows the terrain and has a civilian informant intelligence network. Threats to a firing battery include snipers, mines, ambushes, limited indirect fire and ground assaults (usually during emplacement or march order).

Units tend not to train for some major battlefield factors: civilians, the media and nongovernmental agencies (NGOs), such as the Red Cross, CARE, etc. Even though most contingencies will be near populated areas, these influences come as a surprise to most soldiers when they start a rotation at the JRTC. In an actual contingency operation, the press and NGOs usually will be in theater before the military forces.

Because of civilians, stringent ROEs are established. The civilians may or may not be friendly, which adds to the confusion.



Units should get access to satellite imagery and photos of the area to which they're deploying to use later for targeting. Also, OH-58D Kiowa Warriors, such as the one shown here; AH-64 Apache helicopters; AC-130 fixed-wing aircraft; and unmanned aerial vehicles (UAVs) are excellent sources that provide eight-digit grids for targeting.

The presence of the media needs to be played on the training battlefield. A battery commander inexperienced with the media who is asked by a reporter about a fratricide and then has a microphone stuck in front of him usually is unprepared to respond credibly.

A third element usually not played at home station is NGOs, which don't always adhere to US military policy. They are independent of any government and follow their own rules and regulations. A unit may be required to support them while having little control over their actions.

On the contingency operations battlefield, fire support is especially difficult. The target-rich environment of 250 BMPs and T-72 tanks coming out of the sunrise is the least likely scenario. Applying restrictive ROE while firing into populated areas all under the close scrutiny of the international media is the most likely fire support environment. Indirect fire fratricide—on both friendly forces and civilians—is a major concern and could eliminate the use of fires altogether.

Fratricide. To reduce the risk of fratricide, units adhere to the fundamentals outlined in the figure. The most important fundamental is battle tracking and reporting. Battle tracking is the process of knowing where everything is on the battlefield, including friendly units and civilians. The best computer systems and survey methods and the most accurate howitzers and gunnery techniques are worthless unless you can clear targets.

Two techniques implemented by the task force psychological operations (PSYOPS)/civil affairs (CA) officer help control civilians and reduce the risk of fratricide. A dusk-to-dawn curfew gets civilians off the battlefield during darkness, making identification of insurgents and clearance of fires easier. Also, the PSYOPS/CA staff can warn civilians about weapons systems, such as enemy mortars, that our forces quickly return fire against. This warns civilians and reduces the support they'll give insurgents trying to set up mortars in their backyards.

1. Develop a tactically sound and simple scheme of maneuver.
2. Execute detailed tactical and technical fire support rehearsals.
3. Establish fire control measures and boundaries on identifiable terrain features.
4. Establish a simple but accurate clearance of fire procedure.
5. Emphasize target identification.
6. Standardize maps and overlays.
7. Use simple, accurate graphics.
8. Maintain vertical and horizontal information flow.
9. Practice detailed battle tracking and reporting.

Fundamentals of Reducing the Risks of Indirect Fire Fratricide in Contingency Operations. The most important fundamental is the last: Practice detailed battle tracking and reporting.

Firing Operations— Being Very Careful

As soon as a unit enters the theater, it must establish an accurate firing capability. Because of the ROE, civilians and closeness of most indirect fires to maneuver, fires must be placed where they can minimize the chance of collateral damage and fratricide while still providing the requested support.

Accurate, Predicted Fires. The main challenge is to meet the five requirements for accurate and predicted fires.

1. Target Location and Size. Before deployment, units should get access to satellite imagery and photos of the area that can be used later for targeting. AC-130s give real-time accurate target locations. The cameras of AH-64s, OH-58Ds and unmanned aerial vehicles (UAVs) are excellent sources that provide eight-digit grids for targeting. Forward observers (FOs) need to be proficient with the global positioning system (GPS) and the GVS-5 hand-held laser range finder, giving them their own location, range-to-target and one-round adjustment capability.

2. Firing Unit Location. Battery commanders must be prepared to go to an area of operations where there's no known survey or declination station, establish survey and provide it to the mortars.

Fire support officers (FSOs) must make sure the mortars have declinated their compasses and aiming circles when a declination station is established in the theater. An initial declination station should be established at the forward landing strip and drop zone. Several stations should be established throughout the area as mortars can't be expected to travel long distances to declinate.

