|  |  |  |
| --- | --- | --- |
|  | DEPARTMENT OF THE ARMY  HEADQUARTERS, 278h ARMORED CAVALRY REGIMENT  TENNESSEE ARMY NATIONAL GUARD  3330 SUTHERLAND AVENUE, PO BOX 10167  KNOXVILLE, TENNESSEE 37939-0167  REPLY TO  ATTENTION OF | 278acrPatch |

278-RCO 07 January 2012

MEMORANDUM FOR See Distribution

SUBJECT: Gunnery Standing Operating Procedures (GUNSOP)

1. **Purpose:** To provide guidance for the 278th Armored Cavalry Regiment Gunnery Training Program. This SOP identifies major training objectives, standards, goals, and safety considerations. It is designed to give commanders the latitude to train their units to standard and to maximize our limited resources during training. I expect leaders and subordinates to read this SOP and other pertinent manuals. Our soldiers deserve leaders who are confident, competent, and qualified to lead our soldiers through a tough, demanding gunnery program.

1. 2. **Commander’s Intent:**

a. Gunnery is a commander’s program. Our objective is to develop lethal crews, platoons, and troops/companies/batteries. I expect our NCOs to take our crews through Table VI qualification, and our commanders to train to standard their platoons and troops/companies/batteries on the advanced tables. The common thread through all of our training is to develop and maintain a combat ready force that is prepared to fight and win by focusing on the fundamentals. Our task is to conduct tough, realistic, and safe gunnery training. The objective remains 100% first-run qualification (Q1) on GT II-GT VI and GT XII. Changes to the various gunnery manuals (FM 3-20.21 HBCT GUNNERY MANUAL), particularly on fielding of new weapons and digital systems have toughened the conditions. Units must make maximum use of the gunnery training resources available for our soldiers, including the intermediate scaled range, and dismounted ranges for our infantry/engineer squads.

b. Cavalry troops, Tank companies, and Infantry and Engineer Companies will conduct one Level 2 Gunnery through GT VI bi-annually, and GT V annually. I expect aggressive use of the COFT SA (BFV COFT), TFT-B (Gunnery Table Top SA) AGTS (M1 SA COFT) and TFT-T (Gunnery Table Top SA), and associated training device/facilities to sustain our gunnery skills.

c. Commanders will ensure all firing crews meet specified gunnery training gates (to include intermediate training tables to qualification tables). Commanders will address all exceptions to the RCO and S3 at the Quarterly Commanders Briefing (see Annex N) or at the pre-AT Terrain Walk Briefing.

3. **Objectives:**

a. To standardize gunnery training, evaluation and reporting of Army standards throughout the 278th ACR (Volunteers).

b. To incorporate critical Minimal Proficiency Levels (MPL), METL tasks, battle drills, and ultimately digitization into gunnery tables and Scenarios for tables above individual crew qualification.

c. To maximize the use of TADSS including the COFT SA (BFV COFT), TFT-B (Gunnery Table Top SA) AGTS (M1 SA COFT) and TFT-T (Gunnery Table Top SA), to sustain crew skills and aggressively execute a year-round gunnery program.

d. To continually assess every crew’s ability to advance to the next phase of training by careful observation, evaluation, and feedback.

1. To conduct safe, tough, and realistic training to standard.

4. **Conclusion**: Our gunnery program will be a success when commanders are involved. I expect leaders to adhere to the Army’s gunnery standards, to resource our soldiers for success, and make our units combat ready.

5. This SOP is subject to review and update annually. The POC at Brigade is MSG Lee DSN 683-3274.

FRANKLIN C. McCAULEY, Jr.

COL, AR, TNARNG

Commanding

Enclosures

Annexes A-L

Distribution

CDR, 1/278th ACR

CDR, 2/278TH ACR

CDR, 3/278TH ACR

CDR, RFS/278TH ACR

CDR, RSS/278TH ACR

CDR, RTS/278TH ACR

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**ANNEX A CONDUCT OF RANGES**.

REFERENCES: DA Pamphlet 350-38 Standards in Weapons Training

FORSCOM Regulation 350-2 Reserve Component Training October 99

FM 3-20.21 HBCT GUNNERY Chapter 13

AR 350-40, Range Operations, Procedures, and Policies, 1 July 1993.

