



Red Diamond

Threats Newsletter



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ACE Threats Integration

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by [Jennifer Dunn](#), TRADOC G-2 ACE Threats Integration (DAC)

TRADOC G-2 ACE Threats Integration has released a number of products as part of its Threat Tactics Reports (TTRs) series: [ISIL](#), [Russia](#), and [North Korea](#). The next installment of this series is China. The China TTR is scheduled to be published sometime early this fall and will provide a detailed look at the People's Liberation Army's Army (PLAA)—China's ground forces. The document emphasizes government strategy and military doctrine, equipment, and capabilities that have a direct effect on ground tactics and techniques. It includes a series of graphical representations of tactics that are taken directly from Chinese doctrine. The document concludes with a section that demonstrates how the Chinese tactical principles and capabilities can be replicated using the [TC 7-100](#) series. The September issue of the *Red Diamond* will include a preview of the China TTR.



RED DIAMOND TOPICS OF INTEREST

by Angela M. Wilkins, TRADOC G-2 ACE-Threats Integration, Editor, *Red Diamond* Newsletter (BMA Ctr)

This month's front-page feature announces the impending publication of the fourth product in the Threat Tactics Report (TTR) series, this one focusing on PLAA ground forces tactics. More details of the information from the TTR are presented in an article beginning on page 14. PLAA stand for the People's Liberation Army's Army, as opposed to PLAN, which represents the navy, or PLAAF, which represents the Air Force.

The next version of the DATE, 3.0, will involve input from users and interested parties in the form of working groups, in particular to address the topics of terrain, maritime, timeline, irregular warfare, and order of battle. The first working group will be this December. See pages 5 and 6 to learn how to participate.

Part 3 of the threat tactical vignette series of *Red Diamond* articles begins on page 7. This article delves into the details of reconnaissance and ambush tasks.

The World Class OPFOR utilizes the tasks and systems of mission command to conduct a Warfighter at a higher tempo, in a more adaptive and integrated fashion than training units, in order to seize, retain, and exploit the initiative. The article beginning on page 18 discusses the best practices of the WCOPFOR as an operational-strategic command (OSC). The article was co-written by LTC David

Wright of MCTP and Pat Madden of ACE Threats Integration (ACE-TI).

This month's WEG article features the Chinese SLC-2 and its capabilities. The article describes its artillery-locating functions and how it might affect US military operations.

Iran's ground forces are comprised of two entities: the Artesh and the Iranian Revolutionary Guards Corps (IRGC). Details are shared as to the composition and capabilities of these forces, and a tactical example of how the Artesh might act defensively during a potential invasion of Iran is provided.

Finally, an article containing an excerpt from the recently published *Threat Tactics Report: Russia* completes this August issues of the Red Diamond. A link to the full product available from ATN is provided in the article.

Contact information for all TRADOC G-2 ACE Threats Integration personnel is provided on the final page of the newsletter. We are here to help, so contact us with your questions.

Email your topic recommendations to:

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Director's Corner

Thoughts for Training Readiness



by [Jon Cleaves](#), Director, TRADOC G-2 ACE Threats Integration (DAC)

The TRADOC G-2 recently hosted an Opposing Force Conference to plan for the continued quality of Training and Doctrine Command intelligence support to US Army readiness. One of the central aspects to TRADOC G-2 Operational Environment Enterprise (G-2 OEE) support in unit, activity, and leader readiness is identifying realistic, robust, and relevant opposing forces (OPFOR) for training, professional education, and leader development.

Once requirements are validated, resourcing OPFOR is always a matter of priorities to provide the best possible conditions to the US Army unit commander in order for him or her to evaluate tasks-missions to an Army standard. This mission task is even more problematic in an era when the Secretary of the Army and the Chief of Staff of the Army acknowledge compromises to Army modernization and force reductions underway, and warn of risk to operational readiness and Army responsiveness.

Enemies and adversaries continue to flex intent and capabilities in current events throughout US combatant commands worldwide. Recent examples include expanding paramilitary insurgencies and state sponsors promoting separatist movements and combat into neighboring sovereign states.

With the Army requirement to represent or replicate threat/OPFOR capabilities for the dynamic capabilities of a hybrid threat (HT)—regular forces, irregular forces, criminal organizations, active and/or passive supporters in a relevant population, and acts of terrorism unrestrained by extremist actors—knowing “what right looks like” as requirements is a prime mission task. Confronting the combined arms task organizations of Army brigade combat teams (BCTs), and their augmentation from division-corps echelons and joint or partner forces with realistic, robust, and relevant OPFOR is already a training operational environment (OE) challenge. Identifying and validating critical requirements remain particularly challenging in live, constructive, virtual, and/or gaming simulations.

The TRADOC G-2 ACE Threats Integration Directorate serves as Army lead for designing, documenting, and integrating threat or OPFOR and OE conditions in support of all Army training, education, and leader development programs. We also review, analyze, and provide recommendations for the integration of OE and its critical variables into training, education, and leader development.

In the coming months of 2015, the TRADOC G-2 ACE Threats Integration Directorate will conduct a series of internal tactical vignettes and threat assessments—*Threats Integration Wargame 2025*—to study possible and probable threats in near-term and mid-term OEs that a regionally aligned Force (RAF) could confront in decisive action missions. The resulting sets of conditions will assist in identifying threat capabilities and limitations as a basis to update flexible and dynamic OPFOR force structure requirements. One concept among several concepts to be considered is a more adaptable task organization such as a guerrilla brigade tactical group (BTG) with affiliated or associated regular forces, and state actors and/or other irregular actors. These options may prove more effective in threats representation than a traditional use of heavy BTG OPFOR and/or lesser irregular OPFOR affiliates.

Evaluation of these wargame outcomes will guide revision of OPFOR equipment requirements in the TRADOC *Operational Environment Master Plan* (OEMP). The OEMP states the high and medium fidelity requirements for current and future realistic and viable training conditions at the Combat Training Centers (CTCs), Home Station Training (HST) sites, institutions and Centers of Excellence (CoEs), and Enduring Mobilization Training Centers (EMTC). Validated requirements of the OEMP are essential to Army senior leader decisionmaking on fiscal priorities and allocation programs of Army resources.

The ACE Threats Integration Directorate will keep the *Red Diamond* readership apprised of OEMP developments on revised requirements and implementations as they occur toward supporting US Army readiness now and into the immediate future.

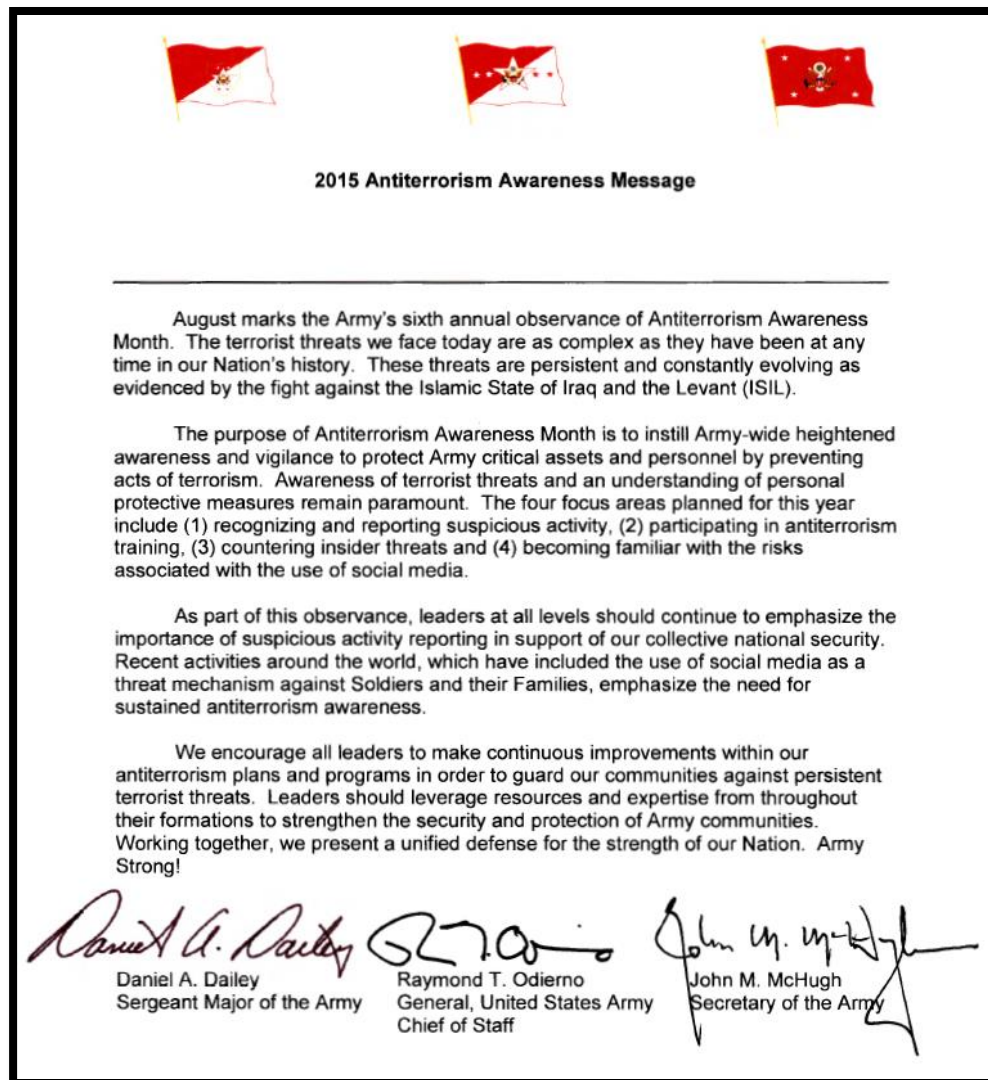
JON

US ARMY ANTITERRORISM AWARENESS MONTH

AUGUST 2015

by TRADOC G-2 ACE Threats Integration, Operations (BMA Ctr)

The senior leadership of the US Army declared August 2015 as the Army's Antiterrorism Awareness Month to instill a more heightened sense of antiterrorism communication and understanding throughout the Army community. Themes for antiterrorism include focus topics of active shooter, insider threat, homegrown violent extremists and social media. The Army senior leadership published the announcement (below).





Decisive Action Training Environment

DATE 3.0

Beginning the Process

by [Laura Deatrick](#) (CGI Ctr) and WO [Matthew Tucker](#) (UK) LO, TRADOC G-2 ACE Threats Integration

ACE Threat Integration (ACE-TI) has started the production process for version 3.0 of the Decisive Action Training Environment (DATE 3.0). Due to DATE's widespread and increasing use both nationally and internationally, ACE-TI desires the active involvement of current and future DATE users in this process. As such, ACE-TI will be hosting a working group meeting to be held at Fort Leavenworth from 8–11 December 2015.

It is envisaged that the DATE 3.0 working group meeting will host subgroups to address certain key issues that affect multiple users. The proposed subgroups are detailed below, with their aim, outcomes, and considerations. Most of these will begin prior to the meeting and will continue work into calendar year 2016.

Subgroups

Terrain. This subgroup will be concerned with issues of terrain and simulation. The aim of the group is to produce a common geographic DATE map that can be utilized by all virtual and constructive exercises. The dirt combat training centers (CTCs) and other live environments will be considered in the study as they will use the common map for their constructive simulation wrap around. The group will consider the current terrain in use and agree upon definitive country and province borders and included infrastructure. User input regarding specific needs/training requirements that are currently lacking or needing change (e.g. pipelines) will be gathered and

examined for inclusion in the common map. The final product will include geocoordinates defining all borders and the “dirt CTC” placements within the AO, and may include specific infrastructure features as well.

Maritime. This subgroup will recommend a course of action (COA) for the employment of maritime assets in the DATE region. It is the aim of the group to enable maritime operations to occur in a manner that facilitates the participation of the Navy, Marines, and international partners. At least three broad-outline COAs will be presented to the group, and through a collection and study of potential users' requirements and an analysis of the work required and the perceived benefits, a COA should be recommended for action. The COA should be fleshed out to include an exact list of requirements and a consideration of all other factors such as bordering country political positions.

Timeline. This subgroup will assess the issue of keeping the DATE narrative consistent with a timeline. The aim of the group will be to articulate a DATE event timeline and consider how this stays current. After deciding historical information such as founding dates and the historical role of the countries, consideration should be given to the occurrence of events. Certain events will need to be on sliding dates, such as the election of the current governments, while others will need to remain fixed.

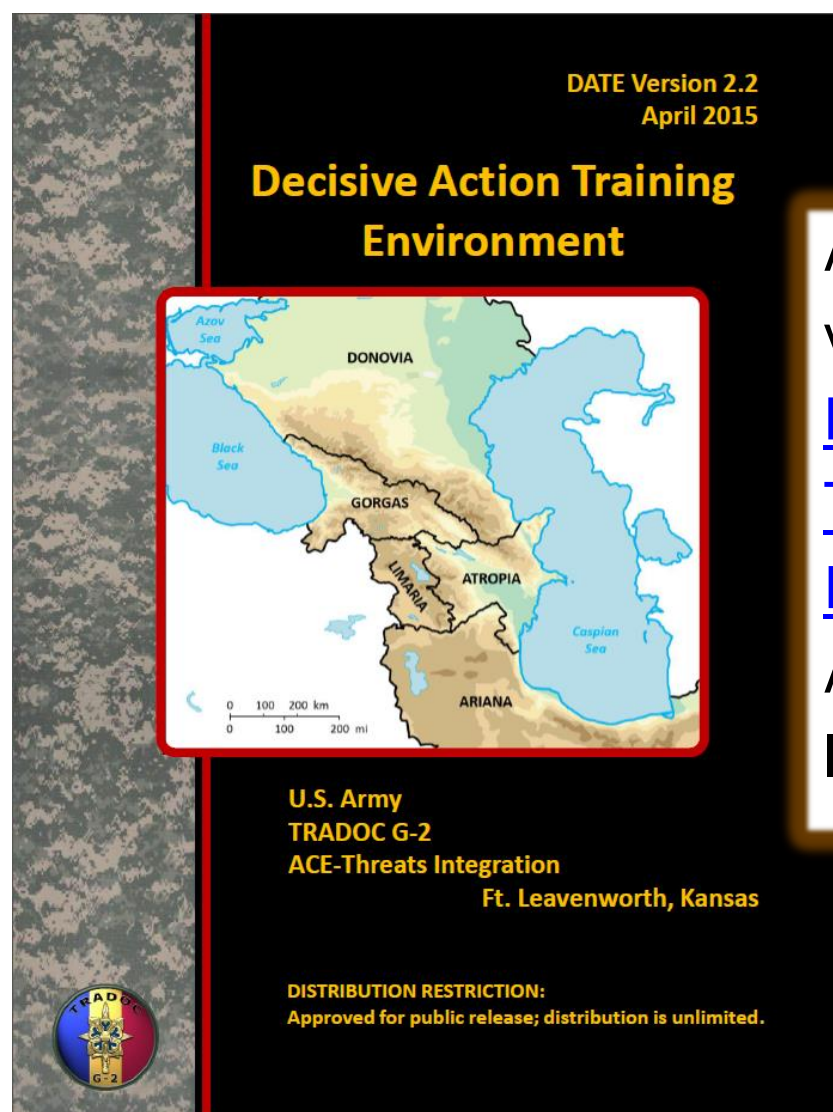
Irregular Warfare. This subgroup will review and improve upon the definitions of the irregular actors

within the DATE. Having identified any groups that are not represented in the DATE, the aim will be to describe all of the irregular warfare actors by their areas of responsibility/operation, motivation, size, ideology, goals, and interactions and relationships with other DATE organizations, including governments and criminal elements. This product should standardize all irregular warfare actor representation across the CTCs and international partner institutions.

Order of Battle. The aim of this subgroup is to review the present Order of Battle (OB) structure, revise it where appropriate, and define the OB for missing players, such as the Lower Janga insurgents and the major criminal organizations.

How to Participate

An initial video teleconference is planned for early September 2015. ACE-TI will present its overall vision of the DATE 3.0 update and working group meeting, review the subgroups, and answer questions regarding the process. Of note, meeting participation is highly recommended, but not required, for working group/subgroup participation. Those desiring to participate in the VTC, the primary working group, or any of the subgroups can contact Mr. Walt Williams at 913-684-7923 or walter.l.williams112.civ@mail.mil. To submit comments or suggestions for improvements to DATE, please contact Laura Deatrick at 913-684-7925 or laura.m.deatrick.ctr@mail.mil.



