



View from TOC Wadi

by Major Mark E. Wilcomb

Upon leaving Europe two years ago, I was absolutely certain I was one of the finest artillery battalion S3s to have walked the earth. I could put together and brief a training plan that was sure to raise the assessment of every task on the battalion mission essential task list (METL) to a “T” (trained) in the shortest amount of time with the lowest expenditure of resources. The Chief of Staff of the Army and I were in total agreement on the magnificence of *FM 25-100 Training the Force*.

The battalion’s general defense plan (GDP) was locked in and coordinated with the supported brigade and sister artillery units. Each battery commander knew the complex plan from the border through to his final position. My tactical operations center (TOC) was full of “Jedi Knights” and digital-speaking warriors. I knew we could move the battalion and mass its fires wherever and whenever the need arose. Our statistics and battle damage assessment (BDA) during exercises were awe-inspiring and a true source of Redleg pride. As I headed for an assignment at the National Training Center (NTC), Fort Irwin, California, I thought I had left the battalion in great shape.

My first few rotations at the NTC were painfully humbling. Through those first months of grim soul searching, I realized I wasn’t the *operator* I had thought.

During the course of the next few years it dawned on me that, in my former life as an S3, I had accomplished only about 30 percent of the duties of a *good* battalion S3. A good battalion S3 must control the battalion and its fire support elements (FSEs) every moment of every day, during dirty and confusing fights against a

dirty and confusing foe—all while dodging “Murphy.”

After departing the NTC, I was still troubled by the ease by which I had gained such a deceptive assessment of my performance as an S3. For months I wondered how I had misread the requirements and capabilities of my TOC, the true value of my staff METL and training plans in preparing the TOC for battle and the ability of my officers and NCOs to flawlessly execute a plan so clearly written and briefed.

Those same questions tend to spill out of the mouths of many artillery S3s as the dust settles from their first experience stepping into the ring and sparring with 115 BMPs (Soviet infantry vehicles) and 45 T-72s (Soviet tanks) at the NTC—the experience we called “high adventure.”

What I offer in the remaining paragraphs are several answers given to me by those S3s as we waded through several hundred periods of high adventure at the NTC.

METL

The last thing I’d expect to see in the next rotation is a METL for the battalion staff. I haven’t seen one in years. We have them at home station and brief them every quarter, but we shelve them while at the NTC.

Most of us find by the end of a rotation that a meaty staff METL, void of showmanship, is the first step in organizing the TOC. We know that each task in the METL should link directly to the functions required of our staff in combat. Chapter three of *FM 6-20-1 Field Artillery Cannon Battalion (How to Fight)* identifies specific functions for the TOC

and is worth comparing our METL to from time to time.

Figure 1 lists those essential tasks that frame the heart of the TOC’s mission and some we failed to accomplish at one point or another during our periods of high adventure. Those failures not only jeopardized our ability to achieve the commander’s intent for fire support, but often “dropped us to our knees.”

Duties

We conducted several informal after action reviews (AARs) at the NTC in the absence of S3s and operations sergeants. In them, officers and NCOs consistently surprised us by being able to filter through all the fog of the battle and identify one of our root problems—individual staff duties are not well defined or supervised. The following sums up their collective recommendations:

- Take the staff METL off the shelf.
- Establish the duty positions required to accomplish each METL task to standard.
- Specifically define the responsibilities and performance standards of each duty position.
- Slate soldiers against each duty position (two deep, where possible).
- Train the soldiers to perform those duties to standard.
- Hold soldiers accountable to consistently perform those duties to standard.