1. **Range Operations**
2. Squadrons will ensure that the Troop/battery executing the live fire training will not be responsible for the administrative support requirements. This is in order to allow the firing unit to concentrate on its gunnery and concurrent training tasks. The supporting element separate from the firing Troop/battery will focus on range operations, range maintenance, range safety, concurrent TADSS, retraining stations, and VCE support for Tables II-VI.
3. In order to maximize time management seek to use dual lanes vs. single whenever possible.
4. Squadrons will deploy an ADVON support package per Appendix 1 (Conduct of Ranges Range Support Operations).
5. Squadrons deploy to training with their own Range Organization package. See Appendix 2 to Annex C Bradley Gunnery (Packing List) and Appendix 2 to Annex D Tank Gunnery (Packing List). For Example:
6. Range diagram/sand table kit
7. Concurrent training stations (training tasks supporting the live fire table)
8. Rock Drill site: to train both conduct of the range and crew duties
9. Crew records display site
10. AAR/Briefing site
11. Medical treatment site
12. Troop CPs will be established on all live fire ranges to establish priority of work, monitor range execution, monitor fire control system maintenance, and serve as the information center on the range. The Troop CP will monitor the admin range net in order to track the status of crews fired, firing order, and be prepared to brief visitors on the status of the range. This will enable the tower to focus solely on the safe and efficient execution of the range.
13. **Range OIC/NCOIC/RSO**
14. Range OICs, NCOICs, and RSO must be **weapon systems qualified** on the weapons being trained on the range**.**  They must also meet all installation requirements to conduct duties as OIC, NCOIC, and RSO.
15. Range OICs will verify that soldiers/crews identify all range limit markers (left and right) prior to each engagement (day and night) by gunner and BC, VC or TC.
16. The RSO must be focused solely on safety. The RSO must possess, be trained on, and use NVGs, and be able to communicate with the tower and firing crew. The RSO (in a trail vehicle) must be able to see the firing vehicles at all times. A soldier must be detailed to drive for the RSO. The RSO must be completely dedicated to the task at hand-ensuring the safety of the range. The RSO must physically clear all weapon systems (and notify the tower) prior to releasing the vehicle from the baseline/clearing box.
17. **Training Aids, Devices, Simulators, and Simulations (TADSS)**
18. a. Training Aids available now and in the future include:
19. COFT SA
20. TFT-B
21. AGTS
22. TFT-T SA

(5) Engagement Skills Trainer (EST)

(6) Close Combat Tactical Trainer (CCTT)

(7) Automated Fire Control System (AFCS)

(8) Moving Target Simulator (MTS)

(9) AIM TEST

These devices improve gunnery skills without the resource intensive live fire process. Most work in conjunction with a live fire density which saves time and money to the training unit. Units must make maximum use of all assigned and available TADSS in order to meet gunnery objectives for all crews.

1. Each battalion/squadron will maintain two (2) certified TADSS NCOs (not including COFT IOs) who can supervise the use, mounting, training, and recording of the above listed TADSS. These NCOs must offer feedback to the unit commanders to determine what crews are ready to progress in the tables and what tasks the unit needs to practice before heading down range.
2. When possible units will bring assigned Training Aids, Devices, TFT-B/T simulators to live fire gunnery ranges. Preliminary gunnery training will focus on the use of TADSS in conjunction with the scaled ranges. Concurrent training will be executed on all ranges through Table VI.
3. Units will integrate TADSS into their gunnery-training program for GT VII-XII.

**4. Communications**

1. In addition to the gunnery skills tasks listed in FM 3-20.21 the installation and use of dual nets (Jump Admin and Firing) will be integrated into HMMWV, Tank and Bradley Gunnery Skills Training. Range OICs will verify dual net capabilities (Jump Admin and Firing) prior to live fire.

**5. Crew Records**

1. Each Troop level Master Gunner on a live fire range must maintain a folder containing the crew’s GST certification, last time fired together (VC/GNR), stability of TC GNR, most recent COFT crew record, TOW certification (if firing live TOWs), results of preliminary tables and last Pre-fire Checks (signed by the VC). The crew folders will be accessible on the range (tower, Troop CP, etc.).
2. Troop chain of command will verify the records in a crew’s gunnery folder prior to each gunnery density.
3. Each crew will conduct pre-fire checks IAW TM 9-2350-264-10-1&2 (M1A1) and TM 9-2350-284-10-1&2 (M3A2/M2A2) and appropriate TM for HMMWV weapon system before every live-fire run, day and night. Master gunners are the POCs for their Troop/Battery crew records.
4. **Rehearsals**

Prior to each run, day and night, the crews must conduct rehearsals. The Range OIC will have a rehearsal site for a rock drill or chair drill to allow the crews a location to practice the upcoming engagements.

**7. Markings/Safety**

1. Vehicles conducting live fire at night must be marked with two (2) turret orientation lights (unit SOP) on the bustle rack so they are visible from the rear of the vehicle but not visible from the front. This verifies to the OIC/RSO that the turret remains oriented downrange. **Ensure that** **the lights do not cause confusion** with the weapon status lights (red, amber, green) on the vehicle.