Access the current version of the [Decisive Action Training Environment](#), 2.2, on ATN by clicking the link.

Threat *Tactical Vignette* Recon and Ambush

by [Jon H. Moilanen](#), TRADOC G-2 ACE Threats Integration (BMA Ctr)

Part 3 in RZ-CRZ Series

Situation Update

In previous June and July 2015 *Red Diamond* newsletter articles, an encirclement operation was in progress with mechanized and motorized forces of operational strategic commands (OSCs) pushing deep into the enemy's rear zone. Division tactical groups (DTGs) are maneuvering to link up and close the encirclement along the KRONATZ river line. The division commander directs his reconnaissance battalion to screen his southern flank, report enemy advances between the RADO River and AHL rivers, and delay to the RADO river line if confronted with superior enemy forces. A reconnaissance company commander, based on mission analysis, risk assessment, and significant width and depth of his zone, task organizes each of his platoons as an *independent reconnaissance patrol* (IRP).

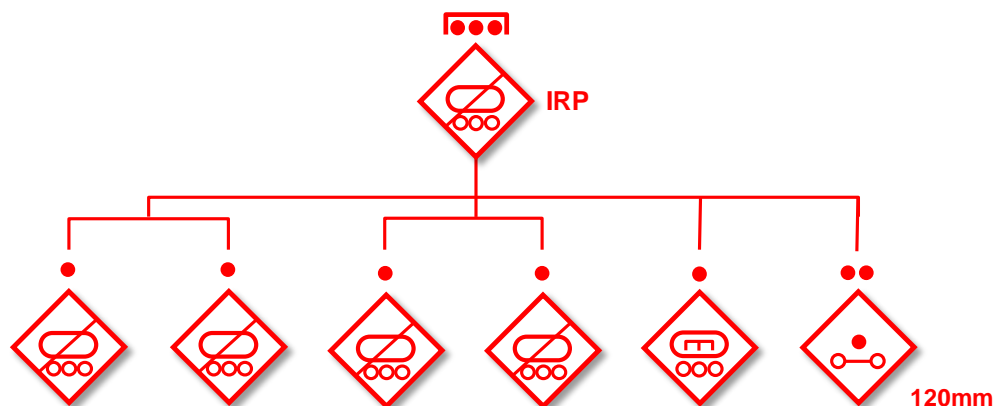


Figure 1. Reconnaissance platoon, task-organized support, for independent mission (example)

This August 2015 article is the third article in the tactical vignette series. Reconnaissance and counterreconnaissance are economy of force actions. This screen mission incorporates both tasks as integral to providing early warning and a degree of protection to the force main body. Additional tactical tasks are typical in the conduct of reconnaissance, counterreconnaissance, and/or a screen.

Screen

A screen is a form of security operation that provides early warning to the protected force.

Ambush

An ambush is a surprise attack from a concealed position used against moving or temporarily halted targets.

In this vignette, the underdeveloped road network throughout the zone remains problematic for transportation based on the recent heavy rains and predominantly cultivated lowland or marshland. Overcast weather settles as fog in the low areas and recurring mist severely limits any long-range ground observation. Enemy reconnaissance elements from infantry

or motorized infantry forces are expected as a vanguard of enemy forces withdrawing to the northeast toward the RADO River crossings.

Note. Descriptions throughout the vignette use threat terms from the TC 7-100 series.¹ The task-organized platoon is best understood by knowing the unit and weapon system capabilities as presented in [TC 7-100.4](#) and its [Threat Force Structure e-folders](#) of units. Another source is the TRADOC G-2 [Worldwide Equipment Guide](#).

Security Operations at Platoon Echelon

The IRP has just seized a bridge over the MIN River and occupied positions on the near and far bank of the river. The platoon leader conducts final checks as he prepares to move from the MIN river position to screen as far south as KOLTE. He reviews his current situation as follows:

- One scout squad remains on the north bank at the destroyed bridge site. Scouts occupy an OP on the south bank. The senior sergeant (SS) will conduct reconnaissance south to probable enemy location (PEL) 23.
- The platoon leader (PL) will conduct route reconnaissance along the roadway from the bridge at BEJUNIK toward KOLTE (PEL 27). PEL 26 is his initial objective task focus.
- The combat engineer squad remains at the MIN River to secure the bridge site and is ready to assist the scout squad at the destroyed bridge or respond to the scout section maneuvering south toward PEL 26 and PEL 27.
- The mortar section remains in position at BEJUNIK ready to assist the platoon with on-call indirect fires.

The platoon leader and scout section depart the bridge site at BEJUNIK and move cautiously along the gravel road toward KOLTE. The marshland to each side of the raised roadbed is inundated from the recent rains and forces the three scout vehicles to remain on or near the sides of the roadway. The rising sun is burning off the morning mist but pockets of gray haze still linger in lower areas of the marsh.

Even though the distance was several kilometers to the south, the wooded rise of Hill 21 is visible above the marsh mist. The map indicates that this probably provides a good visual vantage point south, once occupied, all the way to KOLTE. Correspondingly, if occupied by the enemy, this terrain would provide good visibility north on an approach to BEJUNIK.

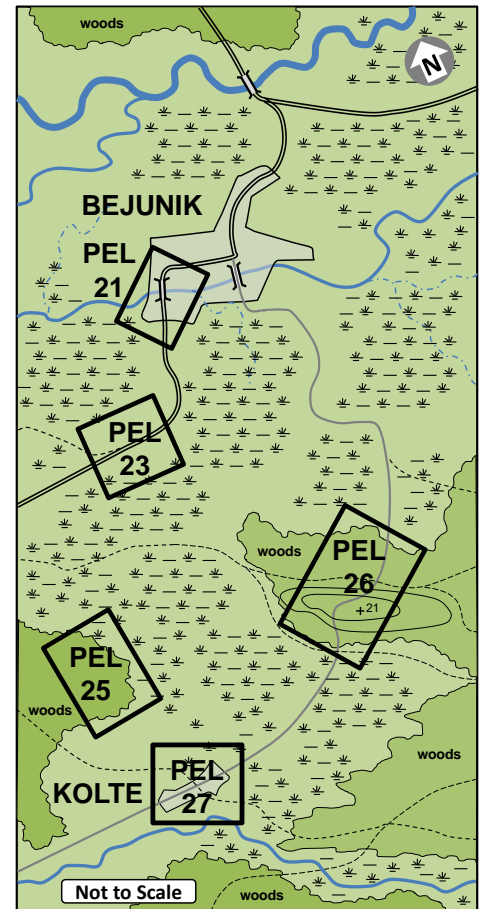


Figure 2. Sketch of IRP PELs



Figure 3. Sketch of IRP dispositions and pending actions

Back at the MIN River near the bridge just crossed by the platoon leader, the senior sergeant is confirming contingencies with the engineer sergeant. Similar defensive preparations are ongoing at the destroyed bridge site to the west. The marsh mist in this area remains thick even with the rising of the early morning sun. The senior sergeant initiates his reconnaissance to go at least as far as the trail intersection with the main road in PEL 23. One BTR crosses south of the MIN River, and links up and recovers one of

the OP teams already south of the river. The other scout squad and BTR continue to improve the defensive position north of the destroyed bridge.

On the eastern roadway, the platoon leader and scout section do not identify any trails intersecting the road from the

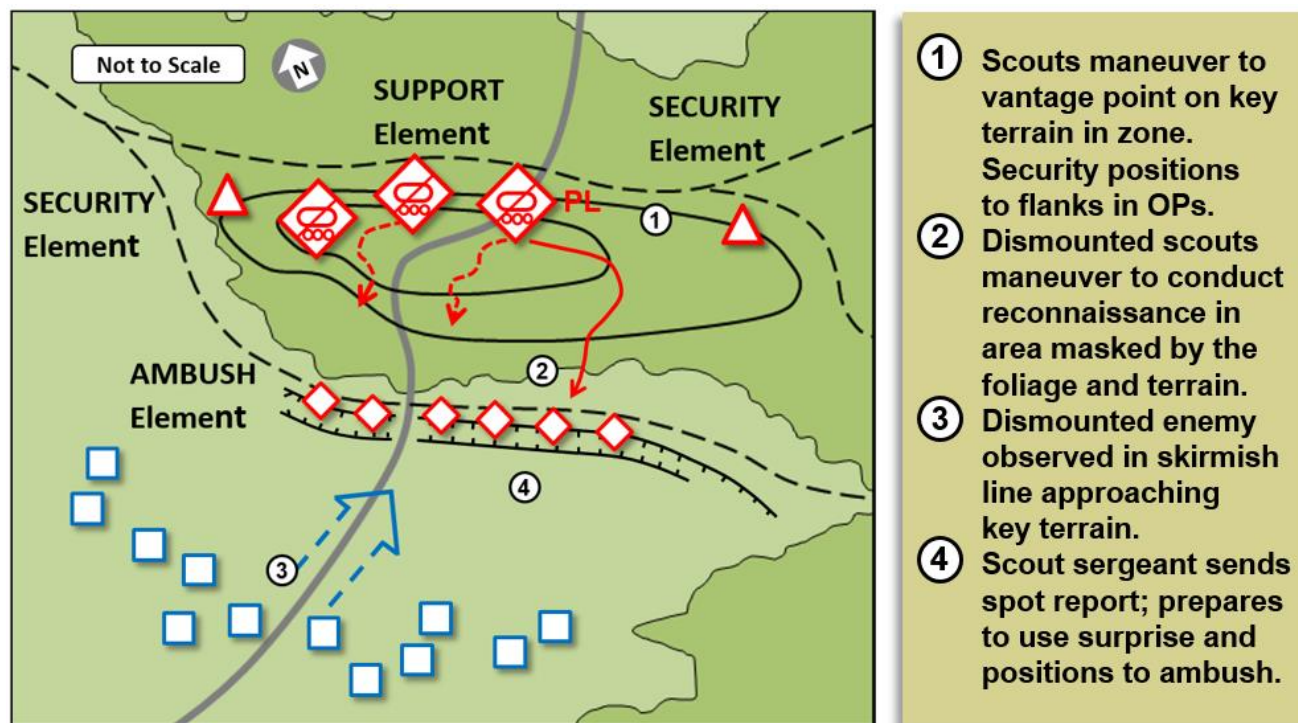


Figure 4. Scouts conduct counterreconnaissance and prepare to ambush

west, although one marsh area appears slightly higher with low brush and thicket. As they approach Hill 21, the wooded area is more expansive than portrayed on the outdated map. Tree growth and thick underbrush expand down the slopes to the marshy areas.

As the scout section maneuvers into the treeline up the northern slope of the hill, small trails from the east converge with the road. The BTRs position near the military crest with some visibility of the road into KOLTE but have no clear visibility of the southern base of the hill. One dismounted observation post (OP) orients east along the trail network. Other dismounted scouts continue down the southern slope. At the base of the hill, a drainage ditch runs perpendicular to the road. Just as the scouts enter the ditch, the scout sergeant signals silence with his hand. Voices ahead!

The scouts hear enemy soldiers to the south moving through the marsh grass toward the hill. From the periodic enemy shouts back and forth among themselves, the scout sergeant estimates at least 10 to 20 enemy soldiers deployed and walking abreast in a wide pattern. The thick tall grasses preclude seeing anything beyond a few meters. A spot report alerts the platoon leader and vehicle crews in the woodline.

Now is when battle drills and section training demonstrate tactical dividends. Arm and hand signals by the sergeant quickly communicate the actions about to occur within moments—Ambush. The scouts spread out along the ditch about three to five meters apart and can still see each other. All eyes are on the scout sergeant.

Based on the sergeant's hand signal and visual gestures, each scout will throw one hand grenade into the kill zone. After the detonations, each scout fires one magazine in controlled rapid fire and then moves left down the ditch. The PKM gunner has already shifted to the section's left flank prepared to graze the frontage from left to right with machinegun fire.

Each scout acknowledges the sergeant's hand signals as they crouch or kneel at-the-ready in the ditch with grenade safety pins already pulled. The enemy soldiers continue to move toward the base of the hill. The sergeant drops his hand sharply, and grenades arc high and far into the marsh grass in front of scout squad. The multiple grenade explosions catch the enemy

skirmish line completely by surprise. Screams from the wounded are drowned out by the deafening automatic and rapid fire of the scouts.² The sergeant hears enemy leaders reacting to the ambush even though he cannot understand what they are yelling.

Return small arms fire from the enemy is ineffective as it clips the marsh grass overhead along the ditch. Even then, one scout is hit once in the shoulder with rifle fire and another scout receives a head wound. Fortunately, the depression of the ditch provides ample cover to start breaking contact from the enemy.

White phosphorous grenades thrown by the right flank scout and the sergeant after the initial volley of fragmentation grenades add to the enemy's confusion while providing additional concealment as the scouts displace. The PKM gunner on the left flank, even though he cannot see the enemy, continues to rake back and forth with machinegun fire into the enemy as scouts pass to his rear in the ditch and move into the woodline. The sergeant taps him on the shoulder, and the gunner moves down the beaten grass path while the sergeant continues firing toward the enemy. After a last look down the ditch at the expanding phosphorous cloud, the sergeant lobbs one more hand grenade, turns, and jogs quickly in a low crouch to the woodline. He stops at his scout setting an antipersonnel mine and tripwire, nods his approval, and they both join the other scouts up the slope in the rally point.

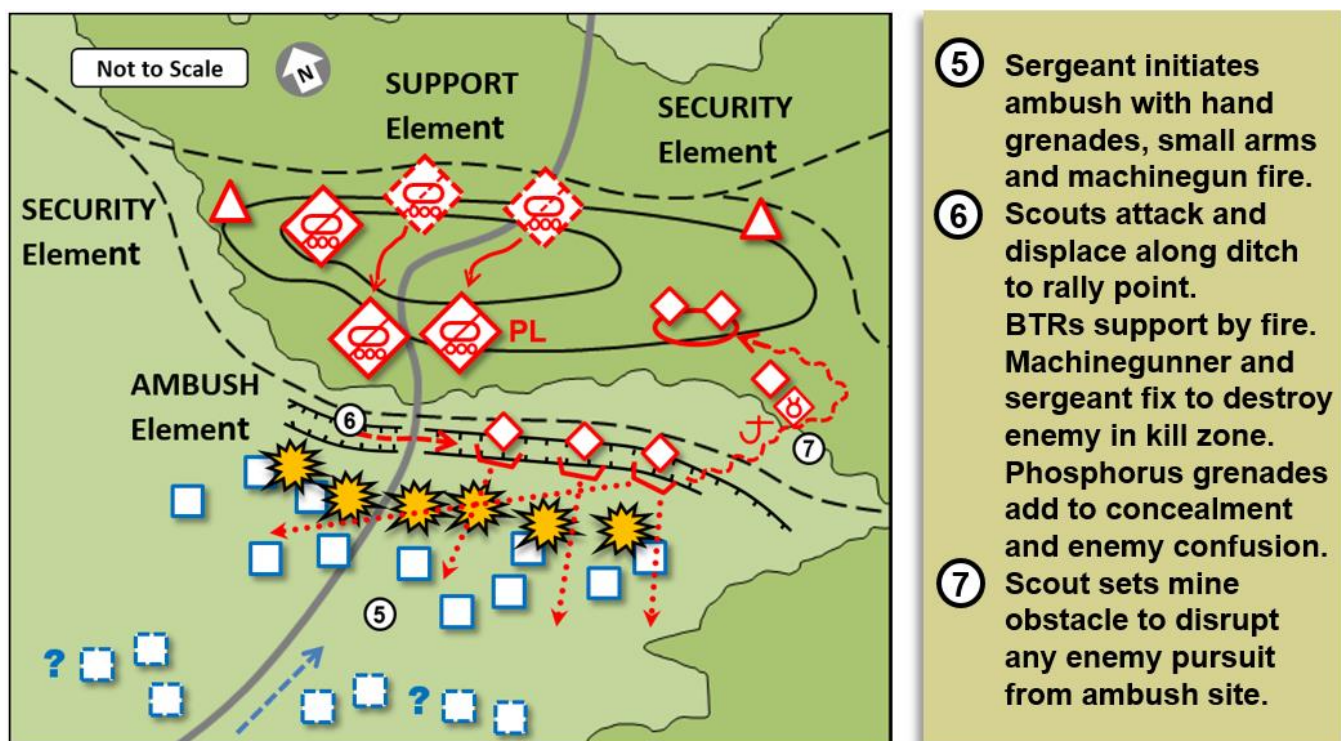


Figure 5. Scouts ambush enemy skirmish line and withdraw to rally point

The platoon leader moved two of the BTRs down from the military crest to the edge of the woodline to assist in covering the withdrawal of his dismounted scouts with automatic weapons fire. Knowing the scout squad has withdrawn to its rally point, the platoon leader directs BTR machinegun fires into the smoke-filled marsh grass.