Many of those officers and NCOs have grown tired of us climbing down from our “Captain Kirk” consoles and leaving the “bridge of the Enterprise” to navigate for a while, grab the “throttle” for a minute or “switch on the energy shields” at just the right moment. Those are *their* duties, not ours. They’ll do them for us and do them

Organize and Prepare for Operations

- Organize TOC Elements for Continuous Operations
- Supervise Subordinate Unit/Battery Preparations
- Conduct TOC Rehearsals

Perform Intelligence Tasks

- Perform Collection Management
- Perform Intelligence Processing
- Perform Intelligence Preparation of the Battlefield (IPB)

Develop FA Support Plans to Support Brigade Operations

- Organize the Staff Planning Process
- Plan/Coordinate Routes, Movements and Positions for Units
- Plan/Coordinate Ammunition Resupply of Units
- Plan/Coordinate Survey Tasks to Support the Brigade Sector
- Plan/Coordinate Scheduled Fires
- Plan/Coordinate Radio and Wire Communications Requirements
- Plan/Coordinate Target Acquisition
- Prepare and Distribute FA Support Plans
- Conduct Orders Briefings

Control Fires

- Organize the FDC for Continuous Operations
- Establish Voice and Digital Communications
- Establish and Maintain Initial Files
- Determine and Manage Weapon and Ammunition Information
- Integrate Fire Planning into the TACFIRE System
- Provide Tactical and Technical Fire Control to the Battalion
- Operate While Degraded/Perform Organizational Maintenance

Manage Essential Tactical Information

- Maintain Current Information on the Operational Status of Fire Support Assets
- Maintain Current Information on the Friendly Maneuver Situation
- Maintain Current Information on the Enemy Situation
- Prepare and Disseminate Operational Reports

Move

- Provide Command and Control of the Battalion During Movement
- Displace the TOC
- Conduct Road March
- Re-establish Operations Following Occupation of Position

Defend the TOC

- Defend Against Air Threats
- Defend Against/Avoid Ground Threats

well, if we assign them the tasks, teach them the procedures and demand they perform to standard. Until then, they'll continue to step out of our way and watch us play all the parts, do only what we tell them and grow more frustrated with duty on the Enterprise.

One of the most contented soldiers I ever watched was Jones, a radio/telephone operator (RTO) who "commanded" one TOC's Command Fire 1 (CF1) net. He *owned* that radio net from his pork chop through to the handset of every RTO on that frequency, and he felt personally responsible for it all. He performed preventive maintenance checks and services (PMCS) on his system like a surgeon, knew the reflective power and output wattage, and demanded his OE-254 antenna be erected "twelve poles" high and maintained to standard.

He knew which RTOs were up on his net, which had momentarily dropped off and why, and where to reach them. He didn't miss a call, omit an entry in his duty log or fail to pass a legible message to the right section in the TOC.

He would defy other RTOs to fail to respond promptly to calls from him or anyone else on his net. Very few did. He understood from previous experience that the operations sergeant, monitoring his performance from a few feet away, would take him to the "land of Armageddon" if he skipped a beat, so he didn't—and he enjoyed duty on the Enterprise.

Specialist Jones had been slated against a TOC duty position, trained on his duties, supervised by his operations sergeant and held accountable to execute those duties to standard. Our soldiers, likewise, must be given back their duties (and job satisfaction), and we need to get back to the bridge.

Configuration

There are a number of *good ideas* in our unit standing operating procedures (SOPs) on the physical design of the TOC complex itself. Several I've seen truly optimize the work space available and tend to boost the efficiency of the different elements of the TOC. But others are reminiscent of bumper car rinks. The S2 and operations sergeant collide with one another moving between their posts; the signal officer can't get started; the nuclear, biological and chemical (NBC) officer can't find an empty car; and there always seems to be one guy going the wrong way. The solution we settle on must provide our soldiers

deconflicted work space to execute their duties. It also should accommodate our bridge.

We must see and hear our TOC performing to standard. We also must see and hear the battlefield to know if maneuver, our howitzers and our FSEs are on track in achieving the commander's intent. Annex C of FM 6-20-1 provides a starting point in reviewing our TOC configuration, recommending several standardized command post configurations. They're not the most efficient, nor have they been used extensively at the NTC. But they prompt several worthy considerations.