**8. Reports/Briefings**

1. a. There are three opportunities for Squadrons to report to the RCO and S3 on their gunnery:
2. Quarterly Commanders Brief – Squadrons may use the YTG brief to cover the following specifics for their upcoming year’s gunnery strategy. An example of the type of information to cover is in ANNEX N.
3. Pre-Annual Training Terrain Walk – The Squadrons will use this event to update and review with the RCO and S3 the plan (G-360) briefed about 8 months earlier.
4. Post Gunnery report -- Immediately following the completion of gunnery, units must send a post gunnery report as shown in ANNEX N. This report goes through the S3, and details TADSS utilization, ranges used, crew training, etc.
5. Each squadron/battalion master gunner will notify the brigade Master Gunners with the time and place of their gunnerybriefings. The battalion/squadron’s Gunnery SOP/Gunnery Order must be certified to be in accordance with published guidance by the S3 and brigade Master Gunners prior to the gunnery brief.
6. **Proofing/Verification**
7. The conduct of all ranges greater than 50 caliber will be approved by the squadron/battalion commander. This requirement cannot be delegated. The emphasis is on ensuring we have detailed oversight on the certification, conduct of preliminary gunnery, and conduct of each range. Deviations from the standards established in FM 3-20.21 HBCT GUNNERY and the 278th ACR Gunnery SOP, and other applicable regulations must be briefed at theG-360 Pre-gunnery brief and approved by the RCO and RS3. Modifications to the gunnery requirements must also be approved by the RCO and S3.
8. Range Scenarios will be proofed using the platform being fired on that range, depending on the type of vehicles the firing unit possesses. **Under no circumstances will a Scenario be proofed using other type of vehicles, such as HMMWVs for tank or CFV/IFV/BFV ranges**.
9. The following criteria must be met when proofing a range Scenario:
10. Verify all targets, including alternates, in each engagement can be seen, and verified safe, from each battle position and firing box. Each target in an offensive engagement must be seen throughout the entire firing box and moving targets must be seen throughout the entire programmed moving distance. Target ranges must be verified to be in accordance with the range standards in FM 3-20.21 or appropriate manual. Additionally, delayed target times (M1A1) must also be confirmed to be accordance with the standards in FM 3-20.21. Verify that all targets can be seen through daylight channel, TIS, and GAS.
11. Squadron commander and their master gunners are responsible for proofing the lower tables (GT II through VI).
12. GT VI target Scenarios must be proofed by the squadron commander/squadron master gunner and by the Regimental Master Gunner for doctrinal correctness and standardization throughout the Regiment. The Regimental master gunner must be notified of the date and time that a GT VI Scenario will be proofed to ensure the standards are met and to resolve any range issues prior to the first firing day.
13. GT VII-XII range Scenarios must be proofed by the regimental and squadron master gunner, and approved by the regimental commander and the RS3 during the pre AT Terrain Walk Briefing.

**10. Regimental Master Gunner Responsibilities.**

1. Verify targets and Scenarios for all Gunnery Tables VI and IX/X and XII Scenarios for the RCO and RS3 to approve.
2. Maintain Bradley and Tank Table gunnery Scenario library for GT/TT II through XII at Regimental S3.
3. Monitor the Regiment’s VCE training program in coordination with the TSBs. Review certification of Squadron VCE’s each year; Recertification for VCEs is annually.
4. Monitor all live fire preliminary utilization requirements to include ALL COFT devices, TADSS utilization, crew training, and ranges used by the Squadron/Troop.

**Appendix 1** (Range Support Operations) **to Annex A Conduct of Ranges**

**Range Support ADVON Package\***

|  |  |  |
| --- | --- | --- |
| UNIT READINESS NCO | SFC/E-7 | 1 |
| UNIT SUPPLY NCO | SSG/E-6 | 1 |
| SQDN S3 PAX | SGM/MSG/SFC | 3 |
| SQDN S4 | SFC OR SSG | 1 |
| VEHICLE CREW PAX\*\* | SPC(-)/SGT/SSG | 6 |
| RANGE OIC | SFC (+) | 1 PER RANGE |
| RANGE RSO | SSG (+) | 1 PER RANGE |
| \*GENERIC LIST THIS IS THE MAX NUMBER OF PEOPLE ALLOWED | | |
| \*\*FOR IWQ THIS IS NUMBER OF RANGE SPT PAX | | |

**Appendix 2** (Conduct of the Range Brief Format) **to Annex A Conduct of Ranges**

**Conduct of The Range Brief**

1. **Introduce Range Staff**:
2. OIC
3. NCOIC
4. RSO
5. Master Gunner
6. Beachmaster
7. Others
8. **Orient Unit to Range:**
9. Tower
10. Limits
11. Latrines
12. AAR/Admin/Troop CP
13. Smoking Area
14. Class I
15. Class V
16. Maint.
17. Firing Line/Lanes
18. Routes into off range
19. LZ/Medevac
20. Concurrent Training
21. **Time Line**
22. Open/Close/Mandatory Shutdowns
23. LOGPAC
24. **Range procedures**
25. Action, Condition, Standards for the Range (GT VI or M4 Zero, etc.)
26. Upload/Download
27. Display flags
28. Communications/Nets
29. Firing Order
30. Engagement Sequence
31. Malfunctions
32. Clearing Procedures/Location
33. Ground Guides
34. Ammunition Allocation
35. Prep to fire Checks
36. Commands/Prompts/Cues

**ANNEX B --- ALL Conduct of Fire Trainer**

REFERENCES: DA Pamphlet 350-38 Standards in Weapons Training

FM 3-20.21 HBCT GUNNERY

1. **Purpose**: To provide guidance to units in the use of all Conduct of Fire Trainers. This Annex and the COFT SOP is the framework upon which units can build and develop a strong and aggressive training program. The successful utilization of this training aid will significantly enhance our ability to fight our weapons systems with confidence.