At the rally point, the scout sergeant reports no friendly killed and two scouts as walking wounded in the ambush. The enemy estimated in the kill zone is a 10 to 20 soldier element.

The BTR at the military crest reports three wheeled armored carriers stationary at the northern outskirts of KOLTE. The spot report stops suddenly in mid-transmission as medium indirect fires land on the crest of Hill 21.

While the platoon leader keeps one BTR at the woodline, he returns to the military crest of the hill to find a burning hulk that was a BTR. A direct hit by indirect fire destroyed the BTR. No crew members survived. The BTR scout at the southern woodline of Hill 21 reports no observed dismounted enemy movement from the west but states that he cannot fully observe to the south. However, a follow-on spot report from a dismounted scout team notes three to five dismounted enemy soldiers maneuvering northeast as they enter the wooded area east of Hill 21.

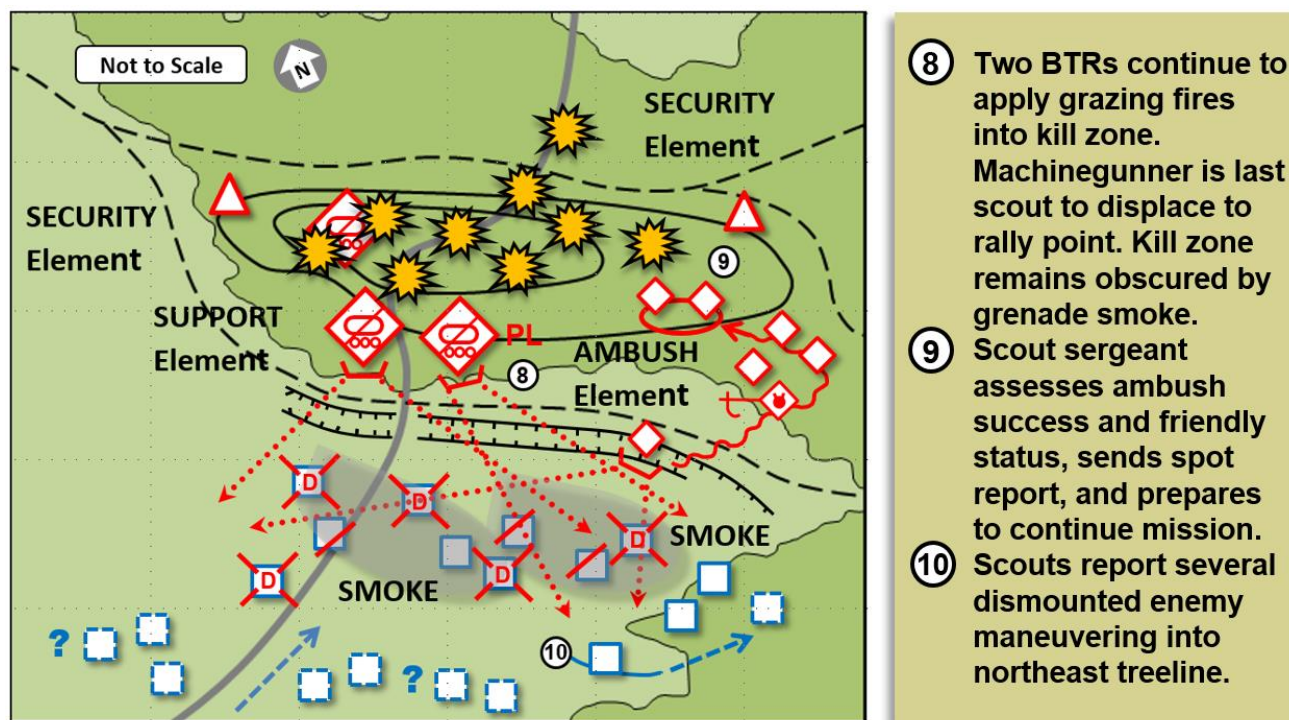


Figure 6. Scouts reorganize and prepare to continue screen tasks

What Next?

The screen mission continues. The platoon leader and senior sergeant are updating the platoon on the situation oriented to their respective PELs in zone. Casualty care is ongoing in the rally point. The platoon leader is considering a raid to capture enemy soldiers and exploit field interrogation to identify what enemy units are maneuvering from the south. He coordinates with the dismounted scouts at the rally point and keeps the BTR at the woodline oriented toward KOLTE.

Concurrently, the senior sergeant on the eastern road reports that he is entering PEL 23 and continuing south on his reconnaissance. The senior sergeant rises higher in his BTR cupola as the morning mist suddenly evaporates. He senses something is not normal as he visually scans the road and trail intersection to his front. Scouts start to dismount from the BTR.

At the MIN River, the scout squad and combat engineer squad are improving defensive positions. Observation posts are forward of each simple battle position (SBP). The mortar section remains ready for fire missions.

Training Implications

This article illustrates the value of individual skills proficiency and effective execution of small unit drills and tasks based on quality training, teamwork, and leadership. The decentralized command and control (C2) of a threat/opposing force (OPFOR) demands leader initiative with prudent risk-taking and willingness to act, but also indicates that leaders require experiences and mentorship to develop expertise.

The platoon leader adapted quickly to the changing tactical conditions that emerged in the conduct of his screen mission. In this independent reconnaissance mission, limitations due to adverse weather, physical environment, and time sensitivity of enemy expected in zone complicated his tactical decisions.

Map reconnaissance with outdated maps and not having other technical imagery systems precluded knowledge of a second small bridge in BEJUNIK. Use of dismounted scouts on the approach to BEJUNIK added to IRP stealth and ability to surprise the enemy of the platoon's presence and seize the roadblock. Knowing this engagement alerted any other enemy elements in the village, the scouts moved rapidly down the streets to seize the bridge. The huge explosion seemed to dash their plans, but when another firefight erupted with the scout support element, the initiative and aggressive actions of IRP noncommissioned officers were instrumental to seizing a bridge over the MIN River before it could be destroyed.

Hill 21 was clearly the commanding terrain south of the MIN River and as far south as KOLTE. The IRP arrived at this key terrain without any enemy contact. Continuous security and use of dismounted scouts allowed the IRP scout section and platoon leader to surprise and defeat the vanguard of an approaching dismounted enemy element in an ambush using immediately available weapons systems—semiautomatic and automatic rifle fires, hand grenades, and machinegun fire. Assessment of enemy destruction was not feasible given the smoke concealing the kill zone and the decision for the scouts to quickly withdraw after a sudden and violent massing of their on-hand combat power in an ambush.

Knowing the threat is essential to planning and combating the capabilities and limitations of an opponent in a training mission. When a specified threat exists in a deployment order, the actual threat force is represented or replicated in training and pre-deployment evaluations. When training is not focused on a particular real-world threat, Army activities use an opposing force as stated in Army Regulation 350-2. This regulation is a 2015 update on the operational environment (OE) and OPFOR) program.

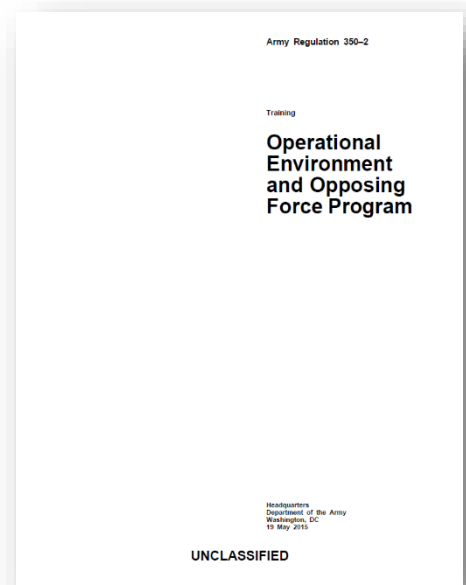
An OPFOR is a plausible, flexible military and/or paramilitary force representing a composite of varying capabilities of actual worldwide forces (doctrine, tactics, organization, and equipment) used in lieu of a specific threat force for training and developing US forces.³ The OPFOR can represent a particular threat, hybrid threat, and/or an adversary that can morph in capabilities and influence within a relevant population.

An *ambush* is a surprise attack from a concealed position, used against moving or temporarily halted targets. In an ambush, enemy action determines the time and the OPFOR sets the place.⁴ Ambushes can be employed to but are not limited to—

- Destroy or capture personnel and supplies.
- Harass and demoralize the enemy.
- Delay or block movement of personnel and supplies.
- Canalize enemy movement by making certain routes useless for traffic.

An ambush is typically organized into three elements: the ambush element, the security element, and the support element. There may be more than one of each of these types of elements.⁵

- The *ambush* element is the *action* element of an ambush. It attacks and destroys enemy elements in the kill zone. The ambush element seized the initiative and surprised the approaching enemy elements. Not knowing the size and capabilities of the enemy, the section sergeant decided to conduct an ambush and break contact.
- The *security* element of an ambush prevents enemy elements from responding to the ambush before the main action is concluded. Actions may be required to prevent the ambush element from becoming decisively engaged. Security elements provide early warning or can be directed to isolate the ambush site. This *enabling* element assists in covering the withdrawal of the ambush element from the ambush site.
- The *support* element of an ambush has the same basic functions as that of an assault. It provides the ambush with one or more of the following but is not limited to: C2, combat service support (CSS), supporting direct fire and/or indirect fire, and mobility support. Support is an *enabling* element.



The reconnaissance and counterreconnaissance tasks are often a normal complement to each other unless constraints are placed on a mission to preclude counter-reconnaissance actions. Surprise and deception are factors to confuse the enemy and limit enemy response to the ambush. Using available cover and concealment with camouflage during an engagement provide a degree of protection, as well as supporting the coordinated withdrawal actions directly after the ambush to a rally point.⁶

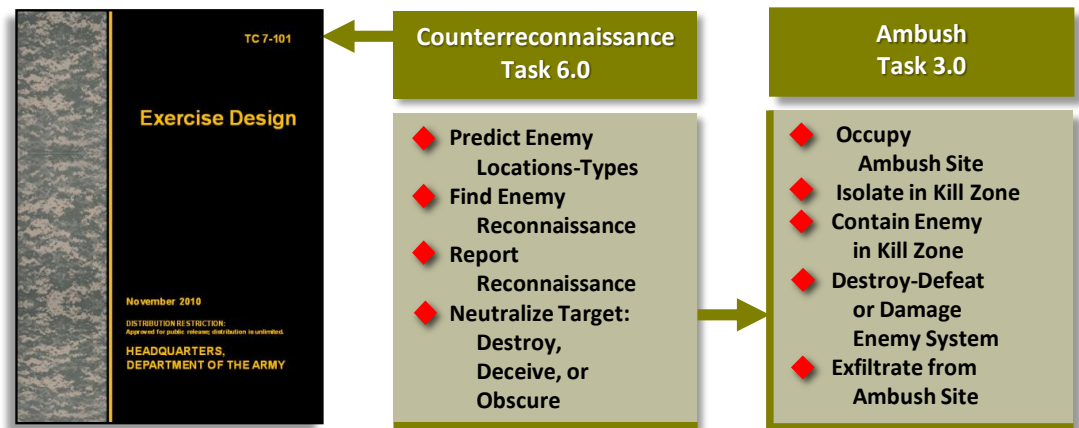


Figure 7. Threat/OPFOR counterreconnaissance with ambush task

In deliberate planning for an ambush, consideration and reconnaissance confirm aspects of—

- Movement and/or maneuver routes from an assembly area or start point to the ambush site.
- Security locations to the frontage, flanks, and rear of the ambush site.
- Support element locations.
- Review an assault position and rally points.
- Fighting positions at the ambush kill zone.
- Actions after the ambush concludes.
- Exfiltration routes for ambush, security, and support elements.
- Actions in the rally point.

Preparations at the ambush site typically include cover and concealment, interlocking sectors of fire among fighting positions, camouflage, improving fields of fire without overtly disturbing the natural foliage or terrain appearance, and integrating emplaced obstacles such as mines and wire to natural obstacles in order to limit enemy options once ambushed in the kill zone.

Note. In this article vignette, a sudden tactical opportunity arose that required a trained and ready response to imminent enemy contact. The next article in this tactical vignette series will address tasks of raid, actions on contact, delay, and/or breaking contact.

Notes

¹ Headquarters, Department of the Army. [Training Circular 7-100.2, Opposing Force Tactics](#). TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. 9 December 2011. para. 8-83—8-86.

² Kurowski, Franz. *Panzer Leaders II: Battle Stories of German Tank Commanders in WW II*. Mechanicsburg, PA: Stackpole Books. (2000). pp. 76-95. *Note.* This book relates a similar use of surprise and quick action by a reconnaissance platoon to effectively ambush an enemy skirmish line encountered during an independent reconnaissance mission.

³ Headquarters, Department of the Army. Army Regulation 350-2. *Operational Environment and Opposing Force Program*. 19 May 2015 with effective date 19 June 2015. para. 1-5b.

⁴ Headquarters, Department of the Army. [Training Circular 7-100.2, Opposing Force Tactics](#). TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. 9 December 2011. para. 3-133.

⁵ Headquarters, Department of the Army. [Training Circular 7-100.2, Opposing Force Tactics](#). TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. 9 December 2011. para. 3-137—3-141.

⁶ Headquarters, Department of the Army. [Training Circular 7-100.2, Opposing Force Tactics](#). TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. 9 December 2011. para. 3-117.



Training Spotlight:

China's Peoples Liberation Army's Army

by [Jennifer Dunn](#), TRADOC G-2 ACE Threats Integration (DAC)

ACE-TI analysts study the training practices of real-world threat actors as part of their routine research. This information is often assimilated, through one manner or another, into one or multiple products to be made available to the US Army training community. For this article of the *Red Diamond*, ACE-TI will spotlight the Chinese People's Liberation Army's Army (PLAA) training.

China's military has implemented an extensive modernization program over the past several decades. This modernization program is driven by two main lines of effort: acquisition of new technologies to replace aging technologies and new training techniques. The combination of these two lines of effort has resulted in a People's Liberation Army (PLA) that is much leaner and more capable than it was 30 years ago.

The PLA is comprised of four separate services. These services are the PLA Navy (PLAN), the PLA Air Force (PLAAF), the PLAA, and the Second Artillery Force. While China has dedicated time and resources to modernizing all of these services, this article will focus on the modernization's training line of effort's impact on China's ground forces, the PLAA.

Thanks to regular increases in military spending, China has succeeded in revamping the PLAA, which was once known for outdated equipment, poor training, and rampant personnel problems. The influx of extra spending has not only gone toward purchasing new more modern equipment to field with PLAA units, it has also gone to doctrinal and training updates, both of which are reflected in PLAA training exercises. This article will describe both doctrinal and training updates as well as discuss recent PLAA exercises.

Doctrinal Updates

By the end of the 20th century, the PLA had completely revamped its tactical and operational doctrine in an effort to modernize its forces. The new doctrine introduced an idea that now drives the PLA's military thought. That concept is *fighting local wars under the conditions of informationization*. Informationization is a term used by Chinese military thinkers to describe operating in an environment where joint operations are being conducted and supported through the

Informationization. “The PLA is convinced that systems integration is more important than individual high-tech hardware. Informatization [informationization] is thus singled out as the driving force for PLA transformation. This reflects a new understanding about the type of war the PLA expects to face in the future: even if the combat is between conventional platforms, **the key to victory is the IT [information technology] systems.** The idea of adding numbers of platforms to enhance capabilities is obsolete. Therefore, INFOWAR [information warfare] is no longer seen as only one method of combat, but the dominant form and the core of all other types of military engagement. Nor is IT upgrading a matter of mere technical significance—it is now considered the lifeline of the PLA's survival.” (You Ji, “China's Emerging National Defense Strategy,” *The Jamestown Foundation*, 2004.)

use of advanced information technology.

