

Thunderbolt Blast

U.S. ARMY ARMOR SCHOOL NEWSLETTER
SUMMER 2024



DOCTRINE

Doctrine and Collective Training Division's (DCTD) ABCT Doctrine Branch is in preparation of three Important upcoming Armor Training Publications; We have two important up and coming Training Circulars - TC 3-20.31-9, *Armored Platoon Services* and TC 3-20.31-120, *Heavy Tank Gunnery*. *Armored Platoon Services* addresses the training and knowledge gap identified during the M1/M2 Service Review in November 2023. It will provide the first doctrinal reference for training maintenance procedures in our formations to include planning, preparation, and execution. Currently, this TC is with TRADOC for final review, and introduces three new DA Forms being staffed by the Army Publishing Directorate. We hope to see this published on APD in July 2024.

Heavy Tank Gunnery is currently in the signature draft phase and we expect to release the manual for publication NLT 1 July 2024. *Heavy Tank Gunnery* is a complete revamp of the gunnery training tables for Armor formations with a focus squarely on LSCO operations. 3ID completed their pilot of the tables in FEB 24, and have moved quickly to push the revised training methodology out to the force. The implementation timeline will span a year with the final implementation date being 1 OCT 25. Meanwhile, TC 3-20.31-25, *Bradley Gunnery* remains in development at the Armor School applying the same methodology. The force should anticipate the release of the new M2 gunnery tables NLT 1 July 2025 with an implementation date of 1 October 2026.

DOTTD remains dedicated to updating the force via the Center for Army Lessons Learned (CALL) newsletter, the U.S. Army Armor School Facebook page and our X (Twitter) page (@MCoE_DCTD). For questions or concerns, please contact the Doctrine and Collective Training Division at usarmy.moore.mcoe.mbx.doctrine@army.mil or through our MCoE Doctrine and Collective Training Division X page.

CHIEF OF ARMOR & USAARMS CSM COMMENTS

Greetings from the Armor School and Fort Moore for the summer surge the Armor School's priority remains to set conditions for our Armor and Cavalry forces to be ready today while we work to prepare the force for tomorrow.



We have started to see the fruits of the entire enterprise's efforts to right-size the Armored force and boost CMF 19 Accessions. In June, 19K accessions to possibly grow over 100% of the FY24 accessions target. After the deficit of the last several years, the operational force today is manned over 90% aggregate for 19Ks, and will be over 90% 19K manning by the end of summer based on the 19K trainees in 194th Armor Brigade's training pipeline. For the 19C MOS build, as of 1 July 2024, there over 1200 Soldiers who have completed the reclass process putting the 19C MOS well on the way to meeting its FY25 targets before we even started recruiting 19Cs in June of 2024. For those Soldiers who do not qualify for 19C constructive credit, the 194th Armor Brigade has started the first of four FY 24 19C transition courses, with an additional five courses scheduled for FY25. Assuming successful recruitment efforts, the 19C MOS should be above 80% of requirement throughout the operational force by January 2025.

Looking forward to the next iteration of the Army's Transformation in Contact initiatives, we at the Armor School anticipate as the Army continues to move towards the realization of not trading blood for first contact, the role of the Scout on the future battlefield will change. With the integration of HMI into reconnaissance, surveillance, and security, we believe the 19D MOS will not only continue to master

(194TH ARMORED BRIGADE)

194th Armored Brigade's mission is to produce qualified and disciplined Soldiers for Armor and Cavalry units for the operating force. As the Army refocuses to the demands of Large-Scale Combat Operations (LSCO) amid the complexities of an ever-evolving battlefield, it is paramount the Army's premier Armor One Station Unit Training (OSUT) reorients training as well.

194th AR BDE currently is supporting the MCOE LOE's with 22x Classes (including 91A, 91M, H8, and H9 courses at OTD) in session totaling 1,493 Trainees. We are also excited to announce the Army's first 19C transition course with 63 personnel. This course has been a great proof of principle of all the hard work OCOA and 194th AR BDE have put into this effort to train this new MOS. Soldiers enrolled in this 19C course have completed BFV drivers training, GST and are preparing for live fire before they graduate on 16 July 2024. In conjunction with the 19C course the BDE is excelling in other areas utilizing Bradley's, Tanks, and sUAS platforms throughout all FTXs to familiarize the Trainees and allow them to conceptualize their roles in a combined arms fight. These efforts allow for more realistic and combat focused training as trainees can see the capabilities of combat platforms in the screen line, while also integrating sUAS drones and indirect fires into their final FTX.

Finally, 2-15 CAV conducted an "out of cycle" 19K course graduated 116x additional 19Ks into the Operating Force. This was necessary due to the 19K STO initiative which has attacked the shortage of 19Ks in ABCTs in the US Army.