2. **COFT Operations**: The Conduct-of-Fire Trainer (COFT) is a powerful training tool to increase and sustain critical gunnery skills at all levels. It must be fully integrated into the unit’s training program to complement the use of other gunnery devices, and to enhance sustainment and remedial training. The COFT builds commander and gunner skills to levels of combat readiness far beyond what can be done today on constrained ranges. It should be one of the focal points of the unit gunnery-training program.

3. **General**: Each VC-GNR combination will train in the COFT.

1. M1A1: Once a crew successfully completes the Gate-to-Live-Fire exercise, the COFT computer will designate the crew as certified. Once the COFT certifies crews, they will continue to follow computer recommended exercises in the Advanced Gunnery matrices. Crews must complete the gate-to-live-fire exercise(s) within 90 days before live fire. Training in the COFT should be limited to 2-hour blocks of training time.
2. M3/2: The standard for live fire is successful progression to Reticle Aim 17 and completion of level 12 + 3 degraded exercises in the COFT-SA. The Squadron commander will use those results to determine if the crew can progress to live fire.
3. Those crews that have achieved the live-fire prerequisite should continue to move through the matrix using computer recommendations.

4. **Responsibilities**:

1. Commanders are responsible for their COFT training programs and the execution of the program.

b. Squadron Master gunners are responsible for:

1. Monitoring their unit’s COFT program.
2. Keeping their commander informed of the status of their COFT programs.
3. Submitting quarterly COFT usage reports up to Regimental Master Gunners.
4. Presenting at the G-360 and pre AT Gunnery Briefing, the backup data for COFT utilization. Submit hours/crews and Operational Readiness Rate.

c. Regimental Master Gunners:

1. Will monitor all I/O training and re-certification.
2. Will ensure that units are using the appropriate exportable training packet for training I/Os.

5. **Instructor/Operators (I/Os):** The I/O is the key to a successful COFT training program. As a minimum, each squadron will maintain four qualified I/Os per Troop. The EN units will maintain two qualified I/Os per Troop.

a. Minimum Qualifications for I/Os (M1/M3/M2 COFT):

1. Serve in the position of Bradley/tank commander.
2. Served as a MOS qualified crewmember on the weapons system.

b. Unit leaders will consider the following qualifications when selecting I/Os:

1. Demonstrated knowledge of gunnery fundamentals, techniques, and fire control systems.
2. Experience as an M1A1/M3A2/M2A2/BFIST commander.
3. Retainability for 12 to 18 months.
4. Instructor experience.
5. Demonstrated potential to be an I/O.
6. Demonstrated leadership qualities.
7. Able to understand the technical publications necessary to operate the COFT.

c. Certification/Re-certification:

1. Conducted annually by the Squadron Master Gunner and monitored by RS3.
2. Certified IAW Fort Benning I/O exportable training packages.
3. Units will maintain a roster of certified personnel when re-certification is conducted and turned in to the site manager.
4. Resources. The COFTs will be assigned to squadron level commands equipped with M1/M3/M2 series vehicles.
5. Crew Records: Unit Master Gunners will maintain a copy of their company/troop/battery’s most recent crew session records and unit training summaries. This data will be consolidated and forwarded to the Squadron Master Gunner for further consolidation

6. **COFT SA/AGTS-SA**:

1. Certification is the goal of all TC/GNR combinations. Crews will progress through the training matrix (Advanced) using only the COFT recommended sequence of exercises. All exercises will be trained to standard under special conditions (i.e., wearing protective mask during NBC conditions, moving vehicle does not short halt, etc.).
2. Crews will achieve certification by computer recommended exercises.
3. Once a crew successfully completes the Gate-to-Live-Fire exercise, the COFT computer will designate the crew as certified. Once the COFT certifies crews, they will continue to follow computer recommended exercises in the Advanced Gunnery matrices.
4. Squadrons will maintain a copy of their most recent troop training summary. Companies will maintain the most recent copy of crew training session records.
5. All crews will progress through the training matrix using the COFT recommended sequence of exercises only. Crews will always fire the training exercises as stated, and to the exercise standard (NBC conditions, moving vehicle does not use shortfall halts. etc.).
6. Additional exercises may be fired in preparation for GT VI.
7. Crews will achieve certification by computer recommended exercises.
8. Once crews have been certified, they will continue to sustain the basic skills they have acquired. The troop commander, with assistance from the troop master gunner, is responsible for determining what exercise level is necessary to accomplish this mission. It is recommended that these crews train on group fire exercises for both the commander and the commander/gunner. However, if the commander or master gunner determines the proficiency of the crew has decreased since the last session, the crew will be directed to a lower matrix as required. It is recommended that crews shoot using the desert database prior to NTC deployment.
9. **COFT Reporting Information ( Squadron Battle Roster Information)**