After observing the US Army at war over the past decade, the PLA has developed a list of lessons learned that it is actively implementing through training and doctrinal changes. These key lessons learned include:

- “The centrality of information on the battlefield, and the impact of attacking key nodes rather than across a broad front of activity.
- “The importance of offensive action, pre-emptive strikes, surprise, and deception.
- “The value of high-tech weaponry. Specifically, weapon systems needed to integrate information technology, increase firepower effects and range, higher accuracy, and greater mobility and survivability.
- “The importance of ‘real-time’ C4ISR [command, control, communications, computers, intelligence, surveillance, and reconnaissance], long-range precision strike, and advanced electronic warfare capabilities.
- “The combat-multiplying effect of joint operations.
- “The need for timely comprehensive logistics support.”¹

These lessons learned have resulted in additional updates to PLAA doctrine, the most recent of which is the doctrinal series called the “Science of Army Operations.”² This series was driven by the need to update the PLAA’s doctrine to include the concept of informationized operations and to meet the demand for trained joint operations command personnel.³

The PLAA recognizes that doctrinal updates alone are not enough to effect change across its forces, so the PLAA also modified its military training programs through an intense self-assessment of its own weaknesses. As a result, the PLAA’s training has undergone considerable updating.

Training Updates

The Chinese government fully recognizes the strengths and weaknesses of its armed forces and has coined several terms for the gap between the PLA’s current capabilities and its ability to actually accomplish its doctrinal missions and tasks. Two examples are translated as: “the principal contradiction” and the “two incompatibles.”⁴ In an effort to fix these deficiencies, or, at least minimize the effects of its capability gaps, the PLAA has revamped its training program.

The primary way in which the PLAA has updated its training is by “implementing reality.” PLAA subject matter experts postulate that the biggest change over the last decade has been having the country’s forces confronted with more realistic training.⁵ This new effort has encompassed training commanders and staff across all echelons, but in particular has focused on command and control of joint and combined arms training at battalion, regimental, and brigade level because the PLAA sees a significant portion of its capability gaps arising from this area. In general, the bulk of the PLAA’s training emphasizes the following capabilities: integrated joint operations, amphibious operations, special purpose forces (SPFs), helicopter operations, and anti-terrorist operations.



Figure 1. Chinese soldiers learn how to use new command and control platform

Despite the PLAA's training advancements, PLA leadership recognizes that many shortfalls still remain. These shortages are in the training community's inability to incorporate true realism in training events and in deficiencies within the training support base itself. According to a critique from the Chinese *PLA Daily* in 2011,

Although we have taken solid steps towards training in informatized conditions, we should also see that military training in our army is still generally mechanized. Traditional ideas and habitual practices have not been drastically changed. We have not established a mode of training in line with the new mode of generating combat power. Current training support is not sufficient for training under informatized conditions. Reform is the only way to solve all these problems.⁶

As a result of critiques such as this, a new outline of Military Training and Evaluation is undergoing field trials.

Key Training Objectives

The PLAA has identified several extremely weak capabilities: joint operations, close air support operations, and night operations. The improvement of these deficiencies has become a key PLAA training objective.

Joint Operations

While the PLA has improved its ability to conduct joint operations in recent years, it still remains far behind the capabilities of Western countries such as the US. Two factors in particular cause the PLA to not be entirely successful in joint operations. The first is the PLA's inability to conduct joint operations within the constraints of the existing PLA command structure. The stove-piped nature of the existing command structure prevents the flow and sharing of information across all services, a necessity for successful joint operations. The second factor is the training level of officers across the services. While the PLA has attempted, and been limitedly successful at adjusting its command structure, it is still having trouble ensuring that officers across all services possess the level of education, training, and experience necessary to conduct these types of sophisticated military operations. Nearly every joint exercise reported by the Chinese press reveals that an Army officer and an Army headquarters are in command. As a result, the PLA has held very few joint exercises led by either the PLAN or PLAAF as an indicator of limited cross-training between the services. Due to these observations, the PLA continues to place greater emphasis on training its officers across all branches of service to prepare them to fight using joint operations.

Close Air Support

As part of the PLA's weakness in conducting joint operations, one of its biggest capability weaknesses is providing close air support (CAS) and operating in an environment with CAS. For the past decade, the PLA has tried to update its CAS command and control doctrine in order to fix this issue, but it has not been fully successful. Thanks to recent acquisitions, the PLA now possesses the physical aircraft, munitions, and communications systems required for CAS, but will need to undergo training to fully integrate the air support elements with the ground forces. Consequently, CAS will be a greater factor in upcoming training exercises.

Night Training

While the PLAA's SPF elements are highly proficient at conducting night operations, the rest of the PLAA has much less experience training in low visibility environments. The SPF rely on night or other times of limited visibility for insertion and extraction, so these units train regularly in these difficult conditions. In 2009, in an effort to increase the PLAA's limited visibility operations capability, the PLAA headquarters directed that all units must spend at least one quarter of training time dedicated to night operations.⁷ Despite first initiating this training objective in 2009, this remains an objective today, six years later.

The Blue OPFOR

For the US Army, the rotational training unit (RTU) is often referred to as the "blue force" while the opposing force (OPFOR) is referred to as the "red force." During PLAA training exercises, the OPFOR is the "blue force" and the RTU is the "red force." Some PLAA units have created permanent blue forces for training purposes, but the premier PLAA OPFOR unit is the 195th mechanized infantry brigade. This blue force, under the Beijing Military Region, underwent retraining in enemy

tactics in 2013 and officially activated in its current form in January 2014 under the personal approval of President Xi. This premier OPFOR unit epitomizes the PLAA's continuing efforts to train its forces in environments and against enemies more realistic than in the past.⁸ To this end, the 195th mechanized infantry brigade simulates tactics and techniques common to NATO ground forces, in particular what the PLA believes are common US Army tactics and techniques.⁹

The 195th mechanized infantry brigade is unique in China in that it routinely defeats the red forces that come to train against it. Normally, PLAA OPFOR units refrain from truly challenging RTUs in an effort to allow the RTU's commanders to retain dignity and to not offend them, as many of the commanders possess direct ties to the ruling political party.¹⁰ President Xi's blessing of the 195th has given it the freedom from political pandering in order to truly challenge the RTUs it faces on the simulated battlefield. It is likely that this type of OPFOR unit will begin to proliferate throughout the PLAA due to the brigade's success against the RTUs, the lessons learned by the RTUs' staffs and commanders, and the personal support of President Xi.

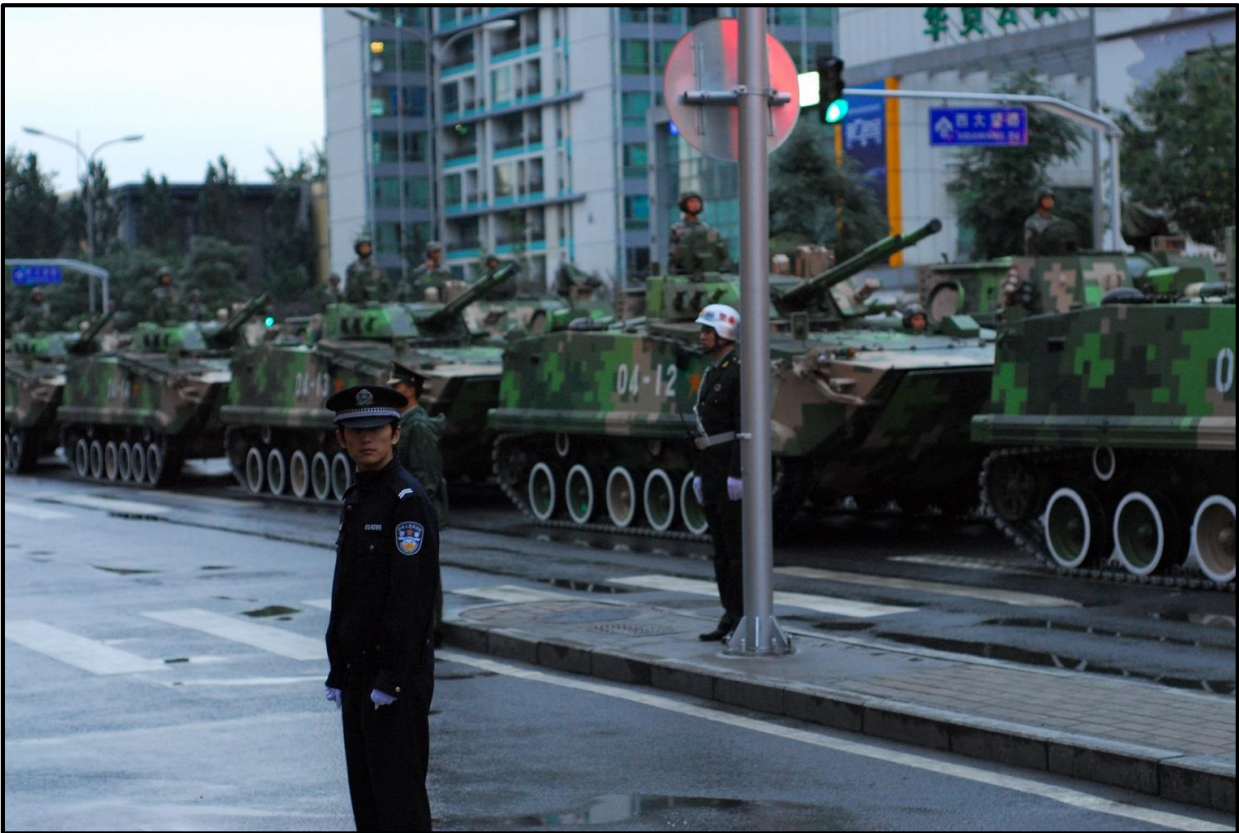


Figure 2. [Training exercise for a military parade](#)

Exercises

The doctrinal and training updates discussed in this article are reflected in recent PLAA training exercises.

Since PLAA doctrine assumes that Chinese forces will be the weaker force in any encounter, it is common for exercises to begin with the PLAA under attack by enemy cyber and electronic warfare operations, aerial precision-guided munitions, and SPF insertions that cause the RTU to immediately assume a defensive posture.¹¹ These techniques are derived from the PLAA's lessons learned and assumptions about the environment in which it will operate.

The PLAA's most recent exercise, "Stride 2015," **[Note.** Stride 2015 began in June 2105 and is on-going during the writing of this article and has yet to conclude] tests the following:

- Army maneuver
- Reconnaissance
- Strike power, including live-fire and long-distance delivery
- Mobilization
- Militia reserve support
- Joint decision making and action
- Tactical command¹²

Stride 2015 is testing several mechanized brigades at a training base in Inner Mongolia. These forces are training against the 195th blue force. Acting as a NATO/US force, the blue force possesses additional information/intelligence assets and superior capabilities over the RTU in other warfighting functions. The blue force receives information on the RTU's location, operates with air superiority, and even possesses a nuclear capability. If Stride 2015 ends like Stride 2014, the result will be a blue force that defeats all the brigades being trained. In Stride 2014, of the six units pitted against the PLAA's OPFOR, **only one was successful** at defeating the Blue Force and that victory came at a high cost, namely nearly 50% of the RTU's personnel.¹³

Training Implications

The PLAA's training program demonstrates a number of key training implications. The first is that Chinese doctrine is continually evolving and being updated by the PLA. The updates to doctrine are often based on China's observations of other actors, including the US, and other conflicts around the world.

Secondly, Chinese doctrine assumes that the PLAA will be the weak force in most encounters. This means that Chinese units are training in an environment where they do not have advantages such as superior technology, intelligence, and air superiority. As a result, the PLA designs current training events to teach the PLAA how to counter an enemy's strengths while operating in a constrained environment.

Lastly, China trains its forces to fight against a threat based on the US and its allies' tactics, techniques, and procedures. It is likely that continued training against a threat of this nature will continue to advance the capabilities of the PLAA's forces, making them more adept at countering the current perceived advantages of Western militaries over the PLA.

Notes

¹ Eric C. Anderson and Jeffrey G. Engstrom, "Capabilities of the Chinese People's Liberation Army to Carry Out Military Action in the Event of a Regional Military Conflict," SAIC, March 2009.

² These documents are unclassified and available for review. For those interested in reviewing these documents, contact the author of this article for instructions on where to access them.

³ "Science of Army Operations," PLA Press, 2009.

⁴ Dennis Blasko, *The Chinese Army Today: Tradition and Transformation for the 21st Century*, Routledge, 2012.

⁵ Anthony H. Cordesman and Nicholas S. Yarosh, "Chinese Military Modernization and Force Development: A Western Perspective," Center for Strategic & International Studies, 30 July 2012.

⁶ http://www.81.cn/jwgz/2015-02/05/content_6342480.htm

⁷ Dennis Blasko, *The Chinese Army Today: Tradition and Transformation for the 21st Century*, Routledge, 2012.

⁸ Gary Li, "The Wolves of Zhurihe: China's OPFOR Comes of Age," The Jamestown Foundation, 20 February 2015.

⁹ Jeffrey Lin and PW Singer, "Stride 2015: China's Best Troops Take on a Grueling Combat Simulation," Popular Science, 29 July 2015.

¹⁰ Gary Li, "The Wolves of Zhurihe: China's OPFOR Comes of Age," The Jamestown Foundation, 20 February 2015.

¹¹ Dennis Blasko, *The Chinese Army Today: Tradition and Transformation for the 21st Century*, Routledge, 2012.

¹² "PLA Trans-Regional Drill Kicks Off", Xinhua, 1 June 2015.

¹³ Jeffrey Lin and PW Singer, "Stride 2015: China's Best Troops Take on a Grueling Combat Simulation," Popular Science, 29 July 2015.

World Class Opposing Forces

WCOPFOR Best Practices

Part 2 of 2

by [LTC E. David Wright](#), Mission Command Training Program (MCTP), World Class Opposing Forces (OPFOR) and [Patrick Madden](#), TRADOC G-2 ACE Threats Integration (BMA Ctr)

Part one of this two-part article, published in June 2015, highlighted how the WCOPFOR develops plans for operational-strategic command (OSC)-level operations and division-level missions within a Warfighter exercise. The purpose of part one was to help brigade, division, and echelons above division better understand the operational framework, as well as operating concepts of the WCOPFOR, as an operational threat. This second half of the article highlights the best practices of the WCOPFOR. The following discussion will not focus on tactics, techniques, and procedures at the tactical level. Instead, the focus will be how the WCOPFOR, as an OSC, utilizes the tasks and systems of mission command to conduct a Warfighter at a higher tempo, in a more adaptive and integrated fashion than training units, in order to seize, retain, and exploit the initiative. As the Army's primary combat training center for mission command training, the WCOPFOR is a training aid to assist in the development of leaders and their staffs in the operations process and associated tasks. As a result, the professional WCOPFOR must be more proficient at planning, preparing, executing, and assessing operations in order to serve as a "sparring-partner" to stimulate effective training. Five of the critical best practices are setting conditions, deception, task organization, and resourcing of response cells.