3. Weapon and Ammunition Information. Most units have ammunition set aside for deployments. Rounds should be taken from those lots and calibrated before the units assume mission status. Once in theater, units may not have the time to calibrate or an area in which they can do it. However, units need to use the M90 chronograph during all fire missions.

4. Meteorological Information. It may take several days in

the air flow for the meteorological (Met) station to arrive. Until the Met station is operational, units need to use the piball technique in collecting Met data (see *FM 6-15 Field Artillery Meteorology*). All that's required is a theodolite, balloons and a half dozen bottles of helium. A balloon is released and tracked giving wind speed and direction. Surface temperature and density are taken, and units can derive Met data, using the back-up computer system (BUCS).

5. Computational Procedures. Units should take the battery computer system (BCS), BUCS and charts. They also should bear in mind that repair parts and facilities might not be available for a long time. FSOs need to ensure that mortars bring mortar ballistic computers (MBC) and plotting boards.

Registering. Even if units meet the five requirements for accurate and predicted fires, sometimes they'll need to fire a registration. If "danger close" fires are predicted, units must fire a registration (or at least check rounds).

The ROE may make registering difficult. However, in most situations, there are ways to get registration data that don't violate the ROE. For example, if a battery is on the coast, a radar registration over the ocean would probably be allowed. During peace enforcement operations, registering in each belligerent's

territory not only will provide data, but also a show of force. Units might have to use nonlethal munitions to fire a registration, such as a radar registration with white phosphorous air burst.

Target Acquisition. The Q-36 Firefinder radar is a major force protection item. It needs to arrive early in the air flow before the enemy can close the airfield with mortar fire.

Deploying units often experience difficulty in employing the Q-36 during initial entry operations. Several factors contribute to this difficulty, ranging from ineffective wargaming at the battalion level to poor section load plans.

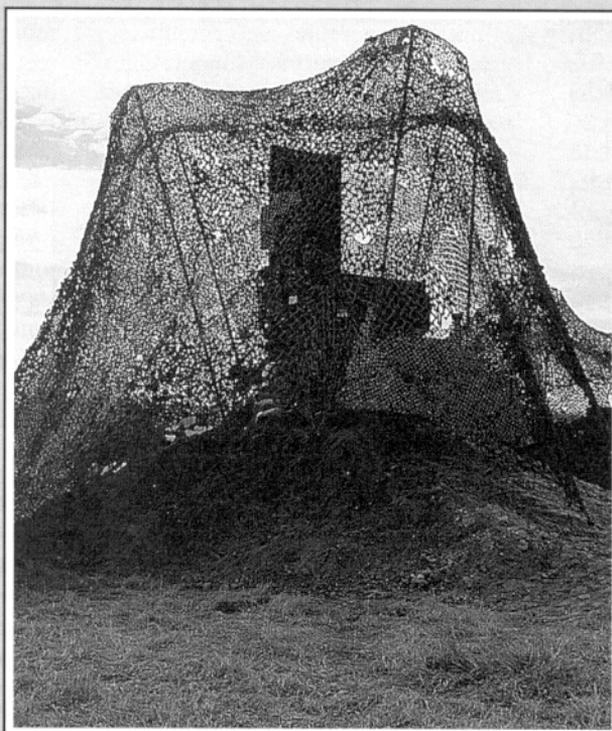
But the most significant challenge facing the radar section in entry operations is unrealistic in-position-ready-to-observe (IPRTO) times. During planning, decision makers rarely address and wargame the unique tactical and technical considerations associated with the radar. Times for the radar to be in position and ready to observe the battlefield's firing activities usually are based on textbook optimum radar positions, which are incredibly hard to replicate in theater during initial entry operations.

Other operations hinge on the timing of the radar's operational status. Task force leaders consistently emphasize the importance of the radar's being operational as a condition for follow-on combat operations.

The times outlined in *FM 6-121 Field Artillery Target Acquisition* provide an excellent standard for evaluating crew drill proficiency at home station. However, assuming sections can consistently achieve these times during combat operations without effective reconnaissance, route clearance and security is impractical.

These challenges become exponentially more difficult when radar warrant officers waste precious time looking for "the optimum" site. The key is to determine what coverage is essential for providing immediate support to the brigade combat team (BCT) and, as quickly as possible, find the site that will accommodate that coverage. Improving coverage is an option that can be exploited after the task force secures its initial objectives.