Master gunners track the following of your units and keep on file for review:

1. Final crew COFT levels achieved prior to Table VI achieving the specified gate.
2. Number of crews who entered the Advanced Gunnery Skills Matrix*.*
3. Number of crews who completed Gate to Live Fire.
4. Number of crews who entered the advanced level UO (Urban Operations).
5. Number of crews who completed advanced level (Gate Test).
6. **Preliminary Gunnery Training**.

Preliminary gunnery training develops individual crewmember skills needed to operate the vehicle and turret weapon systems as a minimum; the following training will be conducted:

1. Each crewmember must view the “Fratricide Awareness and Avoidance and Depleted Uranium” tape less than 180 days prior to live-fire.
2. Crewmembers will conduct refresher training in injured crewmember evacuation and emergency fire drill procedures within 120 days of live-fire in conjunction with GST.
3. Each unit will conduct classes and hands-on training on all TADSS devices as needed. The unit will also track training and licensing on these devices and submit a quarterly update to the regimental Master Gunners for:

(1) TFT.

(2) MILES.

1. Through Site Video (TSV)/GEAV-S.
2. Recommend the conduct of GST training and testing at Troop level four months prior to gunnery live fire.
3. Conduct CPC (GT II) 4 months prior to firing live fire.
4. Conduct SECTION PRACTICE (GT VIII) prior to firing GT IX.
5. **ALL COFT VARIANTS**
6. In order to qualify for live fire gunnery, all VC/GNR combinations must meet the required crew training levels in the COFT.
7. In the event that a crew lacks the opportunity to reach this standard, the squadron commander can put them through selected Gate-to-Live-Fire exercises three times each for record and decide whether to let them negotiate live fire based on the results of those exercises.
8. The objective for all crews is COFT certification. Once qualified on GT VI the crew continues to progress in the COFT at least 4 hours every quarter IAW yearly unit rotation schedules.

**ANNEX C --- Bradley Gunnery**

REFERENCES: DA Pamphlet 350-38 Standards in Weapons Training

FORSCOM Regulation 350-2 Reserve Component Training October 99

FM 3-20.21 HBCT GUNNERY

1. **Purpose:** To provide planning guidance and standardize the conduct of BFV/CFV crew and platoon qualification tables (to include Armored Reconnaissance troop) and establish responsibilities for range operations and support. Infantry and Reconnaissance units will fire gunnery tables IAW current FM 3-20.21. The Squadron Commander will determine when crews achieved prescribed training requirements to conduct intermediate and advanced gunnery IAW current FM 3-20.21 Note: few ranges can accommodate the qualification standards prescribed in FM 3-20.21. Those ranges include Fort Campbell and Camp Shelby ranges.

2. **Standards**: To meet individual and crew qualification standards specified in DA Pam 350-38, Standards in Weapons Training (STRAC) for RC HBCTs CH 2/4. The following are **goals** to focus gunnery efforts in the Regiment.

1. Qualify 29 BFV crews per Combined Arms Battalion (14 BFV crews per Infantry Company plus HQ crew) on GT VI bi-annually IAW FORSCOM Reg. 350-2 for CH 2/4 units. Gunnery objective is first run qualification at GT VI. Squadron commanders will specify gunnery qualification objectives, for example 85% Q1 etc on GT VI.
2. Qualify 19 CFV crews per Reconnaissance squadron (6 CFV crews per Armored Reconnaissance Troop plus HQ CFV) on GT VI bi-annually IAW FORSCOM Reg. 350-2 for CH 2/4 units. Gunnery objective is first run qualification at GT VI. Squadron commanders will specify gunnery qualification objectives, for example 85% Q1 etc on GT VI.
3. To qualify all BFV platoons on Table XII IAW FORSCOM Reg. 350-2 for CH 2/4 units. Gunnery objective is first run qualification.
4. To qualify all CFV sections on Table X IAW FORSCOM Reg. 350-2 for CH 2/4 units. Gunnery objective is first run qualification.

3. **Sustainment Training**:

1. Gunner Skills Test (GST) – Trained at Troop level, tested within 4 months of live fire. Selected tasks trained monthly per unit commander’s assessment.
2. Instructor/Operator (I/O) Courses – Conducted as necessary. Each troop/battery must have 4-6 I/Os trained and certified by the troop/battery master gunner.
3. **Preliminary Gunnery Requirements**:

Preliminary gunnery training develops individual crewmember skills needed to operate the vehicle and turret weapon systems. Prior to conducting live-fire training, all crewmen combinations must meet the following minimum requirements:

1. All crewmen must take and pass all GST and GT I within 4 months prior to crew live-fire. As stated in the safety annex of this SOP, Crew Evacuation and Rollover Drills will also be tested during the GST.
2. Crewmembers will conduct refresher training in injured crewmember evacuation and emergency fire drill procedures in conjunction with their GST qualification 4 months prior to gunnery.

c. All Bradley crews must conduct GT II/CPC within 4 months of live fire gunnery.