Setting Conditions for the Decisive Fight

Regardless of the form of maneuver, offensive or defensive, the WCOPFOR looks forward in time to ensure its success with its hybrid threat, OSC-

level assets. They do so by determining the decisive point in order to effectively deploy its action forces and associated functions in support of the OSC mission. [Joint Publication \(JP\) 5-0, Joint Operation Planning](#) defines the decisive point as "a geographic place, specific key event, critical factor, or function that, when acted upon, allows commanders to gain a marked advantage over an adversary or contribute materially to achieving success (e.g. creating a desired effect, achieving an objective)."¹ (Note: Decisive Point is a joint term that is also used by the Army in its doctrinal publications.) For example, if the OSC Commander (CDR) envisions the decisive battle will take place at an opposed wet-gap crossing in five days, the commander and staff will determine what conditions need to be set during the wet gap crossing to ensure that the training unit's attack fails. Critically important is identifying what systems and subsystems need to be destroyed, degraded, or neutralized as illustrated in

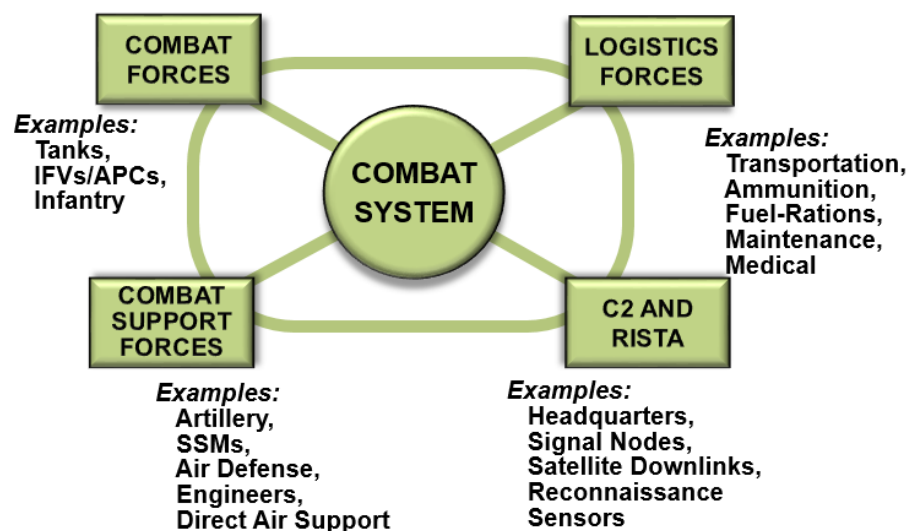


Figure 1. Combat System

figure 1 below from Army [Training Circular \(TC\) 7-100.2, Opposing Force Tactics](#).² These items serve as the basis for the OSC’s attack guidance matrix for the Integrated Fires Command (IFC) and subordinate units, essentially high-payoff targets.

Continuing the defense of a wet gap example, the OSC will not only identify those high-payoff targets for targeting by joint fires, but also determine how to “divert” the enemy’s combat power away from the decisive point to deal with emerging threats. This is often a mix of limited-objective attacks, strikes, or irregular forces targeting the training unit forces across the depth, physically and temporally, of the battlefield. Working backwards in time, the OSC synchronizes in time, space, and purpose effects in order to destroy or degrade the training unit’s ability to successfully complete its task. It is important to note that the OSC staff is looking days in advance of the decisive point. As a result, training units often misconstrue the intentions of OSC enabling operations. Furthermore, the OSC will not solely rely on traditional “metal-on-metal” approaches to set these conditions. The OSC takes full advantage of the principles of operations described in Chapter 4 of Army [TC 7-100, Hybrid Threat](#) versus an extra regional threat to assist in setting conditions for the decisive battle (see figure 2).³ For example, the OSC can have more success by placing long-range, heavy multiple rocket launchers (MRLs) inside of urban areas. This location is selected in order to mitigate the use of multinational coalition or joint fires (i.e. USAF fixed-wing aircraft) in support of wet gap

- **Control Access into the Region**
- **Strategic Preclusion**
- **Operational Exclusion**
- **Access Limitation**
- **Employ Operational Shielding**
- **Control Tempo**
- **Cause Politically Unacceptable Casualties**
- **Neutralize Technological Overmatch**
- **Change the Nature of the Conflict**

Figure 2. Principles of operations

crossings which can result in unacceptable civilian casualties. More importantly, the unintended casualties from coalition or joint fires can result in producing more

restrictive rules of engagement than from traditional OSC air defense or combat air patrols.

Deception Operations

As part of the OSC staff’s attempts to affect the outcome of the campaign, the use of deception is critical to the success of the WCOPFOR. The WCOPFOR’s deception efforts are highly refined and often underestimated. Deception within the OSC generally falls into tactical or operational categories. At the tactical level, the OSC maximizes the use of camouflage, concealment, cover, and deception (C3D) units to reduce the coalition’s ability to target and engage WCOPFOR systems with precision munitions. By emplacing hulks and decoys, and fabricating deception units or individual systems with realistic multi-spectrum signatures, the OSC is able to complicate the joint targeting process and adversely affect the training audience’s ability to track battle damage assessments.

Typically, the OSC focuses the tactical deception efforts to protect critical systems (e.g. high-value targets) such as MRLs, surface-to-surface missiles, and air defense artillery systems. At the operational level, the OSC staff will use C3D and fabrication units to create the appearance of real units. It will also task organize units to appear to be specific sub-units in order to confuse the coalition, create distrust in sensors and reporting, or exploit reinforcing biases. As an example, during a recent Warfighter, the OSC created a deception 17th Division Tactical Group (DTG) named Tactical Group Hawk. This unit was composed of three militia brigades reinforced with a mechanized brigade and an artillery brigade (see figure 3). In order to enhance the deception, the T-72 tank battalions of the militia brigades were detached and replaced with T-90 tank battalions. The intent was to deceive the training units into thinking that the 17th DTG

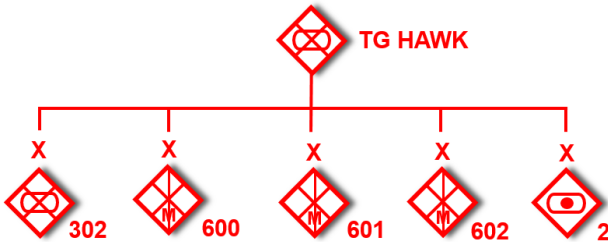


Figure 3. Tactical Group Hawk Deception Force

had already been committed, while it used C3D battalions to delay the identification of the actual 17th DTG for subsequent operations. Deception operations are not stand-alone events that occur within the Warfighter simulation. The WCOPFOR also operates closely with the exercise controllers to inject associated message traffic or reports of these deception units if the simulation cannot replicate specific simulation signatures in order to provide realism to training unit intelligence staffs and other appropriate audiences.

Task Organization

Throughout this planning and execution process, another common best practice has been to task organize OSC subordinate elements with the required resources necessary to accomplish the mission. This task organization often results in division or brigade tactical groups (DTG/BTG) that have little resemblance to their original constituent force structure (see figure 4).

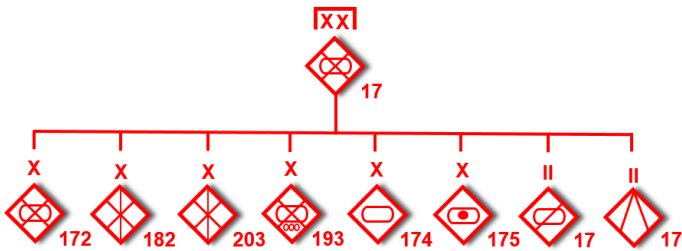


Figure 4. DTG task organization

For the OSC staff, resourcing subordinate units is a constant balancing act between specified strategic and operational objectives, emerging threats within the rotation, and available resources. Properly aligning forces, within the exercise’s training objectives, requires the WCOPFOR not only to analyze resources required for specific missions, but to conduct a highly refined combat power analysis. The WCOPFOR looks beyond a typical correlation of forces and means (COFMs) to determine the correct combat power ratios to be successful. Instead of using PowerPoint slides to portray or track relative combat power, the OSC CDR and staff conduct an iterative and focused dialogue that seeks to balance the ability to mass lethal and non-lethal capabilities with the ability to deploy, sustain, and protect those capabilities (see figure 5). While this often addresses additional forces assigned to a subordinate unit, it also includes OSC-level shaping operations, and/or adjacent units conducting enabling operations to mitigate risks, exploit

advantages, and generally extend the operational reach of the OSC and its subordinate units.

Combat Power Analysis Tool

1. What is the mission?
2. What current resources are available? (two-levels down)
3. What is our estimate of the enemy’s composition, disposition, and intention (two-levels down)?
4. What is the operational reach of our units? Where will they culminate and why?
5. What enablers and/or tasks can we assign to increase the operational reach and move the culminating point further?
6. What enemy capabilities will impact our ability to accomplish the mission? When and where will they be the most effective?
7. How do we neutralize those capabilities in time and space?
8. Where is the enemy vulnerable? Can we exploit that?
9. Are additional resources required?
10. How do we allocate existing resources?

Figure 5. Combat power analysis staff aid

Manning of Subordinate Headquarters/Response Cells

The overall purpose of the Mission Command Training Program is to serve as the Army’s premier combat training center for mission command training. The OSC2 staff and command posts operate as a near-peer competitor, not by applying technological means to plan, prepare, execute, and assess operations, but by leveraging the experience and education of the military and contracted professionals who constitute the opposing force. This requires the proper resourcing of not only the OSC command posts, but also the work areas and response cells that enable the “subordinate units” to operate during the Warfighter exercise. A typical subordinate unit, controlling two divisions, consists of one to two military personnel and ten to twelve contracted personnel per shift. The contracted personnel generally consist of former battalion and/or brigade commanders with extensive combat and Warfighter experience. As a result, the planning and execution of tactical tasks by these divisions and brigades receive a significant investment in terms of experience, education, and intuition. This investment ensures that not only are the operators of the simulation highly qualified, but that the “product” transferred to the OSC command post, in terms of situational awareness and tactical action, provides coherence, accuracy, and logic. Likewise, the OSC command post receives an investment in resourcing, not only through its military personnel, but again through the use of contracted former battalion and brigade commanders, many of whom have previously served as observer-controller trainers in MCTP. As a result, the WCOPFOR command groups consist of hand-

picked professionals that enable the WCOPFOR to plan, prepare, execute, and assess at a more rapid tempo across echelons than the training audiences.

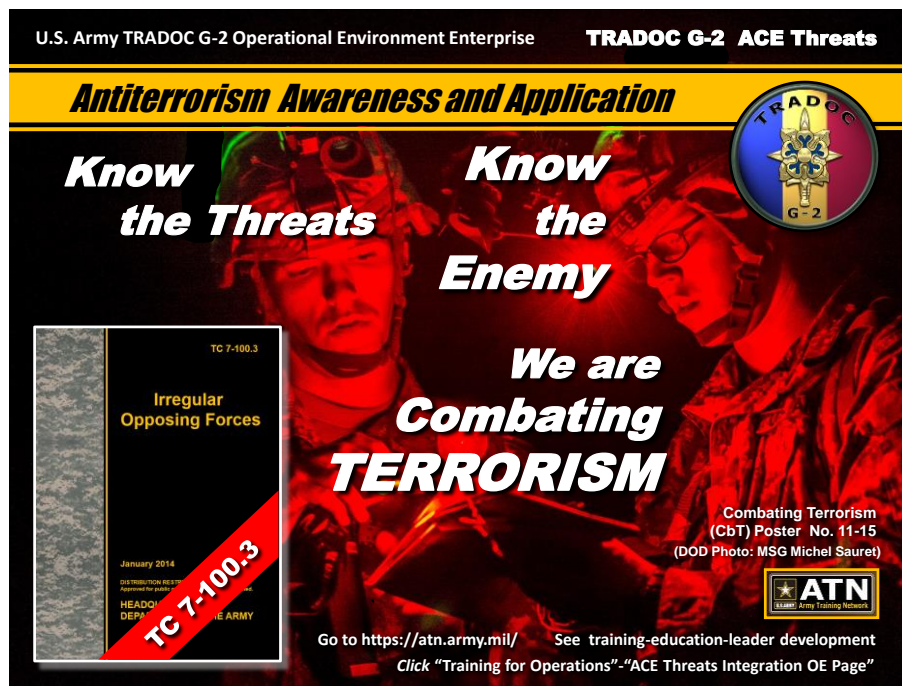
Conclusion

While this article addresses the best practices of the WCOPFOR, it is crucial that the reader not forget the purpose of MCTP and its opposing force. The tactical and operational employment of the WCOPFOR are intended to stimulate the mission command warfighting function and operations process for training audiences. By focusing on improving the elements of the mission

command system, and remaining cognizant of these WCOPFOR best practices, training audiences will be more successful in Warfighters and operational deployments.

Notes

- ¹ US Joint Chiefs of Staff, [Joint Publication \(JP\) 5-0, Joint Operation Planning](#), 11 August 2011, p. III-26.
- ² Headquarters, Department of the Army, [Training Circular 7-100.2, Opposing Force Tactics](#), TRADOC G-2 Analysis and Control Element (ACE) Threats Integration, 9 December 2011, p. 1-14.
- ³ Headquarters, Department of the Army, [Training Circular 7-100, Hybrid Threat](#), TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. November 2010, Chapter 4.



The August iteration of the Threat Tactics Course was a success! If you'd like to receive information about future courses, please send an email to Angela Wilkins at angela.m.wilkins7.ctr@mail.mil to be added to the distribution list. You will be informed of the dates of the next class.

TRADOC G-2 *Worldwide Equipment Guide:* Chinese SLC-2 Artillery Locating Radar



by [Walter Williams](#), TRADOC G-2 ACE Threats Integration (DAC)

Artillery target acquisition is the process of detecting and locating hostile mortar, cannon, and rocket units with sufficient accuracy, reliability, and responsiveness for counterfire and counterbattery to be directed against an enemy unit. Artillery-locating radars (ALRs) or weapon-locating radars (WLRs) are probably the most reliable artillery target-acquisition systems. Normally they are assigned to field artillery units to support target acquisition, cannon or gun registration, as well as fire correction. The radars are designed to track the ballistic path of both hostile and friendly artillery, rockets, and mortar systems and use the data collected to calculate the point of origin and point of impact. They are almost impossible to deceive. However, any system that follows a non-ballistic, or altered ballistic, path may not be locatable to the same degree of accuracy, if at all. Older radars tracked the projectile in flight or used the position and time difference as the projectile passed through the radar's split or dual beam. These systems were easily overloaded and multiple targets led to inaccurate locations or a complete inability to determine a location. The development and fielding of phased-array radars have effectively solved this problem.

Recently, the marketing of the Chinese SLC-2 has caught the attention of ACE-TI analysts as a system noteworthy of informing the training audience. It has been marketed by Chinese arms exporters to foreign nations as a system that can quickly determine the location of enemy artillery systems and provide the geocoordinates to conduct counterbattery fire. It is also technically possible for the SLC-2 to track low-flying light aircraft such as UAVs and helicopters. However, the operational accuracy is affected due to changes in the flight path by the airframes and the limited azimuth and elevation sectors of the radar.

System Capabilities and Characteristics

The Chinese SLC-2 seems to be similar to the US AN/TPQ-37 ALR in both appearance and performance. It also appears similar to the Chinese BL-904 ALR but with a better operational performance. The system can be used to track friendly artillery fire. The system calculates the impact error of friendly artillery rounds and provides automatic correction parameters for increased accuracy. The radar system is employed as a two-vehicle set. Various open-source material indicates the Dong Feng EQ2102 3.5 ton 6x6 truck is associated with the SLC-2 Radar set. One vehicle (2 personnel) carries the radar while the other vehicle (2 personnel) carries the command cabin and the system power supply. The command cabin contains equipment such as the operation and control panel, data processing equipment, computer monitors/displays, and radios.

System Proliferation

The SLC-2 is not widely proliferated at the moment. The system continues to undergo extensive marketing and contracting for testing. For example, Sri Lanka contracted for five each SLC-2 Radar sets in 2006 presumably for testing and field trials. Thailand Royal Marines also conducted tests with the system.

A 2013 threaded discussion on the Pakistan Defence website provides insight on the probable acquisition of the SLC-2 as part of a package deal with a Chinese SH-1 155-mm howitzer. Jane's also reported the marketing of the NORINCO Artillery Master 155 Field Artillery Weapon System (FAWS) in the Middle East region" during IDEX 2015.¹ The FAWS includes "command post vehicles, reconnaissance vehicles with advanced day/night sensor pods, a truck-mounted artillery locating

and correction radar, and a meteorological system. Targets can be located rapidly using the ground-based elements, or the Sharp Eye-III unmanned aerial vehicle, which would typically be issued on the scale of three per battalion.”² It is strongly suspected that the truck mounted ALR discussed is the SLC-2.

