



NTC Trends Brief

12 SEP 2013



Mr. Derek D. McCrea
Training, Leader Development and Safety (Jacobs ASG)
TRADOC Capability Manager
Armored Brigade Combat Team
706.545.2684
derek.d.mccrea.ctr@mail.mil

Unclassified/FOUO



Agenda



- NTC Visit Overview
- Live Fire Exercise Trends
- Training Aids, Devices, Simulators and Simulations (TADSS)
- Force on Force Trends
- Summary



Unit and CTC Visit Overview



In the past year TCM ABCT has completed trend analysis from 5x separate Decisive Action Training Environment (DATE) rotations at NTC/JRTC, 7x unit visits/umbrella week data collection efforts and multiple leader engagement sessions with ABCT officer and NCO leaders attending training at FBGA to develop Observations, Insights, and Lessons (OIL) based DOTMLPF Integration Action Plan. Since 2010 we have conducted 31 unit visits.

- It is the goal of TCM-ABCT to engage every AC/RC ABCT at least once every two years at NTC or homestation.
- TCM-ABCT identifies and analyzes trends, and recommends solutions to mitigate ABCT DOTMLPF gaps. We communicate with the ABCT community to improve combat effectiveness, and help build stronger ABCTs.



Live Fire Trends - Page 1



- **Abrams LFX Trends.** Several tanks did not have operational individual Muzzle Boresight Devices (MBD's) and were required to borrow MBD's. Manually charging the hydraulic system to prevent gun tube drop on the Abrams Tank was not accomplished.
- **Bradley LFX Trends.** Common crew errors have included: improper loading and unloading, failure to time the feeder, bolts and tracks not locked in, tension not released from ammunition, ghost rounds not cycled, excessive links not swept out from the plenum chamber, expended round casings not cleared out of the ejection port during clearing operations, and lack of awareness of sectors and surface danger zones (SDZ) including the implications and risk associated.
- **TOW Proficiency:** First time live fire engagements with the TOW at the NTC have been ~20% successful and of those that do successfully fire, only ~50% hit the target. The root cause is a combination of training, material (MSRs), and doctrine (loss of TOW training tasks for GST). Doctrine revisions will address increased TOW training requirements.
- **Boresighting.** Abrams and Bradley crews need improvement on boresighting. Leaders did not understand or plan for the appropriate amount of time that needs to be allocated for boresighting. Live fires started late on several occasions due to lengthy times to accomplish this task.
- **Pre Fire Checks.** Crews did not have or use paper copies of pre-fire checks and relied on the FBCB2 digital pre-fire checklist. The advantage of paper pre-fire checklists is they assign responsibility by requiring the vehicle commander's signature and serve as a means to ensure critical tasks are accomplished before crews load the Bradley weapons systems. Unit master gunners identified this deficiency and initiated a policy with signed paper pre-fire checklists to be turned in before crews could receive their ammunition. Master gunners stated after they incorporated this standard crew induced malfunctions were reduced.



Live Fire Trends - Page 2



- **Abrams Gun Tube Fractures.** Two Abrams systems encountered a major fracture to their main gun due to obstructions in the tubes when fired. Below are risk reduction measures being taken to mitigate future gun tube fractures:
 - PM ABCT Safety will update the Gun Tube Strike Safety of Use Message (SOUM) to highlight the importance of ensuring crews check and clear obstructions in the event of a gun tube strike.
 - NTC Dragon Live Fire team will revise their live fire pre-brief to highlight terrain awareness during live fire.
 - Review tank TMs to ensure they provide proper crew procedures after a gun tube strike.
 - MCoE needs to ensure these procedures are properly addressed in 19K OSUT, Abrams Master Gunner Course, M-SLC, ABOLC and MCCC.

- **Unstabilized Gunnery.** Commanders are not using all military occupational specialty (MOS) Soldiers and vehicles for the LFX. There has been a general lack of unstabilized weapons gunnery conducted during the past year at the NTC LFX. Units can incorporate mounted unstabilized weapons systems into the scheduled fight and can also request a Convoy Live Fire Exercise for sustainment platforms. During previous unit visits ABCT leaders have expressed a need for Unstabilized Gunnery SMEs to reside in formations that lack Abrams and Bradley Master Gunners. This same issue prevents sustainment units from being able to secure themselves during force on force. TOCs, BSBs etc have unstabilized weapons systems and mounts assigned, however, they have not been mounting or training on these systems.

Recommendation. The ARNG has the "Senior Gunner Course" available at the Warrior Training Center (WTC) for units to train unstabilized weapons system SMEs. The course is open to E5(P)-E8 and all MOS.