1. The BC/GNR combinations must advance through the Initial Gunnery Skills Matrix in the COFT-SA, then complete the Basic Pre-Live Fire Matrix and pass the ‘GATE TO LIVE FIRE” exercise at least once. Under special circumstances, crews may be waivered of this requirement after the completion of 16 hours of ALL COFT VARIANTS. The approving authority of this waiver is the Regimental Commander.
2. **ALL COFT VARIANTS**:
3. Crews will train a minimum of 4 hours every quarter in the ALL COFT VARIANTS
4. The standard for live fire is successful progression to Reticle Aim 17 and completion of level 12 + 3 degraded exercises in the COFT-SA.
5. In the event a crew cannot pass the gate to live fire exercises the squadron master gunner will put the crew through 5 GT VI COFT exercises. Based on the crews' performance, the squadron commander will decide whether to allow the crew to begin live fire or not. The Regimental Commander may waive these requirements after a crew’s completion of 16 hours of ALL COFT VARIANTS.

4. **TOW Gunnery**: Training must be conducted within four months prior to TOW missile live-fire IAW FM 3-22.1. Master Gunners will verify that all Bradley crews are TOW certified within 120 days of firing exercises.

1. **Live-Fire Gunnery** **during IDT and AT**
2. To ensure standardization within the 278th ACR, the following standards apply to all Bradley/Tank gunnery tables:
3. Crewmembers will wear NOMEX only during LFX gunnery training.
4. The AARs will be given to crewmembers after each training event from GT II through GT XII, IAW FM 25-101. A certified VCE will give a well organized, professionally executed, command sponsored AAR in order to promote the learning process.
5. Standard full-scale targets with TVI thermals will be used for all live-fire training.
6. All tables will be fired IAW FM 3-20.21 HBCT and standards met prior to progressing to higher tables.
7. GT V may be modified by the unit commander to train identified weaknesses. But the crew must achieve standards IAW FM 3-22.1 to progress to GT VI (pg. 9-16). If modified, GT V must not mirror GT VI.
8. Crews must fire Gunnery Table V A&B before progressing to GT VI. Crews who fail to qualify GT V must get the squadron commander’s approval to advance to GT VI.
9. Table VI is the qualification table and the gate table for advanced gunnery. Table VI will be fired as established IAW FM 3-22.1, and the 278th ACR Training Standards.
10. Table X is the section qualification table and will be fired as a maneuver exercise under live-fire conditions.
11. **Firing Alternate Crews**: The platoon leader’s gunner will become the vehicle commander when the platoon leader dismounts. He will have a SGT in the back of the track who will become the gunner of the CFV/IFV, creating the alternate crew. The alternate crews will meet all the standards required of the primary crews up to GT VI.

7. **Qualification requirements for platoon level gunnery**:

1. Crews must qualify GST, GTI, and GT VI within 6 months prior to GT IX and/or CALFEX.
2. All squad members must qualify with their individual weapons within six months prior to GT IX.

c. All squads must complete a squad live-fire exercise within six months prior to GT X.

8. **Mandatory Training Events**.

The Regimental Bradley Gunnery Program requires that the following training events occur with the following frequency:

Mandatory Bradley Gunnery Events Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **EVENT** | **FREQUENCY** | **GATE REQUIREMENT** | **REMARKS** |
| **TOW VERIFICATION** |  | COFT TOW Certified | Vehicle pass TOW  verification |
| **TADSS CERTIFICATION**  **/ TRAINING** | Continuous | None | BCs and gunners will be trained on GEAV-S (if available) prior to gunnery density |
| **PRELIMINARY GUNNERY** | Continuous | None | Crew will attend all the mandatory classes |
| **COFT** | Continuous | Crew will have passed Gate-to-Live-Fire exercise. | Goal Minimum of 4 hours per crew per quarter |
| **GST and GT 1** | Annually/w/in 4 months gunnery | None | Meet standards of FM 3-20.21 |
| **GT II**  **CPC** | Annually/w/in 4 months gunnery | Crew is TADSS trained. Gate to live fire. | Meet standards of FM 3-20.21 |
| **GT III**  **Basic Machine Gun** | Yearly | Complete GT II  requirement. | Machine Gun Pure. Live fire |
| **GT IV**  **Basic Main Gun** | Yearly | Can be fired in conjunction with GT III | Meet standards of FM 3-20.21. |
| **GT V**  **Crew Practice** | Yearly | Live fire with Main gun and Machine gun | Meet standards of FM 3-20.21. |
| **GT VI**  **Crew Qualification** | Bi-Annually | Pass GST and GT II w/in 4 months. Qualify on GT V. | Meet standards of FM 3-20.21. |
| **GT VII**  **Section Proficiency** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT VIII**  **Section Practice** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT IX**  **Section Qualification** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT X** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months. | Meet standards of FM 3-20.21. |
| **GT XI(1)(2)** | Post MOB | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT XII(3)** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **CO TM CALFEX**  **BN TF FCX** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |

NOTES:

1. Squadron Commander approval based upon failure to meet the “live fire prerequisites” in the COFT.
2. Use TADSS to conduct GTXI.
3. GT XII contains tactical exercises

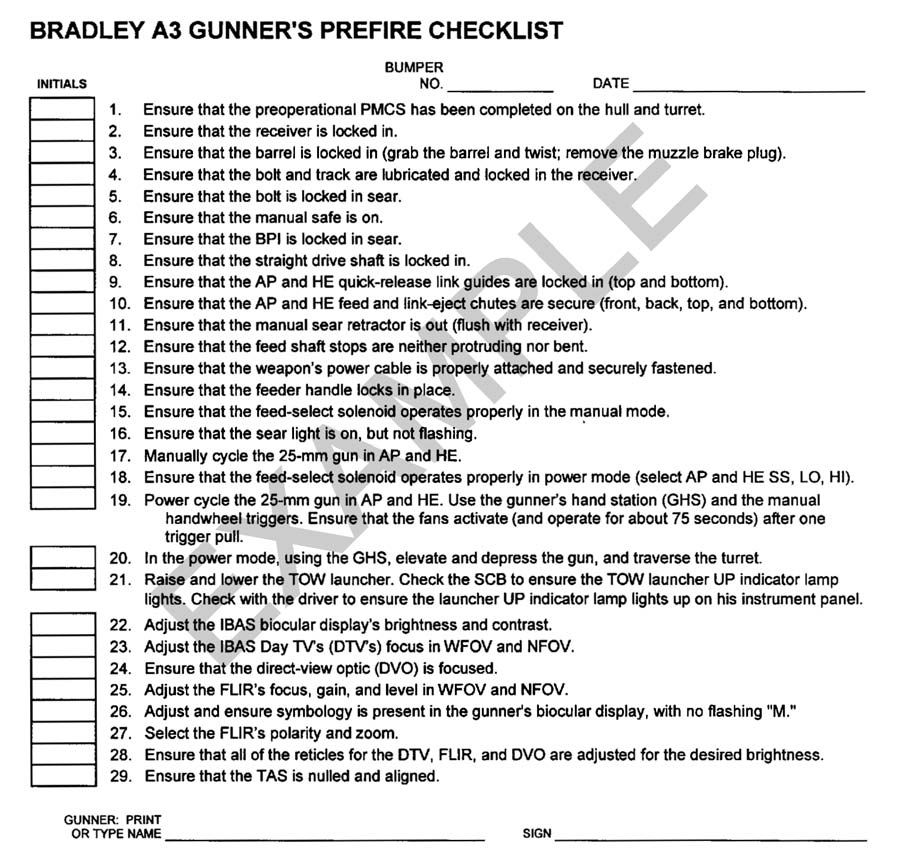
**Appendix 1 Prep to Fire Check List BFV**