Guidance provided by the commander or his representa-



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tive tends to come in the form of not-later-than (NLT) times. This infers acceptance of a position for the sole purpose of achieving the IPRTO time, instead of allowing additional time to select the best available position within the immediate area.

The asset used to insert the radar will have a significant effect on IPRTO. Basically, three options are available: ground convoy, fixed-wing aircraft or rotary-wing aircraft. The minimal amount of equipment the radar needs for operations will fit into one C-130. However, units tend to plan radar loads that include other vehicles. This causes the system to get spread over two or three different aircraft chocks and delays the radar's operational time.

When using Air Force aircraft, an individual knowledgeable about radars needs to be present with the airfield control group when the equipment arrives, ensuring a smooth transition. This individual helps establish communications and tactically updates the radar section leadership. Simultaneously, the section can reconfigure loads in a secure environment.

Traditionally, radars collocate with a firing battery in a perimeter to facilitate security. The radar technician and the battery commander must have an appreciation of the unique requirements of both the radar and the howitzers. The typical scenario has them wasting precious time trying to grasp each others basic needs. To gain experience integrating radars with the firing battery, key personnel should approach collocation at home station from a hostile fire perspective.

Employing the Q-36 radar effectively during initial entry operations requires a concerted effort that starts with the battalion commander and ends with that soldier operating the equipment. Clear, concise and realistic guidance is an absolute. The radar technician must provide candid advice to the staff on the section's ability to accomplish assigned tasks within the allotted time. Back briefs, rehearsals and pre-combat checks and inspections (PCCIs) will ensure all personnel and equipment are ready to execute.

The Firebase. As always, placement of the firing battery depends on mission, enemy, terrain, troops and time available (METT-T). Because the main threat will probably be from ground forces, a strongpoint or firebase provides the best defense. Also, the firing

units will probably have to be able to fire 6400 mils, which can be accomplished from a firebase.

Most units have never built a firebase. At home station, units need to train with engineers to establish standing operating procedures (SOPs) for building a firebase in a realistic time estimate.

Battle drills for all contingencies in the firebase and movement in and out of the firebase need to be established and practiced. The drills should include reaction to snipers, daily mine clearing of routes into the battery, convoy counterambush, repelling ground attacks, security during march order and emplacement, patrolling, security when picking up container delivery system (CDS) resupply, convoy operations, reporting inventory of items leaving the battery and battle tracking.

If the enemy has air capabilities and friendly forces don't have air superiority, units should not use a firebase. In that situation, excellent passive air defense measures while still maintaining a ground attack defense may be the battery's best protective posture.

Clearing Targets. Probably the hardest part of fire support in a contingency operations is clearing a target, especially in close terrain with civilians on the battlefield. With rare exception, all indirect fires must be observed fires. The observer must know where he is—if possible, using a GPS. If there is the least doubt about his location, he should call for a ground burst illumination round or air burst white phosphorous to get his bearings before calling for high-explosive rounds.

Next, the observer must know where other units are and if civilians are in the area. Detailed battle tracking, diligent reporting, and the execution of disciplined immediate action (infantry) battle drills are the keys to success. When observers report every hour or so (sooner if moving) and all elements in the area of operations get the information, the risk of fratricide decreases significantly.

Getting indirect fire rapidly has always been a problem, especially when trying to target insurgents. But using priority targets and mortars can decrease the response time. The company FSO and commander decide who gets priority of fire in their area and provide, at least, mortars and an FO.

The mortars lay on a priority target. As the unit moves close to the target, the soldiers have the option of reconnoitering by fire or deleting the target and

having the mortars lay on another one. If the unit receives fire, it can quickly shoot the priority target and then start adjusting the rounds toward itself until the effects are on the enemy.

Another problem is attacking an objective when the terrain confines observation to only 100 to 200 meters. If the exact location of the target is not known, adjustment is required. Observers need to get as close to the target as possible with local security and adjust with a ground burst illumination round, smoke or white phosphorous until the rounds are within minimum safe distance to the observer. The observer then may have to move away from the objective before he can fire for effect.

Whether deploying to the CTCs or on an actual contingency mission, the keys to success are tough realistic training, thorough planning and SOPs that are detailed and followed.

Fire support for contingency operations means being flexible, versatile, and disciplined.



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