TADSS – Page 1



Issue: Units have disclosed there is a lack of 25mm, 7.62mm, .50 cal, 120mm dummy ammunition, and TOW Missile Simulation Rounds (MSRs) for Abrams and Bradley crews to effectively conduct Gunnery Skills Test (GST) training in accordance with the Individual and Crew Live-Fire Prerequisite Testing (TC 3-20.21.1). Examples: “We only have enough 25mm dummy rounds to have ammo in one chute on one Bradley in the brigade.” Training Support Centers (TSC) don’t stock .50 cal, 7.62mm or 25mm Dummy Drill & Inerts (DDI), however some TSCs do carry 120 mm dummy training ammunition. One set of training ammunition is not enough for an entire BCT to attain and retain proficiency on GST.

Recommendations:

- Conduct inventories to identify serviceable training dummy rounds. Unserviceable links can be requested from the Ammunition Supply Point (ASP) to reduce the total Army requirement needing ordered. Order quantities necessary to support unit GST requirements IAW TC 3-20.21.1.
- Following inventories, master gunners or BSTB Ammunition Managers order DDI through TAMIS and the BCT Ammunition Technician IAW the procedures outlined in Appendix B, Training Aids, Devices, Simulators and Simulations (TADSS), in DA Pamphlet 350-38, Standards in Training Commission available at <http://www.atsc.army.mil/tcmlive/strac/firspage.asp>.
- Request Abrams 120mm dummy training ammunition shortages through TSCs. TSCs can submit 120mm training aid requests through the fabrication module and request TADSS once per year.
- **Order missile simulator rounds (MSRs) through the supply system. The MSR is a non-expendable major end item (NSN 6920-00-223-4919) that weighs 61 pounds. As of 9 SEP 13, Redstone Arsenal has 5,832 MSRs and they are issued to units at no cost.**



TADSS – Page 2



Recommend battalion master gunners sign training aids down to company level. The below breakdown provides enough dummy rounds to run a company level event with one vehicle per station, or a battalion consolidated GST with two vehicles per station. Minimum dummy ammunition recommendations below are just enough for each company to operate one vehicle per GST station and does not include retraining ammunition:

Bradley Training Dummy Rounds Breakdown

25mm-470 total rounds/CAB; 7.62-40 total rounds/CAB (math below)

25mm Ammo (DODIC A967): 235 ea M794 rds x 2 = 470 rds/CAB (1/Rifle Company)

70 M794 Dummy rds for Load AP Ready Box

75 M794 Dummy rds for Load HE Ready Box

45 M794 Dummy rds for Load AP in Feeder

45 M794 Dummy rds for Load HE in Feeder

7.62 Coax Linked Ammo (M172): 20 ea rds x 3 = 40 rounds per CAB for M240C GST

Note: Scouts and HHC can use the company ammunition for training.

Abrams Training Dummy Rounds Breakdown

M240 Linked Ammo: 10 ea x 2 = 20 rds/CAB for M240 GST

.50 CAL Linked Ammo: 5 ea x 2 = 10 rds/CAB for .50 CAL GST

120mm: Sabot, 1 MPAT, 1 HEAT, 1 canister per Armor Company.



TOW MSR





NTC Force on Force Trends



- **Movement Techniques:** Units are not planning for transitioning from movement to maneuver. Units commonly stay in the traveling formation until contact is made. This appears to be a learned TTP from recent experiences on route security missions against ambushes, IEDs, etc.
- **Armor and Infantry Action, Crew, and Battle Drills.** Battle, crew and action drills conducted by Armor and Infantry platoons, squads and crews have atrophied. While observing training, leaders at the platoon level have expressed that they didn't know where or how to find ARTEP or battle drill manuals on the Army Publishing Directorate (APD). They either did not know or understand that the ARTEP manuals had been replaced by Combined Arms Training Strategy (CATS) and are located on the Army Training Network (ATN), or that battle drills were removed from platoon and squad manuals and placed in CATS and on ATN. The MCoE DOTD is reincorporating drills back into most squad/platoon manuals.
- **Rifle Platoon Collective Task Proficiency.** Every ABCT that has conducted a decisive action rotation at NTC in the past year needs improvement on maximizing the use of Infantry squads in unison with Bradley crews. Units experience challenges finding the right balance of training and synchronizing Bradley crews and dismount Infantry for missions. The root cause is a combination of reduced operational and institutional training requirements over the past decade and reduced operations on Bradleys supporting dismount Infantry in traditional roles.
- **Sustainment.** Sustainment of platforms needs improvement from operator to Brigade level. Far too many vehicles are sitting in maintenance collection points at the NTC resulting in reduced training value for those Soldiers. Sustainment forecasting also needs improvement. On some occasions units have been going "black" on classes of supply (Water, Fuel) during mission execution.



Discussion



- Gun maintenance
- GST training
- Bradley Skill Level 1-4 Training



Questions