Training Implications

The introduction of the SLC-2 enhances the ability of a military force to rapidly detect and provide a geographic location of an enemy artillery unit conducting a fire mission. Recent technological advances in reconnaissance, surveillance, and target acquisition (RSTA) and fire control systems provide an adversary a capability to rapidly disseminate information on suspected enemy targets within one minute or less. This includes from the time of acquisition to computation by a fire direction center and the initial transmission of data to a firing battery. Under favorable conditions, the first artillery round may be on target within two to four minutes of acquisition. The desired identify-destroy cycle should not last any longer than six to ten minutes. Otherwise, in layman’s language, the hunter may become the hunted.

US Army units conducting combined arms maneuver (CAM) operations would more than likely encounter an adversary or opposing force (OPFOR) possessing an ALR as part of a robust RSTA package as described in the preceding paragraph. Thus, there would have to be a paradigm shift of “they can’t do that” or “their equipment isn’t as good as ours” to one of “let’s look for the vulnerabilities or cycle times for the equipment” and see how to mitigate or defeat the capability.

For example, a sound technique is to use an old yet viable capability such as sound ranging or even human reconnaissance elements (such as patrols or civilian) to passively locate a cannon or rocket-launched firing unit. Most modern-day sound ranging systems can be characterized as completely automated, EMP protected, accompanied by a meteorological unit, resistant to electronic jamming, and completely passive. Once the firing unit location has been detected, the location information is passed to an ALR section for greater accuracy to ensure a first round hit. This technique facilitates a shorter cycle time for the OPFOR ALR, thus reducing the vulnerability to detection by electronic intelligence (ELINT) collectors.

Threat Doctrine Manifestations

[TC 7-100.4, Hybrid Threat Force Structure Organization Guide](#), June 2015, describes the hybrid threat that exists for the purpose of training US forces for potential combat operations. The hybrid threat force structure reflects the characteristics of military and irregular forces that may be present in an operational environment (OE). The SP Artillery Brigade Target Acquisition Battery located on the Army Training Network (ATN) has two each ALRs and two sound ranging systems along with meteorological equipment. The Ukrainian IL220U and the Russian IL219 are listed as the baseline ALRs for this force structure. These would be considered to be tier 2 systems. The SLC-2 is a tier 1 system that can be substituted for the baseline systems. The countermortar/counterbattery platoon consists of two sections with an ALR in each section. The following page is a data sheet containing the requisite parametric data for the SLC-2.

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Notes

- ¹ IHS Jane’s 360. [Mastering the Art of Artillery \[IDX15VP\]](#). 21 February 2015.
- ² IHS Jane’s 360. [Mastering the Art of Artillery \[IDX15VP\]](#). 21 February 2015.

CHINESE ARTILLERY LOCATING RADAR SLC-2



Chinese SLC-2 Artillery Locating Radar with antenna erected

SYSTEM	SPECIFICATIONS	SYSTEM	SPECIFICATIONS
Alternative Designations	None	Scan Method	Electronic
Date of Introduction:	INA	Scan Type	Sector (azimuth)
Proliferation:	At least 3 countries	Scan Width -Hostile Fire (deg)	90
DESCRIPTION:		Scan Width -Friendly Fire (deg)	22.56
Crew	4		
Platform (Chassis)	Dong Feng EQ2102 3.5 ton 6x6	TRANSMITTER:	
Engine Type	Cummings 6BT5.9 Diesel	Transmitter Type	INA
Chassis Length Overall (m)	7.49	Peak Power (kw)	45
Height Overall (m)	2.74	Frequency Band	S-band (2-4Ghz)
Width (m)	2.47	Modulation Type	Pulsed
Combat Weight (kg)	10,420		
		RECEIVER:	
Max On Road (km/h)	90	Noise Figure (dB)	3.5
Max Off-Road (km/h)	INA	Single Pulse Processing	Coherent
Cross Country (km/h)	INA	Multiple Pulse Processing	Doppler Filters
Fording Depths (m)	1.0	PERFORMANCE (km)	SPECIFICATIONS
		Detection Range (Mortar)	10.0
Radio	INA	Detection Range (Artillery)	35.0
		Detection Range (Rocket)	50.0
RADAR:		Detection Range (Missile)	50.0
Antenna Type	Active Phased Array	Emplacement Time (min)	10 (est)
Polarization	Vertical	Displacement Time (min)	10 (est)

NOTES

The system is similar to the US AN/TPQ-37 in both appearance and performance (as claimed by the manufacturer). The system can be used to track friendly artillery fire. The system calculates the impact error of friendly artillery rounds and provides automatic correction parameters for increased accuracy. The radar system is employed as a two-vehicle set. Various open-source material indicates the Dong Feng EQ2102 3.5 ton 6x6 truck is associated with the SLC-2 Radar set. One vehicle (2 personnel) carries the radar while the other vehicle (2 personnel) carries the command cabin and the system power supply. The command cabin contains the operation and control panel, data processing equipment, computer monitors/displays, etc.

Primer of Iran's Ground Forces with Defensive Diagrams and Application for the Training Community

by, [Kristin Lechowicz](#), TRADOC G-2 ACE Threats Integration (DAC)

Part 2 in RZ-CRZ Series

This article provides a basic primer of Iran's two ground military forces and highlights one potential tactic of how one of Iran's ground forces would react to an invasion by an adversary. This article also compares Iran's tactics to opposing force (OPFPR) doctrine found in [Training Circular \(TC\) 7-100.2, Opposing Force Tactics](#). This article also examines Iran's ground force capabilities and compares them to the doctrinal composite in order to assist the training community with concepts for scenario development.

Introduction to Iran's Ground Forces

Iran's military has two main components which consist of the Artesh (the conventional military that resembles the pre-1979 revolution's military force structure) and the Iranian Revolutionary Guard Corps (IRGC) that mirrors the Artesh in force structure. Both the Artesh and the IRGC have elements of a ground force, navy, and air force.¹ The IRGC is a smaller organization than the Artesh as related to active duty military personnel; however, the IRGC has command of the Basij militia which is reported to be able to project up to 1.5 million fighters.² The Artesh acts as Iran's regular military while the IRGC has created an adaptive and unconventional doctrine derived from firsthand experience such as the Iran-Iraq war (1980–1988) and its proxy conflicts as well as monitoring US military engagements in Iraq and Afghanistan.³

IRGC (Ground)	Artesh (Ground)
Strength: 130,000	Strength: 220,000
Infantry Divisions: 7	Infantry Divisions: 4
Independent Brigade: 14	Independent Brigades: 4
Armor Division: 3	Armor Divisions: 4
Independent Brigade: 3	Independent Brigades: 3
Artillery Regiment: 3	Artillery Regiments: 7
Commando Division: 1	Commando Divisions: 2
Airborne Brigade: 1	Independent Brigades: 3
	Special Forces Brigade: 1
	Airborne Brigade: 1

Figure 1. IRGC and Artesh ground strength⁴

The Iranian Revolution Guard Corps

The IRGC was originally created in 1979 to protect Iran's religious-based Islamic regime from potential threats, including the Artesh.⁵ IRGC elements in the past have provided lethal aid to radical Islamist terror groups worldwide in an attempt to export the Islamic Revolution's vision.⁶ The IRGC's relationships with terror groups are vital to their ability to supply lethal aid, conduct clandestine direct action missions, and support Iran's intelligence gathering apparatus. The IRGC has projected power in the form of terrorist operations in Azerbaijan, Georgia, India, and Thailand in 2012.⁷

The IRGC is divided into 31 separate provincial corps with two in Tehran.⁸ These units are semi-independent with a decentralized command structures that in theory would mitigate damage to command and control (C2) if an invasion by a technologically superior adversary were to become a reality. If provoked, Iran's military could be described as a hybrid threat with regular, irregular, and criminal elements working in tandem to defend Iran's borders and territorial assets. The IRGC's units would likely task organize into smaller hunter-killer type units fighting an irregular fight with emphasis on speed, mobility, and surprise based on the IRGC's Prophet 9 exercise.⁹

Iran's military doctrine emphasizes the use of fast attack vehicles on land and sea that would put a premium on mobility and decentralized C2 to ensure a flexible, more adaptive military force taking advantage of the restrictive terrain within

the country. The IRGC has become a powerful element within Iran and is entangled in the political, religious, and economic sectors.¹⁰ The dynamic of these relationships in many instances has translated into better funding, missions, and equipment for the IRGC as opposed to the Artesh.

Artesh: Islamic Republic of Iran Ground Forces (IRIGF)

The Artesh maintains a robust conventional military organization by regional standards. The Artesh has a military force that consists of 220,000 personnel.¹¹ The ground forces have six infantry divisions, four armor divisions, six artillery divisions, two commando divisions, one airborne brigade, and one Special Forces Brigade. The primary mission of the Artesh is to protect the territorial sovereignty of the Islamic Republic of Iran.¹² Unlike the IRGC, the Artesh has a limited force projection capability outside of Iran.¹³

The following are significant weaknesses that would hinder the Artesh's regular capabilities:¹⁴

- Antiquated and poorly maintained equipment
- Lack of highly-trained technical professional Soldiers
- Insufficient replacement parts for equipment, especially air assets
- Rugged terrain and Iran's size creates mobility gaps and challenges for defender or aggressor
- Lack of logistical capabilities for long-term operations

Military Systems and Equipment

The majority of Iran's air and land weapons and equipment are antiquated. Iran's military inventory presents challenges to mission readiness with regard to ground and air power. Iran's arsenal consists of systems from a myriad of different countries; however, a large portion of Iran's military inventory was supplied by the United States before the 1979 revolution. Iran's military industry has focused on the development of UAVs, missiles (both cruise and ballistic), and extending cyber capabilities.¹⁵ This action is consistent with its defensive adaptive doctrine to deter attacks.

Iran has focused a large amount of resources on an inventory of fast-attack vehicles that emphasize speed and mobility, such as motorcycles and fast-attack boats. During the Prophet 9 exercise, motorcycles with Iranian Soldiers armed with anti-tank weapons and boats with cruise missiles swarmed targets.¹⁶ This weapons/equipment procurement could be perceived as a cost effective way to counter a heavy mechanized adversary.

Due to past sanctions, Iran's military industry has upgraded and reverse engineered a number of systems in the mechanized arsenal. Iran claimed to produce their own mechanized vehicles such as armor and armored personnel carriers; however, many of Iran's claims with regard to these new vehicles are based on older chassis and models within the preexisting inventory.

Potential Adversary Invades Iran

After anti-access operations, the Artesh would be the first major resistance encountered in most ground-based invasion scenarios.¹⁷ Theoretically, if a technologically superior country invaded Iran it would immediately be confronted with the Artesh's ground forces, which consists typically of light and mechanized infantry.¹⁸ The Artesh would attempt to repel or destroy the invader with conventional force-on-force engagements; however, if this course of action failed to deter

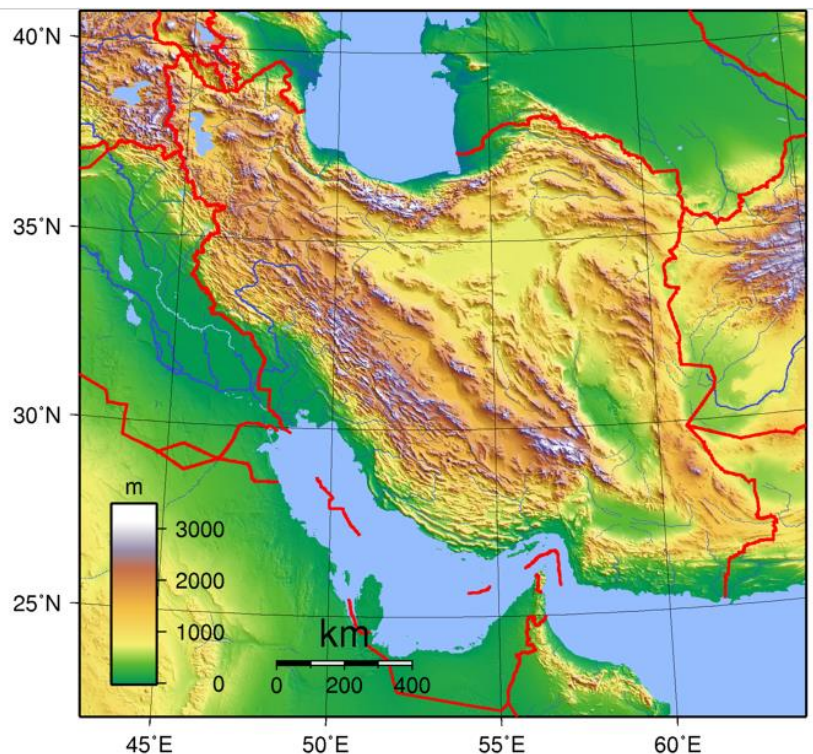


Figure 2. Topography of Iran

the aggressor, the operational and tactical tasks would likely shift to delay for time to allow the mobilization process and the “asymmetrical doctrine” to commence.¹⁹

The Artesh’s forces would most likely rely heavily on cover, concealment, and deception. The Artesh would use key terrain and lines of communication such as natural chokepoints and or man-made infrastructure to canalize enemy forces. During the Iran-Iraq War, Iran’s military realized the significance of using terrain to mask troop movements while forcing the aggressor to engage at a disadvantage in urban or canalized terrain, thus limiting the technologically advanced enemy.²⁰ A terrain analysis of Iran’s physical environment quickly explains the disposition of its military forces.

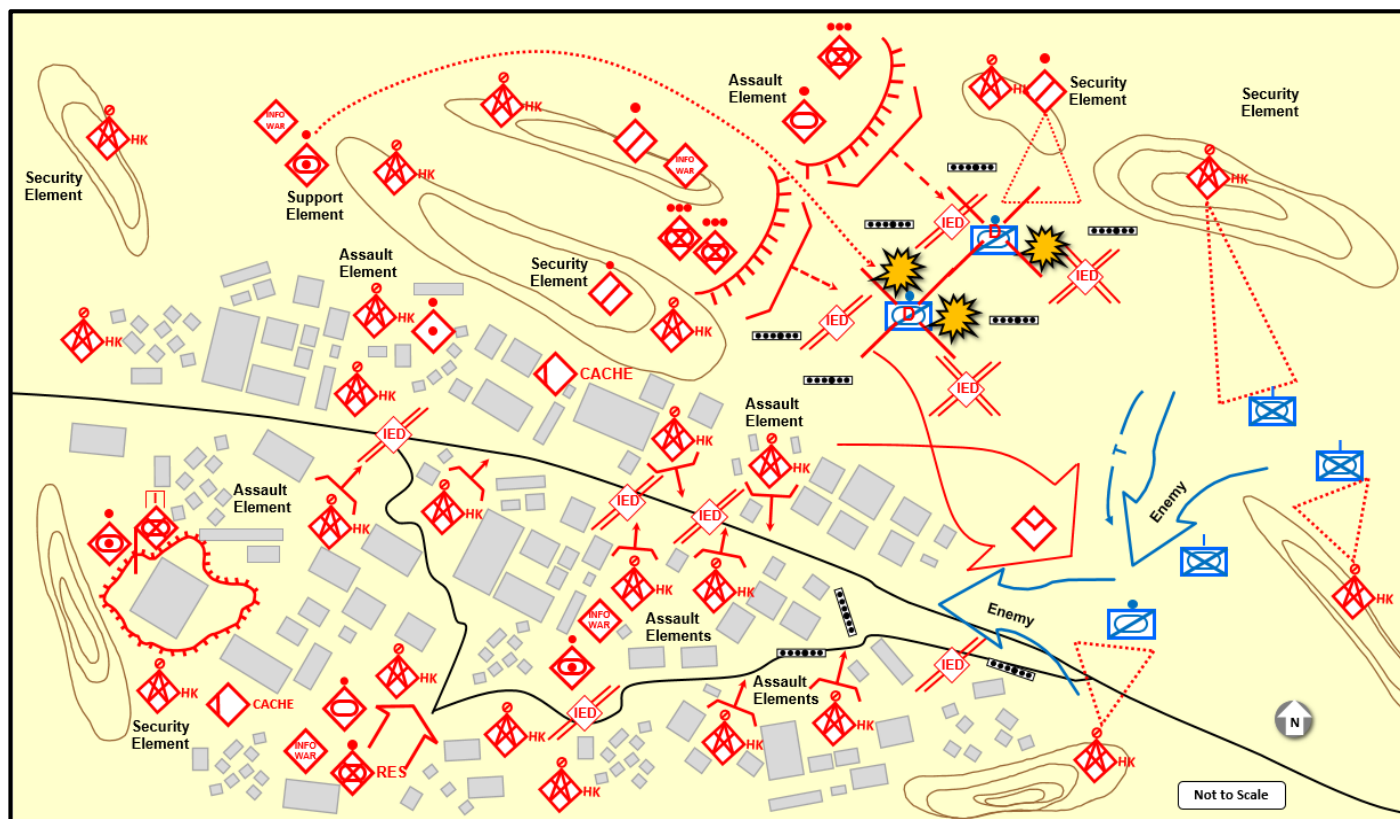


Figure 3. Artesh's defensive posture

The Zagros Mountains canalize movement from the northwest to the southeast. Overall, Iran’s size and terrain dictates a defensive military strategy (such as adapted by Iran’s current doctrine). Iran’s ground forces would likely fight a retrograde delay much like a maneuver defense that would allow them to fall back to preplanned positions and/or defend with an area defense that would maximize the advantages of the restrictive terrain. This course of action would draw the invader farther into the country and potentially over extend logistical lines, making them vulnerable to raids, assaults, and ambushes from fast-attack elements.²¹

This hypothetical example would be one of many battles taking place throughout the area of operations if Iran were invaded. The following diagram illustrates an Artesh defense. The higher level headquarters (HQ) has the tactical task to conduct a defense with the purpose of delaying the enemy and the endstate to gain time. The time gained from this defensive action would allow the IRGC and Basij units to mobilize the large reserve. The subordinate element to the higher HQ is shown in this diagram. The subordinate Artesh elements are tasked to defend from battle positions with the purpose of turning an invader’s force into restrictive terrain (urban environment) to slow the enemy rate of advance.