In each of them, the S3 is positioned in the heart of the TOC. From his post he can see and hear most TOC elements. His remote communications monitoring unit (RCMU) is within arm's reach. Other critical nets are remoted into the work area (at a low volume), so all can "see and feel" the battlefield. The tools of the TOC, whether a variable-format message entry device (VFMED) or the clock on the wall, are each assigned a specific place.

While the S3 can see and hear most TOC elements in these configurations, he has *lost* the tactical fire direction system (TACFIRE). The trend that continues to surface in TOCs at the NTC is the speed with which we, as S3s, lose control over our FSEs and howitzers. We offset our TACFIRE from the main TOC and monitor fires from a TA-312 telephone, the RCMU and the VFMED. In doing so, we give our 24 howitzers to the fire direction officer (FDO). He now owns them.

At the NTC, I routinely challenged S3s to accurately update their commander on what the FDO was doing with his guns during the heat of any battle using this configuration. I've heard a number of good tries, but none could confirm that fires were being cleared against fire support coordinating measures (FSCM), that fire orders complied with the commander's criteria, that fires were being massed when planned or that good solid tactical fire control was being performed. Many of us have been surprised to open the TACFIRE shelter door to find a private first class (PFC) at the console and the rest of the section at chow during a crucial period of high adventure.

A configuration several S3s adopted while at the NTC is shown in Figure 2. Though not necessarily the best idea for every unit, we found it provides better use of space and allows the S3 to monitor his

Figure 1: Tactical Operations Center (TOC) Mission-Essential Tasks

TOC while closely controlling the actions of the fire direction center (FDC) and FSEs. The trade-off in this configuration is the risk of losing both the operations and intelligence (O&I) section and the TACFIRE section to enemy direct or indirect fires. I think the increase in control over those 24 howitzers provides better support to the maneuver force and is worth the risk.

Yes, this configuration takes a while to set up—the first time. Through practice, our times dropped to 15 minutes, coming or going.

Yes, all the key players are “on shift” at the same time. With our present day manning, the luxury of shifts has been revoked. Key players must be up for the bulk of the planning, rehearsals and battle. The sleep plan will be the four hours here and there we can afford during all other times.

Yes, there are a few more soldiers than we’re authorized in the TOC. They come from the wire teams or radio repair or some other slice of Headquarters and Headquarters Battery (HHB). It doesn’t matter where they come from; what matters is we fill all the positions required to accomplish our essential tasks.

No, it may not meet our needs in a rapid 100- or 200-kilometer movement-to-contact. But we’ve proven we’re smart enough to adjust to those unique missions.

Using this TOC configuration, the S3 has all the tools available to perform his duties. From his post, he can monitor the pulse of all fire support assets entrusted to him and determine if they are achieving the commander’s intent. He can continually cycle through each of the elements to confirm they are on track.

Procedures

With our METL, duties and configuration established, it takes very little effort to complete the *organization* portion of what is evolving into our TOC SOP. Now we can try to stop a number of “gremlins” from growing by establishing ground rules for the TOC.

My TOC SOP required the cleanliness and orderliness of a surgical ward. The cigarettes were to be taken outside, along with the chow, visitors, off-shift soldiers and magazines—period. I knew it was right, the soldiers knew it was right—it was the law.

Yet every visitor saw then what I routinely saw at the NTC: the medic passing out throat lozenges and foot powder from the S2’s post, the *Penthouse* on the floor