(316TH CAVALRY BRIGADE)

Observations from the gunnery portion of the 2024 Sullivan Cup showed skill gaps that could reduce the effectiveness of armored crews on the battlefield. While observing the gunnery portion of the competition, instructors at the Armor School identified four key areas for the Armor Force to concentrate on during home station training. The four areas are maximizing the use of optics, employing effective scanning techniques, using effective engagement techniques, and properly adapting to the operational environment. Improvement in these four areas will improve a crew's ability to detect, determine, and destroy potential threats.

The M2 Bradley Fighting Vehicle and the M1A2 Abrams both use Forward Looking Infrared (FLIR) technology to detect and identify targets. FLIR technology offers several advantages over other primary and secondary sights, particularly in challenging environmental conditions such as low light, adverse weather, and obscured visibility due to smoke or dust. The Bradley's Commander's Independent Viewer (CIV) and the Abram's Commander's Independent Thermal Viewer (CITV) serve as a critical interface for accessing and utilizing FLIR and other sensor data on both platforms. Correctly employing the CIV/CITV ensures that vehicle commanders maintain comprehensive situational awareness. This enables them to make informed decisions and effectively coordinate the vehicle's actions with other elements of the maneuver force. Failing to leverage these two capabilities simultaneously results in reduced effectiveness.

the fundamentals of reconnaissance and security operations but also the utilization of robotics and unmanned air and ground systems to enable the accomplishment of these tasks.

As discussed in the doctrine portion of this Thunderbolt Blast, the team has put substantial work of two upcoming Armor training publications: TC 3-20.31-9, Armored Platoon Services and TC 3-20.31-120, Heavy Tank Gunnery. Both publications will be out this summer. Please pick up these manuals as they become available, as they both provide focus on common standards that drive excellence rather than unit driven standards that deviate from installation to installation.

As we enter a period of summer transitions, I will be signing off, and the Armor School will welcome BG Chad Chalfont as the 55th Chief of Armor. We also bid farewell to COL Ryan Kranc as he left as the 316th Cavalry Brigade Commander and we are excited to have COL Justin Harper take the reins as the Destroyers continue to provide world class lethality and functional training to the force.

At the armor School, we will continue to do all we can to enable the operational force's warfighting readiness while preparing Armor and Cavalry formation for tomorrow's conflicts. As we look across Armor and Cavalry formations throughout the Army, our great Soldiers and Leaders continue to make a difference every day. If there's anything that we can do for any one of you, please do not hesitate to reach out.

Forge the Thunderbolt!

BG Michael J. Simmering, U.S. Army
54th Chief of Armor



Develop Future Master Gunners

The Master Gunner (MG) is the subject matter expert for all weapon system platforms in the Armored Brigade Combat Teams (ABCT). MGs advise commanders at all echelons and are a



316 CALVARY BRIGADE (cont)

This directly correlates to prolonged direct fire engagements and hinders the ability to rapidly locate, identify and assess threats on the battlefield. Vehicle commanders must also understand the limitations of FLIR technology, including its susceptibility to environmental factors such as rain, fog, and smoke. At the Sullivan Cup, fog posed the greatest hindrance due to it significantly reducing the distance at which the crews could observe to detect targets. By understanding these capabilities and limitations, vehicle commanders can mitigate risks and exploit FLIR's advantages to maintain a decisive edge on the battlefield. Regarding the utilization and employment of the CIV/CITV, commanders must use the Conduct of Fire Trainer-Situational Awareness (COFT-SA), Advanced Gunnery Training System (AGTS), and exercises conducted in training environments to fine tune their skills and proficiency.

Once crews have mastery over the use of their optics and sensors, they can begin to implement them effectively using scanning techniques. These external viewing optics may have effective magnification and thermal imaging, but they are limited by their field of view. It is only through effective scanning techniques that crews are able to gain an understanding of the battlefield. Scanning is the act of observing designated areas in an assigned sector. It is a rapid sequence of various techniques to identify potential threats. There are five detection methods to determine potential threat locations; rapid, slow, horizontal, vertical, and detailed (as outlined in TC 3-20.31-4, Direct Fire Engagement Process). Crews can employ multiple scan or search methods simultaneously to maximize the potential of acquiring threats. Initially, crewmembers should start with a rapid scan of the sector to identify irregularities. If an irregularity in the environment presents itself, then the crew should refine their search or deliberate method of observation of the initial scanned area. Additionally, when scanning the sky for aircraft, Soldiers are more likely to miss targets in the lower portion of their sector if they expand their acquisition efforts too high above the horizon. The correct upper limit is 20 degrees (TC 3-20.31-4, CH 1). By continuously scanning their surroundings, crews can quickly detect and acquire potential targets. Key things for most crews to understand is that everyone in the crew is a sensor, and they must all work together to locate targets effectively.

There are three basic techniques used to search as a collective small unit or crew. Combined sectors may overlap, be divided, or be specific to near or far distance for the friendly force to focus their efforts (TC 3-20.31-4, CH 1). Crews may combine all three techniques into their threat detection procedures, if necessary.