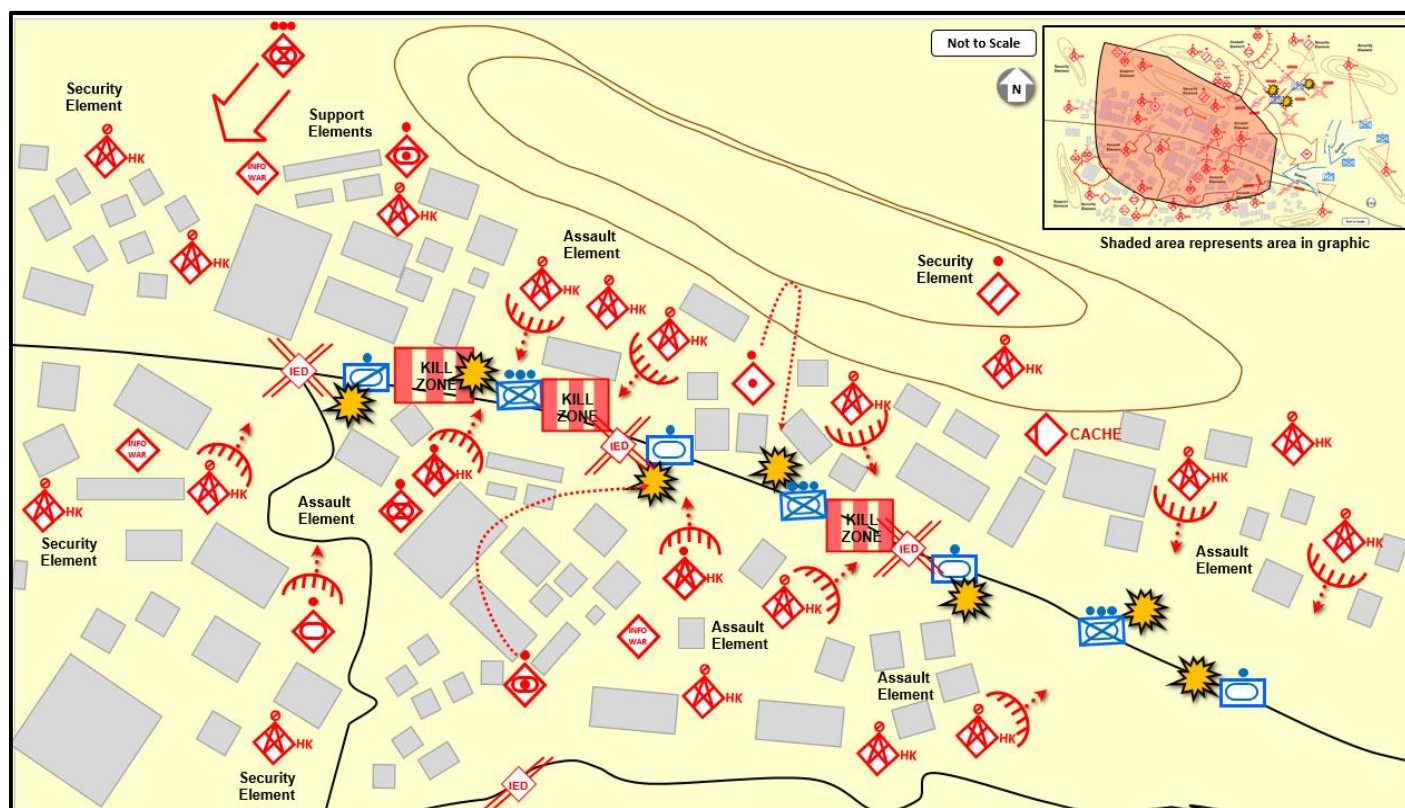


Figure 4. Artesh's defensive posture

The Artesh successfully turns the enemy force into the restrictive terrain of the town where hunter-killer teams armed with sniper rifles, anti-armor, and other assorted small arms conduct harassing ambushes to canalize and restrict, or, preferably, destroy the enemy's forces. These smaller elements set up battle positions along one of the few avenues of approach for a heavy mechanized unit. These units take full advantage of subterranean spaces, rooftops, and street-level areas to conduct attacks. Iran's information warfare (INFOWAR) elements within the town conduct perception management operations with the message targeted for global news agencies. These messages are an attempt to turn public opinion and attack the national will of the invading country with the final endstate of finding political solutions to the conflict while keeping the regime intact.

Training Implications

Hybrid threat doctrine captures conditions and characteristics of a variety of countries to allow for replication of a composite threat to provide the ultimate adversary for the training community. Creative scenario developers are able to replicate real-world threats and make them even more robust by using hybrid threat doctrine. There are a number of reasons why the training community does not use one real world threat. For an example, Iran's military possesses a number of adaptive challenges for a training unit; however, Iran's equipment is a tier 3 or 4 by the Worldwide Equipment Guide's standards. The scenario developer could change the tier to allow for a more challenging training experience and add capabilities that are not present in Iran's force structure. The following table captures TC 7-100.2 tactics and compares them to the hypothetical Artesh defense.

This article provided an overview of Iran's ground force capabilities with a hypothetical example of an Artesh ground forces defense. This article is part of a series that researches real-world potential adversaries to ensure that the hybrid threat doctrine is current and captures the important challenges for the training community. A scenario developer should have no issues with creating a robust and challenging threat that is not Iran but possesses many similar challenges and none of the weaknesses.

Table 1. Comparison of Artesh tactics with threat doctrine tactics from TC 7-100.2

Artesh's Defense (Area Defense)	<p>4-85. In situations where the OPFOR must deny key areas (or the access to them) or where it is overmatched, it may conduct a tactical area defense. Area defense is designed to achieve a decision in one of two ways:</p> <ul style="list-style-type: none"> • By forcing the enemy's offensive operations to culminate before he can achieve his objectives. • By denying the enemy his objectives while preserving combat power until decision can be achieved through strategic operations or operational mission accomplishment. • OPFOR defenses can be characterized as a "shield of blows." Each force and zone of the defense plays an important role in the attack of the enemy's combat system. (4-1)
Artesh's Defense (Simple Battle Position)	<p>4-107. A <i>simple battle position</i> (SBP) is a defensive location oriented on the most likely enemy avenue of approach. SBPs are not necessarily tied to complex terrain. However, they often employ as much engineer effort and/or camouflage, concealment, cover, and deception (C3D) measures as time allows</p>
Artesh's Defense (Complex Battle Position)	<p>4-108. A <i>complex battle position</i> (CBP) is a defensive location designed to employ a combination of complex terrain, C3D, and engineer effort to protect the unit(s) within them from detection and attack while denying their seizure and occupation by the enemy. CBPs typically have the following characteristics that distinguish them from SBPs:</p> <ul style="list-style-type: none"> • Limited avenues of approach. (CBPs are not necessarily tied to an avenue of approach.) • Any existing avenues of approach are easily observable by the defender. • 360-degree fire coverage and protection from attack. (This may be due to the nature of surrounding terrain or engineer activity such as tunneling.) • Engineer effort prioritizing C3D measures; limited countermobility effort that might reveal the CBP location. • Large logistics caches. • Sanctuary from which to launch local attacks

Notes

¹ Kenneth Katzman. "Iran: U.S. Concerns and Policy Responses." Congressional Research Service/US State Department. 25 July 2014.

² Jane's Sentinel Security Assessment: Security and Foreign Forces, Iran. 23 April 2014.

³ Michael Connell. "[The Iran Primer Power, Politics, and US Policy. United States Institute of Peace.](#)" 2010.

⁴ Jane's Sentinel Security Assessment: WORLD ARMIES, Iran. 5 February 2015.

⁵ United Kingdom Government (UK.GOV). "[Country Information and Guidance Iran: Background information, including actors of protection, internal relocation and illegal exit.](#)" 25 November 2014.

⁶ US State Department, "[Country Reports on Terrorism.](#)" 2014.

⁷ Director National Counterterrorism Center. "[Hearing before the Senate Committee on Homeland Security, Worldwide Threats to the Homeland.](#)" 17 September 2014.

⁸ Secretary of Defense (Congressionally Directed Action). "Unclassified Executive Summary Annual Report on Military Power of Iran." 2010.

⁹ YouTube. "[Iran 9th Great Prophet Wargame Phase one, February 25, 2015.](#)" 25 February 2015.

¹⁰ Mehdi Khalaji. "[Iran's Revolutionary Guards Corps, Inc.](#)" The Washington Institute. 17 August 2007.

¹¹ Secretary of Defense, (Congressionally Directed Action). "Unclassified Executive Summary Annual Report on Military Power of Iran." 2010.

¹² Jane's Sentinel Security Assessment: "World Armies, Iran." 5 February 2015.

¹³ Kenneth Katzman. "Iran: U.S. Concerns and Policy Responses." Congressional Research Service/US State Department. 25 July 2014.

¹⁴ Middle East Institute. "The Artesh: Iran's Marginalized Regular Military." 2011.

¹⁵ American Foreign Policy Council. "[Statement before the U.S. House of Representatives Committee on Homeland Security Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies The Iranian Cyber Threat, \(Revisited\).](#)" 20 March 2013.

¹⁶ YouTube. "[Iran 9th Great Prophet Wargame Phase one February 25, 2015.](#)" 25 February 2015.

¹⁷ Jane's Sentinel Security Assessment: "World Armies, Iran." 5 February 2015.

¹⁸ Jane's Sentinel Security Assessment: "World Armies, Iran." 5 February 2015.

¹⁹ Michael, Connell. "[The Iran Primer Power, Politics, and US Policy. United States Institute of Peace.](#)" 2010.

²⁰ Ben Wilson. The Evolution of Iranian Warfighting During the Iran-Iraq War. Foreign Military Studies Office. July-August 2007.

²¹ Michael Connell. "[The Iran Primer Power, Politics, and US Policy. United States Institute of Peace.](#)" 2010.



by, [John Cantin](#), TRADOC G-2 ACE Threats Integration (BMA Ctr)

The *Threat Tactics Report (TTR): Russia* is an in depth look at Russian actions in Georgia in 2008, Crimea in 2014, and Western Ukraine (Donbass) in 2014–15. This report was written to explain the tactics of Russia in these three conflicts. The Russians have used a combination of military, political, and covert assets in conflicts over the past eighty years. This TTR attempts to define the use of Hybrid War in military operations since the 1930s. Hybrid War is a term that is not used by the Russians, but was coined by media, think tanks, and military strategists to define this ever-changing way of war, and is a common way to describe evolving Russian tactics.

Most recently, Russia has used these tactics in tandem with sophisticated cyber and information operations in Crimea and the Donbass region of Ukraine. The TTR goes into detail about Russian use of disinformation, cyber-attacks, Internet “trolls,” and social media tools to advance Russian interests in these conflicts. An excerpt from the [Threat Tactics Report: Russia](#) is below. Please click the link to view the full report and all sources.

Eastern Ukraine 2014–2015

Almost immediately after the action in Crimea, separatists began military operations in eastern Ukraine. Most of the fighting occurred in the Donetsk and Luhansk oblasts (collectively known as Donbass), areas with significant ethnic Russian populations. Pro-Russian demonstrations and limited military operations had been going on since the ouster of Yanukovich, but during March and early April 2014 pro-Russian separatists began seizing government and municipal buildings and installing “people’s governments” in Donetsk and Luhansk.

Building on previous experience in Georgia and Crimea, the Russians used their covert operatives, SPF troops, and INFOWAR to equip, guide, and advise pro-Russian separatists in Donbass. Unlike the previous operation in

Crimea, the population was not completely supportive of the pro-Russian separatists. This required Russia to push the INFOWAR campaign to justify their support for the pro-Russian forces in Donbass. Russia did not move into Donbass as a reaction to the Euromaidan protests, or the Crimea “crisis”—this was a part of Russia’s long-term strategy for Ukraine. Events in Kiev just moved Russia’s timeline up.

Andrey Illarionov, former advisor for Vladimir Putin, said in a speech on 31 May 2014 that some technologies of Russo-Georgian War were updated and again being exploited in Ukraine. According to Illarionov, since the Russian military operation in Crimea began on 20 February 2014, Russian propaganda could not argue that the Russian aggression was the result of Euromaidan. The war in Ukraine did not happen “all of sudden,” but was pre-planned and the preparations began as early as 2003. Illarionov later stated that one of the Russian plans envisaged war with Ukraine in 2015 after a presidential election, however Maidan accelerated the confrontation.

Military Forces

- Ukrainian Forces numbered approximately 50,000 soldiers

Ukrainian Defense Ministry

- Armed Forces of Ukraine
- Ukrainian State Border Guard
- Ukrainian Security Services

Ukrainian Internal Affairs Ministry

- National Guard
- Territorial Defense Battalions

Pro-Russian Separatist Forces

Pro-Russian Separatist forces numbered approximately 10,000-20,000 troops. These numbers fluctuated due to defections, conflicting allegiances, and independent “militia” groups that fought intermittently. The confusion on number of active fighters and sympathizers was an advantage to the separatists as the Ukrainian forces never really knew how large the forces they faced would be. The separatists operated in squad- to platoon-size elements and used harassment tactics (ambushes, mortar and artillery attacks) to confuse the Ukrainian forces.

Breakaway/Separatist Governments

- Novorossiia
- Donetsk People's Republic
- Luhansk People's Republic

Militias/Insurgent Organizations

- Donbass People's Militia
- Vostok Battalion
- Russian Orthodox Army
- Army of the Southeast
- Oplot Battalion
- Zarya Battalion
- Kalmius Battalion
- Cossacks
- Chechen and Volunteers from the Caucasus
- Ukrainian police and military defectors
- Union of Mine Workers

Russian Federation

Russia denies that any Russian forces are fighting in Donbass, but reports of professional-looking, well-trained, Russian-speaking fighters assisting the local militias are widespread. Russia has also been suspected of firing artillery over the border in support of the separatist militias. The Russians have stated that if there are Russian soldiers in Ukraine, they are “on leave” and are not fighting in an official capacity. The exact number of Russian soldiers is unknown, but there have been reports and sightings of Russian military equipment moving across the border from Russia into Donbass.

- Spetsnaz Forces
- Russian Army “Volunteers”
- Russian Paramilitary Fighters

History of the Conflict

Since the dissolution of the Soviet Union, the Donbass section of Ukraine has been a predominantly ethnic Russian enclave. The Russian population in eastern Ukraine has generally been 20–60% of the populace, depending on the Oblast. The graphic below shows the ethnic breakdown in Ukraine as of the 2001 Census.