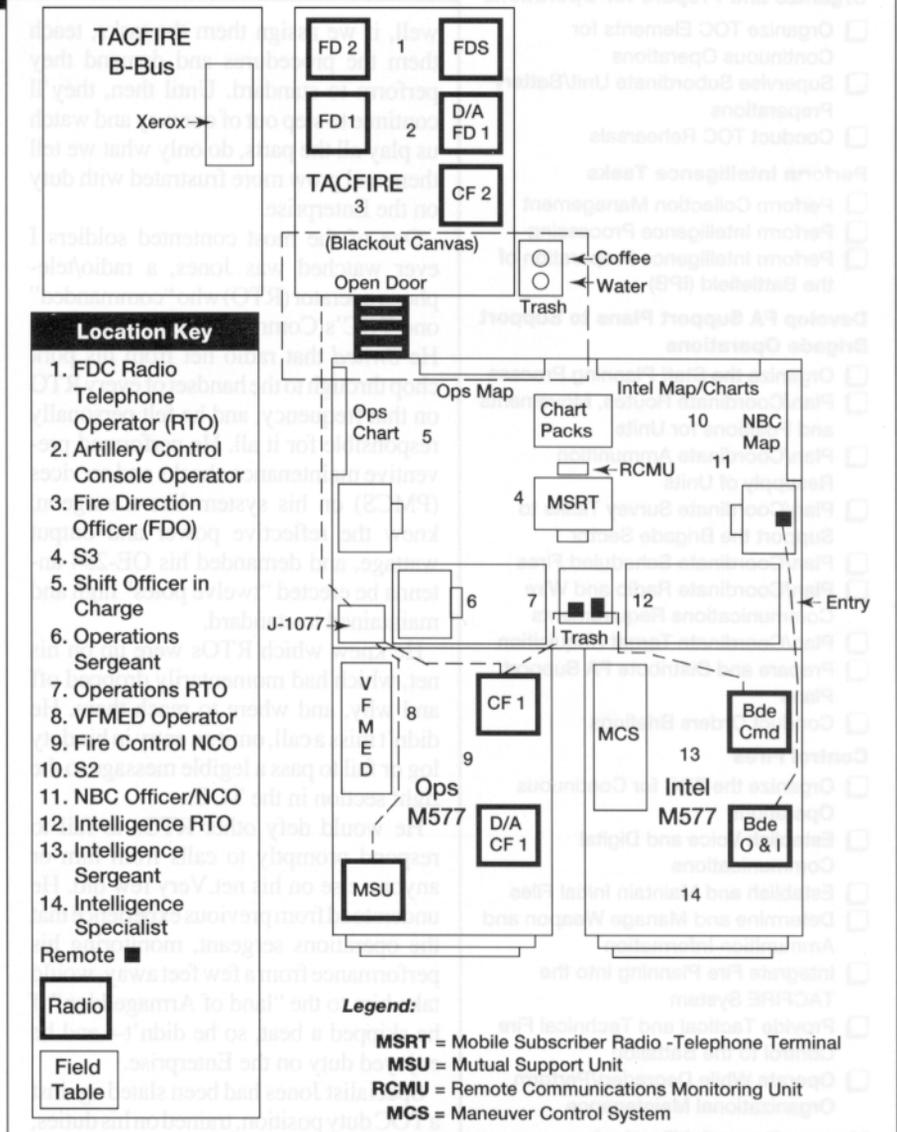


Figure 2: TOC Configuration. This configuration provides good use of space and allows the S3 to monitor the TOC and FDC operations.

of the TACFIRE, Jones’ shaving kit and towel under the operations sergeant’s table (because Jones knows it doesn’t belong around “his” CF1 net) and Captain Smith in his sleeping bag on the shelf of the S2 track because it’s warmer there.

The ability of garbage, clutter and chaos to spread in a TOC is directly proportionate to the rank of the visitor our commander walks in with. Once again, we’re surprised, embarrassed and disappointed that we dropped our standards.

Rules are rules—we should enforce them. In just minutes, we can begin to resemble a “route-step” outfit.

Information Management

We manage information like Sybil negotiates a hall of mirrors. We try every

possible method. But, in the end, 30 minutes before crossing the line of departure (LD), we seem to have trouble identifying who we are and where we’re heading.