In closing, Vehicle crews must master these four skills in order to be successful, not just in the Sullivan Cup, but in conflict. Crews must be able to leverage their technology while using appropriate scanning and engagement techniques in any terrain to be as lethal as possible. It is imperative that units at all echelons prioritize training these skills by using simulations, dry fire, and live fire exercises. Failure to do so induces crew errors, decrease unit lethality, and potentially provides the enemy with the advantage.

crucial part in the operations process on combat and gunnery related training. For Armor specifically, there are two Master Gunner Courses—Abrams Master Gunner (AMG) and Bradley Master Gunner (BMG). Both courses are very demanding and require candidates to pass multiple technical tests to earn the coveted MG badge. The term 'master' is in the title for a reason because, quite frankly, we need subject matter experts within our formations. Therefore, the challenge is to train, in most cases, a junior NCO to achieve the level of mastery within their craft. The AMG/BMG cadre do a great job of producing MGs once they are in attendance, but as an Army we do not produce enough. Identifying, training, and selecting candidates to attend the AMG/BMG Course must be a top priority for Divisions with ABCTs. There needs to be a combined effort between Armor School and the operational force to identify and certify young NCOs to become MGs to increase lethality and be better warfighters. CMF19 will primarily train/operate within ABCTs where platforms are the most technical and casualty-producing pieces of equipment in the formation; therefore, MGs are needed more than ever. For our Armored Crewmembers (Abrams and Bradley Crews), I would argue the training focus needs to be more on the technical aspect, and MGs in the formation needs continued empowerment and support to provide that level of certification.


There has always been a need for 19K Abrams MGs, but with the implementation of 19C (Bradley Crewmember that goes live on 1 October 2024), we need to ensure they have priority to attend the BMG Course to instill a culture of mastery within that MOS. This is another reason why starting October we will go to a pure AMG/BMG stand alone courses to set conditions for leaders to achieve the level of mastery I spoke about in the above passage. Armor School will propose a standard operating procedure (SOP) for identifying, training and selecting candidates to attend the AMG/BM Course. This will require MGs at echelon to be heavily supported and engaged in the selection process and the identification of talent.

Finally, Master Gunners are crucial for the Armored Crewmembers' training progression to increase lethality, now more than ever. With the AMG/BMG Course realignment and the need to fill authorized MG positions, we need to develop future MGs by identifying potential candidates, providing them quality training at the unit, and selecting the best to attend the course. The goal is to build a funnel of candidates early in their career so by the time they are Tank and Bradley Commanders, they have the experience and possess the prerequisites to attend the AMB/BMG Course and earn the MG badge.


Forge the Thunderbolt!

Waylon D. Petty


U.S. Army Armor School CSM

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194th AR BDE

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|  | COL Gregory McLean CSM Ronald E. Kinard | | |
| | 30 AG (REC) BN | LTC Kyle Fails | CSM Kenyon Simmons |
| | 1-81 AR BN | LTC Gregory Hope | CSM Karlton Wade |
| | 2-15 CAV SQDN | LTC Stephen Deuble | CSM Avery Cunningham |
| | 5-15 CAV SQDN | LTC Mitchell Payne | CSM Andrew Pitman |

316th CAV BDE

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|---|---|-----------------------|----------------------|
|  | COL Justin D. Harper CSM Jeffrey C. Davis | | |
| | 1-16 CAV SQDN | LTC Carl Danko | CSM Kevin G. Stewart |
| | 1-29 IN BN | LTC Pedro Escamilla | CSM Robert Garvey |
| | 3-16 CAV SQDN | LTC Hayden Scardina | CSM Greg Brobst |
| | MATA | LTC Douglas Locke III | 1SG Joshua Florio |

199th IN BDE

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|---|-----------------------------------|------------------|------------------|
|  | COL Neil Myers CSM Fred N. Tolman | | |
| | 2-16 CAV SQDN | LTC Ryan Karasow | CSM Jacob Wilson |

Other Agencies

| | | | | | |
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Armor Branch (HRC) Websites:

- Officer: <https://www.hrc.army.mil/content/Officer%20Personnel%20Management%20Directorate>
- Enlisted: [https://www.hrc.army.mil/content/Enlisted%20Personnel%20Management%20Directorate%20\(EPMD\)](https://www.hrc.army.mil/content/Enlisted%20Personnel%20Management%20Directorate%20(EPMD))

MGCC Sabot: <https://www.milsuite.mil/book/docs/DOC-350788>

BMG Sabot: <https://www.milsuite.mil/book/docs/DOC-486004>

Weapons and Gunnery (MAIN PAGE): <https://www.milsuite.mil/book/groups/weapons-and-gunnery>

Charlie Niner Two: <https://www.milsuite.mil/book/groups/charlie-niner-two>

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