The Russians in the east generally tended to live in the cities, working in industrial jobs. The Ukrainians usually lived in the smaller cities, towns, villages, and rural areas. This area has historically had few problems between Russians and Ukrainians, until the conflicts in 2014–15. The Russian population did not show any signs of not wanting to be Ukrainian citizens, but did favor good relations with Russia. Russia used this situation to slowly and methodically build up a network of covert operatives, insurgent organizations, political parties, and Russian civic organizations and clubs that pushed the narrative of Russian oppression by the Ukrainian majority. As stated by Andrey Illarionov, former advisor of Vladimir Putin, the Russians started this effort as early as 2003, planning for possible conflict in 2015. Building on the success of the operation in Crimea, the Russians used the same approach in Donbass, using the same tactics that were discussed in the Crimea section.

Seize Government Buildings

Pro-Russian protests had been going on in Donbass since the Euromaidan protests began in Kiev. They became more vocal, violent, and frequent in late February of 2014. Protesters had attempted to seize the Donetsk Regional State Administration (RSA) building several times in February, and occupied the RSA from 1–6 March 2014 before being evicted by Security Service of Ukraine (SBU). On 6 April, 1,000–2,000 people gathered at a rally in Donetsk to demand a status referendum similar to the one held in Crimea in March. The demonstrators stormed the RSA building and took control of its first two floors. They said that if an extraordinary legislative session was not held by regional officials to implement a status referendum, they would take control of the regional government with a “people's mandate,” and dismiss all elected regional councilors and members of parliament. As these demands were not met, the activists held a meeting in the RSA building, and voted in favor of independence from Ukraine. They claimed the Donetsk People's Republic (DPR). Separatists also

occupied the SBU building in Luhansk on 9 April 2015, and began setting up a shadow government in Luhansk.

the DPR a sense of legitimacy. The new “government” attempted to take over civic administration such as

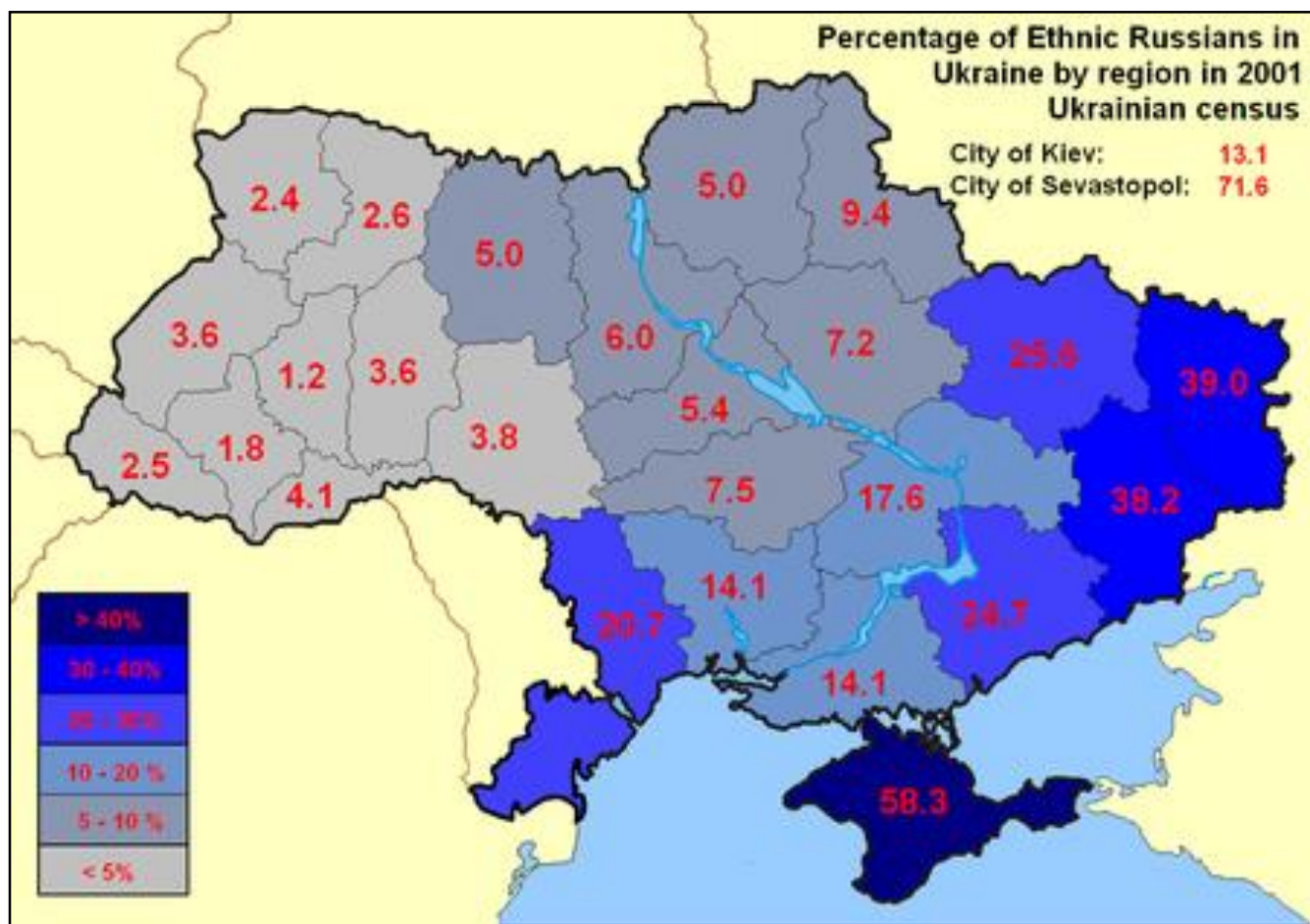


Figure 1. [2001 Census State Statistics Committee of Ukraine](#)

After proclaiming the new republic, government buildings in Druzhkivka, Horlivka, Kramatorsk, Makiivka Mariupol, Sloviansk, Yenakiieve, and Zhdanivka were occupied by the separatists. The basic tactic was to call for a demonstration, assure that the militias and those political leaders that supported separatist goals were present, and then simply encourage the crowd to swarm the building. Most times, security personnel in the building allowed the separatists to occupy the building, assisted them, or did not show up to work that day. Separatists also took over buildings on days when they knew the staff would not be there—weekends, holidays, etc. Separatists were also able to take over armories and distribute weapons to supporters. They then erected barricades and fortified positions outside of government buildings, police stations, and municipal centers.

Once the DPR had a foothold in Donetsk, they began to appoint ministers, mayors, and municipal workers, giving

water, electricity, garbage collection, etc., but with no support from the Ukrainian government, services were significantly degraded.

This swift seizure and control of governmental responsibilities is all part of the Russian template for waging war. The main goal is to gain control of key centers of power and government with a small, dedicated core of supporters assisted by Russian advisors and volunteers. This makes the uprising look bigger than it actually is, appearing to have widespread support. Once in power, the new DPR called for a referendum on independence. This move allows the new government time to solidify power, establish governance, and organize local and foreign militias to defend against the inevitable counteroffensive. It also gave Russian paramilitaries, volunteers, and SPF time to infiltrate weapons and fighters into Donbass. On 12 April 2015, Igor Girkin, a retired colonel in the Russian GRU, along with fifty-two supporters, stormed the police

department and several other municipal buildings in Sloviansk. Girkin and most of his men were from Crimea, and were quickly joined by two hundred local supporters. Girkin expected the Russians to invade Donbass in a repeat of the Crimean seizure. All through Donbass, local militias assisted by foreign volunteers were setting up checkpoints, taking over government buildings, and installing new officials. As all of this is occurring, the DPR continued its campaign for statehood in the media, using TV, radio, and social media. This was generally unsuccessful, as many polls indicated that 50-75% of the population did not support independence for Donetsk.

On 13 April 2015, the Ukrainian Army attempted to take back the RSA building in Donetsk. Ukraine used helicopters and rocket launchers in the attack but were unsuccessful. They did manage to destroy several separatist checkpoints, but were otherwise ineffective. Pro-Russian militias also broke up pro-Ukrainian rallies and put several demonstrators in the hospital.

Transportation Hubs

Separatists set up checkpoints throughout Donbass to prevent or at least slow down any reinforcements from the Ukrainian Army or pro-Ukrainian militias. On 15 April 2015, an armored column sent by Ukraine established a checkpoint 40 km from Sloviansk. The SBU claimed that the rebels there had been reinforced by several hundred soldiers from Russia's Main Intelligence Directorate. Separatists also manned checkpoints in most major cities and towns to control movement and traffic. Finally, separatists managed to gain control of most of the border checkpoints on the Russian border. This allowed for free movement of Russian convoys containing weapons and equipment for the separatists. On 16 April 2015, six BMD-2 armored vehicles were captured by the separatists at a checkpoint near Kramatorsk. Images later showed the vehicles being driven by separatists. Fourteen Ukrainian Armored Personnel Carriers (APCs) with 100 soldiers were surrounded by a large crowd in Pchylkino, but were able to leave after surrendering their ammunition. The commander of Ukraine's airborne troops, Col. Alexander Sveths, another officer, and a civilian contractor were abducted after refusing to lay down the weapons.

Col. Sveths, the officer, and the contractor were released on 18 April 2015. This tactic allowed the rebels to control movement in certain areas of Donbass, monitor

Ukrainian Forces' movements, acquire equipment and disarm Ukrainian troops, and supported the Russian INFOWAR campaign that portrayed the Ukrainian government and Armed Forces as incompetent.

INFOWAR

Russia has had an extensive and thorough INFOWAR campaign in eastern Ukraine. Much like Crimea and Georgia, Russian TV, radio, and Internet were available and predominant in Donbass and other ethnic Russian areas. A steady stream of anti-Kiev propaganda was available to those who wished to access it, and slowly the message of the "oppressed Russian minority" began to gain acceptance. The events in Kiev and Crimea in 2014 only affirmed this in the minds of many Donbas residents.

Russia then activated a vast network of insurgents, political operatives, and covert intelligence agents that began to organize military operations in Donetsk and Luhansk. The Russians used networks of *Internet trolls*—individuals who set up phony blogs to discuss the situation in Donbass and push the Russian narratives. Most of these networks were set up and operated out of Russia by Russians who worked for "independent" companies that paid their employees with cash and had no paperwork or records for plausible deniability. Videos were also produced that showed "ethnic Russian residents of Donbass" commenting on the situation in Donbass. The Russians were exposed when it was discovered that the same person was used in multiple videos that were attributed to the Euromaidan Protests, Crimea, and Donbass.

Targets of Opportunity

Separatists were adept at using social media and cell phones to organize large groups of civilian protesters, using information from those manning checkpoints, and separatists acting as recon assets. In many cases this allowed the separatists to engage targets of opportunity. In Pchylkino, a village south of Sloviansk, several citizens surrounded fourteen Ukrainian armored vehicles from the 25th Airborne Brigade and forced them to leave and surrender their magazines before they turned around. This led Ukrainian President Turchynov to disband the brigade.

This tactic is effective in two distinct ways. First, it allows the separatists to make up for the disadvantage in

weapons and personnel by using civilians to confront military personnel. The potential for unarmed civilian casualties at the hands of armed military men would be an INFOWAR disaster for the military side. Second, it shows that the separatists were able to isolate small military formations and overwhelm them with sheer numbers once they were close. Forcing the Ukrainian soldiers to surrender magazines and ammunition also gave the separatists an INFOWAR victory.

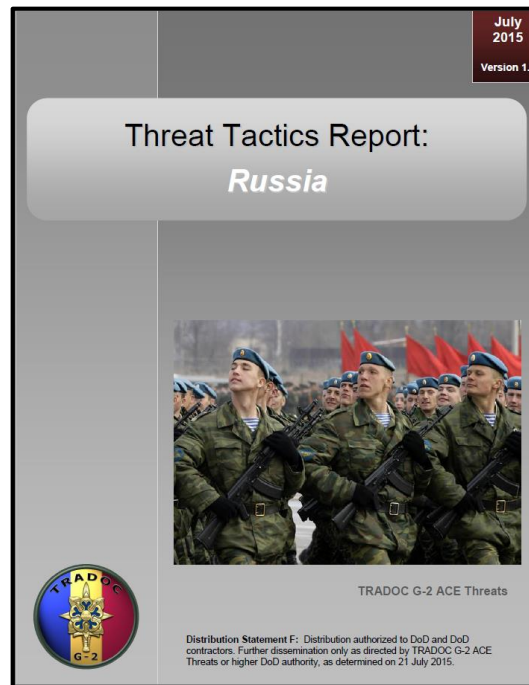
Intimidation

Separatists used intimidation tactics to coerce mayors, civic authorities, and police forces to side with them. Those who failed to do so were replaced, and in some cases imprisoned, beaten, or killed. Humanitarian aid was also prevented from reaching civilians, unless it came from Russia or pro-Russian nongovernmental organizations (NGOs).

Limit Opposition Success

By using all of the tactics listed above, the separatists managed to limit the Ukrainian Armed Forces' success in taking back Donbass. The separatists did not require a total victory; they just need to hold on to a few key population centers, control the movement of supplies, foreign "volunteers," Russian paramilitaries and soldiers allegedly on leave, and arms. Russia has undoubtedly been funneling arms to the rebels to reinforce them and limit Ukrainian success. On 26 August 2014, a mixed column composed of at least three T-72B1s and a lone T-72BM was identified on a video from Sverdlovsk, Ukraine by the International Institute for Strategic Studies. The sighting undermined Russia's attempts to maintain plausible deniability over the issue of supplying tanks and other arms to the separatists. Russia continuously claimed that any tanks operated by the separatists must have been captured from Ukraine's own army. The T-72BM is in service with the Russian

Army in large numbers. This modernized T-72 is not known to have been exported to nor operated by any other country.⁸⁸ Reuters found other tanks of this type near Horbatenko in October 2014. In November, the United Kingdom's embassy in Ukraine also published an infographic demonstrating specific features of the T-72 tanks used by separatists not present in tanks held by Ukrainian army, ironically addressing it to "help Russia recognize its own tanks."



Once the rebels establish a foothold with control of local governments and infrastructure, they can appeal to Russia for recognition as a de facto independent state and call for referendums on independence, thus establishing legitimacy. Another factor in eliminating opposition success is time. The longer the separatists stay in power with minimal setbacks the better. The separatists realize that they cannot ultimately defeat the Ukrainian Armed Forces alone, but if they can keep Donbass in a state of perpetual conflict, then they can attempt to get a favorable diplomatic resolution to the crisis they created.

By using this strategy the Russians have been able to successfully influence events in Georgia (South Ossetia and Abkhazia) and Ukraine. In Ukraine the Russians managed to leverage all facets of Hybrid War to take over Crimea and support an ongoing insurgency in Donbass. They continue to adapt their tactics through the use of proxy military forces, militias, INFOWAR, social media, and cyber assets.

The TTR: Russia addresses past conflicts in Georgia, Crimea, and Ukraine in depth with detailed tactical diagrams showing both conventional and Hybrid War tactics and techniques. The complete TTR: Russia and other [TRADOC G-2 ACE Threats Integration](#) products are accessible through ATN.

What ACE Threats Integration Supports for YOUR Readiness

- ◆ Determine Operational Environment (OE) conditions for Army training, education, and leader development.
- ◆ Design, document, and integrate hybrid threat opposing forces (OPFOR) doctrine for near-term/midterm OEs.
- ◆ Develop and update threat methods, tactics, and techniques in HQDA Training Circular (TC) 7-100 series.
- ◆ Design and update Army exercise design methods-learning model in TC 7-101/7-102.
- ◆ Develop and update the US Army *Decisive Action Training Environment (DATE)*.
- ◆ Develop and update the US Army *Regionally Aligned Forces Training Environment (RAFTE)* products.
- ◆ Conduct Threat Tactics Course resident at Fort Leavenworth, KS.
- ◆ Conduct Threat Tactics mobile training team (MTT) at units and activities.
- ◆ Support terrorism-antiterrorism awareness in threat models and OEs.
- ◆ Research, author, and publish OE and threat related classified/unclassified documents for Army operational and institutional domains.
- ◆ Support Combat Training Centers (CTCs) and Home Station Training (HST) and OE Master Plan reviews and updates.
- ◆ Support TRADOC G-2 threat and OE accreditation program for Army Centers of Excellence (CoEs), schools, and collective training at sites for Army/USAR/ARNG.
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