We have charts, overlays, duty journals and accordion files at each station because other guys have those things. Everyone who’s important has his own stack of electronic line printer (ELP) paper on his table. We have a need to constantly transmit and receive current information from commanders, FDCs and FSEs because that’s what TOCs do and because we keep getting No-Gos on that Army training and evaluation program mission training plan (AMTP) task. We need “Red-Ones,” “Purple-Threes” and “Barracuda” reports along with this week’s revision of “Moveup 1, 2 and 3.” After collecting all that “good” information, we

can make sound decisions and issue our brilliant S3 edicts to units—if we could only find where we put that stuff—“Ask for it again.”

Our basic problem, discovered in our AARs, was trying to manage every bit of information from the latest changes in the commander’s intent to the fuel level in Bravo-27. Why do we continue to require first sergeants to send their defense diagrams to the TOC within 30 minutes of occupation? What have we ever done with them? What edict or change in course did we issue because of them? What happened if we didn’t get them? We know the answer. We continue to “drop the meat grabbing for the after-dinner mint.”

Our METL helps us get back on the right track. Essential information is required to accomplish essential tasks. If we require units to interrupt their mission to pass or receive information, that information should lead to decisions and orders that

facilitate our achieving those essential tasks—not the “nice to do” tasks.

And we should send or receive that information once. If we go beyond once, our tools to record the information need to be reconsidered. Our methods of reporting should be as convenient and concise as we can make them.

For some reason, we always require an essential report from a commander at the worst moment in his life. We routinely ask his FDC for a 32-line ammunition status report about the time an OPFOR (opposing force) company is completing a MTOE (modified table of organization and equipment) adjustment on his remaining platoon.

A thorough scrub of our status charts, reports and reporting procedures will go a long way toward helping us manage only essential information. Figure 3 represents what many have used as an operations status chart. Most of the fluff has been

removed. Fuzes, lots and FSCM are not included. Those details are tracked in FDCs where decisions concerning them are made. The ammunition status and location of reinforcing platoons are not tracked on this chart. The liaison officer (LNO) tracks those details. The bulk of the remaining detailed information is either found in our orders, on the execution matrix posted next to the operations chart, recorded in the duty journal, entered into TACFIRE, plotted on the map or filed in the operations or intelligence files. Charts are for quick and frequent reference.

How and where we determine the information is to be managed will depend on its usefulness to the staff as a whole, frequency of anticipated use and relative importance. We should record, post or file it in one location. Battery locations and tube status will be referred to far more often and by more people than will the information for the priority target they’ve

Unit	Grid	Alt. Grid	Azimuth	# Tubes	DP	AP	HE	RAAM	ADAM	RAP	WP	SMC	ILL	CPHD	M3	M4	119
1A																	
2A																	
1B																	
2B																	
1C																	
2C																	
Cbt Trns																	
Fld Trns																	
Reinf. TOC																	
A																	
B																	
C																	
Q-36																	
Retrans																	
PADS 1																	
PADS 2																	
LRP 1																	
LRP 2																	
Bde TOC																	
Bde TAC																	
D/A TOC																	
TOC																	

Mission	Commander's Intent	Planning Time Line	Warning Order
		NLT PLAN Msn Received Msn Analysis Warning Issued Staff Estimates Order Issued Order Brief Back PREPARE Units Positioned TOC Rehearsal FS Rehearsal Ammo Distributed EXECUTE LD Defend NLT	MISSION LD/Defend Time Move NET ORDERS BRIEF Time Location PRELIMINARY ACTIONS: PCI NLT Resupply Recon
ADA Status		MOPP Status	
Warning: Hold Tight Free WCS: Red Yellow White Current as of: _____		MOPP Level: 0 1 2 3 4 Current as of: _____	

- | | | | |
|----------------|--------------------------------------|---|---|
| Legend: | LRP = Logistics Release Point | ADAM = Area Denial Artillery Munitions | CPHD = Copperhead |
| | D/A = Div Arty | RAP = Rocket-Assisted Projectile | WCS = Weapon Control Status |
| | DP = Dual Purpose | WP = White Phosphorus | PCI = Pre-Combat Inspections |
| | AP = Armor Piercing | SMC = Smoke | MOPP = Mission-Oriented Protective Posture |
| | RAAM = Remote Anti-Armor Mine | ILL = Illumination | |

Figure 3: Operations Status Chart

been assigned. They are best posted on the operations chart and plotted on the operations map; priority targets should be maintained by the FDC. Few items of information require recording, posting or filing by more than one element of the TOC, and most need be actioned only once.

Summary

This article covered only a few of the lessons we've learned in organizing the TOC. I know none of it's new or surprising. Hopefully, it was of some value as a review.

I didn't discuss the orchestration of the planning, preparation and execution of

the battle itself. There isn't enough room to cover those duties in one article. But I can offer you the one major lesson I've learned that appears to be common to all of these areas: Any lasting problem we faced grew from our failure to enforce established standards or our failure to establish a standard.

Problems will always crop up to challenge us. We can blame the isolated ones on Murphy with relative success. The ones that routinely plague us are those we permit by allowing standards to slip. That too is not new or surprising, but it hurts when we forget.



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Right by Piece

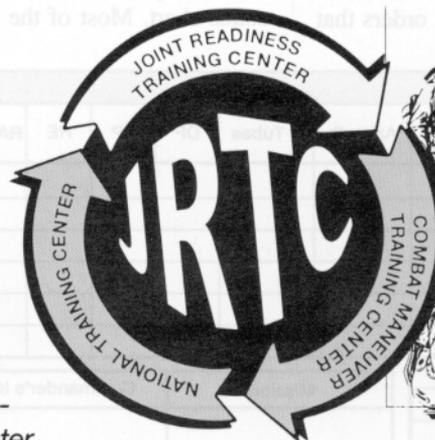
NOTES FROM UNITS

Battalion S1 Operations at the JRTC

How much emphasis should be placed on administrative operations in a low-intensity conflict (LIC)? Does your unit have an effective plan for handling casualties and replacements on the battlefield? While these topics are sometimes brushed aside as less important than other operational concerns, the Joint Readiness Training Center (JRTC), Fort Chaffee, Arkansas, exercises these and other tasks that are the responsibility of the battalion SI and the Administration and Logistics Operations Center (ALOC).

The 1st Battalion, 319th Airborne Field Artillery Regiment deployed to the JRTC in support of the 3d Brigade, 82d Airborne Division, Fort Bragg, North Carolina, and provided fire support for three battalion task force rotations. The following observations reflect some of the lessons learned during the rotation.

The battalion began preparing for its JRTC rotation approximately 90 days before deploying. The battalion staff developed milestones to ensure we identified critical tasks early. Some of these tasks included close coordination with the brigade SI in developing manifests, processing for overseas movement (POM) schedules and briefing battery commanders on casualty evacuation procedures.



The battalion ALOC established operations within the brigade support area (BSA) following an airborne assault and airlift into the theater of operations. The ALOC consisted of one standardized integrated command post system (SICPS) with two field desks and a radio remoted from a high-mobility multipurpose wheeled vehicle (HMMWV). Operating out of one SICPS allowed quick and easy set-up and breakdown. Running the tactical army combat computer system (TACCS) out of the personnel action center (PAC) HMMWV instead of in the SICPS allowed more room in the tent and didn't hamper the TACCS operation.

In establishing the ALOC for combat, we found that engineer support to harden positions was a *must*. The ALOC was bermed in every position to protect it from indirect fires. Fighting positions were prepared to standard with good overhead cover, preventing many unnecessary casualties from fires.

The ALOC defensive sector of the BSA was initially weak due to a lack of supporting communications and inappropriate sectors of fire. However, constant emphasis on defense by the headquarters and service battery (HSB) commander ensured each soldier knew how his fighting position