BUMPER#:\_\_\_\_\_\_\_\_\_\_\_\_ UNIT CALL SIGN:\_\_\_\_ \_\_\_

DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| TASK | BC | GNR |
| 1. BEFORE OPERATIONS PMCS COMPLETE HULL/TURRET |  |  |
| 1. ENSURE BARREL IS LOCKED IN & MUZZLE PLUG REMOVED |  |  |
| 1. ENSURE RECEIVER IS LOCKED IN & BREACH IS LUBRICATED |  |  |
| 1. ENSURE BOLT & TRACK ARE LUBRICATED & TRACK LATCH IS LOCKED |  |  |
| 1. ENSURE BOLT IS LOCKED IN SEAR |  |  |
| 1. ENSURE MANUAL SAFE IS ON |  |  |
| 1. TIME & INSTALL FEEDER |  |  |
| 1. ENSURE BPI IS LOCKED IN SEAR |  |  |
| 1. ENSURE STRAIGHT DRIVE SHAFT IS LOCKED IN |  |  |
| 1. ENSURE POWER CABLE IS ATTACHED & SECURELY FASTENED |  |  |
| 1. ENSURE FEEDER HANDLE LOCKED IN PLACE WITHOUT RESISTANCE |  |  |
| 1. ENSURE AP/HE FEED & LINK EJECT CHUTES ARE SECURE |  |  |
| 1. ENSURE SEAR RETRACTOR IS IN THE OUT POSITION(FLUSH WITH RECIVER) |  |  |
| 1. ENSURE FEED SHAFT STOPS ARE NOT PROTRUDING OR BENT |  |  |
| 1. ENSURE FEED SELECT SOLENOID OPERATES MANUALLY |  |  |
| 1. MANUALLY CYCLE THE M242, 25MM GUN IN AP/HE |  |  |
| 1. ENSURE FEED SELECT SOLENOID OPERATES PROPERLY IN POWER MODE(SELECT AP/HE/SS, LO, HI) |  |  |
| 1. POWER CYCLE M242, 25MM GUN IN AP/ HE, USE GUNNER’S, BC’S & MANUAL TRIGGERS. ENSURE GUN FAN ACTIVATES WHEN TRIGGERS ARE SQUEEZED |  |  |
| 1. MANUALLY CHECK ELEVATION/DEPRESSION & TRAVERSE OF TURRET |  |  |
| 1. ELEVATE/DEPRESS GUN, TRAVERSE TURRET 360 DEG. NORMAL & FAST MODE |  |  |
| 1. RAISE & LOWER THE TOW LAUNCHER ENSURE ELEVATES & DEPRESSES |  |  |
| 1. ENSURE PROPER OPERATION OF ISU: |  |  |
| * CLEAN OPTICS (INSIDE & OUTSIDE) |  |  |
| * ENSURE PROPER SIGHT RETICLE APPEARS WHEN SELECTING AMMO (AP/HE/7.62) |  |  |
| * ENSURE SUPERELEVATION CHANGES AS RANGE SELECT KNOB IS ROTATED |  |  |
| * ENSURE THE AMMO & RANGE READINGS ARE CORRECT |  |  |
| * ENSURE THERMAL SIGHT CAN BE FOCUSED PROPERLY IN HIGH MAG |  |  |
| * ENSURE DEFOGGER IS OPERATING PROPERLY |  |  |
| 23. ENSURE DRIFT CAN BE NULLED OUT OF THE SYSTEM |  |  |
| 24. BORESIGHT M242, M240C, TOW, AUX SIGHT |  |  |
| 25. ENSURE NBC SYSTEM OPERATES PROPERLY |  |  |
| 26. ENSURE 25MM READY BOXES ARE UPLOADED PROPERLY WITH NO MORE THAN 2 ROUNDS ABOVE THE FORWARDER |  |  |
| 27. ENSURE COAX IS CLEAR & BARREL IS LOCKED IN THE RECEIVER |  |  |
| 28. ENSURE AZIMUTH & ELEVATION KNOBS TURN FREELY ON M240C MOUNT |  |  |
| 29. INSTALL COAX & ENSURE IT IS LOCKED WITH THE FRONT & REAR PINS |  |  |
| 30. ENSURE COAX FEED CHUTE IS FASTENED AT BOTH ENDS. |  |  |
| 31. CHARGE COAX. CHECK THE CHAMBER, AND MANUALLY RIDE BOLT FORWARD |  |  |
| 32. POWER CYCLE THE COAX FROM BC, GNR, & MANUAL HANDWHEEL TRIGGERS |  |  |
| 33. CHARGE THE COAX & PLACE IT ON SAFE |  |  |
| 34. ENSURE COAX READY BOX IS PROPERLY UPLOADED |  |  |
| 35. COMMUNICATIONS: |  |  |
| * ENSURE RED, YELLOW & GREEN FLAGS AND CONE LIGHTS ARE ON BOARD |  |  |
| * CONDUCT RADIO CHECKS:  1. ADMIN NET 2. JUMP NET 3. FIRE NET |  |  |

BC SIGNATURE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_GUNNER SIGNATURE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



**BRADLEY RANGE PACKING LIST SAMPLE**

|  |  |
| --- | --- |
| FLAG SET | 1 PER FIRING VEHICLE |
| CONE LIGHTS | 3 PER FIRING VEHICLE |
| CHEMLIGHTS | RED/YELLOW/GREEN |
| JUMP CABLES | 1 PER FIRING VEHICLE AND SPARES |
| BII | 1 COMPLETE SET |
| CVC HELMENTS/W CORDS | 4 EACH |
| TM’s for VEHICLES/WPN SYSTEMS | HULL, TURRET, WPNS FIRING |
| CREW GUNNERY FOLDERS | GST, CPC, GT III-V SCORESHEETS ON EACH CREW. |
| Gunnery FM. And Firing Tables |  |
| BATTERIES (D, AA, NVG, RADIO, DVR NIGHT VIEWER) |  |
| RADIOS, HAND HELD WITH CHARGERS |  |
| CARPENTERS TOOL KIT |  |
| CLS BAG/COMPLETE |  |
| SMOKE, RED |  |
| 1:50,000 MAP OF RANGE OR TNG AREA. |  |
| GUNNER’S QUADRANT |  |
| LENSATIC COMPASS |  |
| BINO’S | 2 EACH |
| SCOPE , SPOTTER | USED TO DETERMINE LOCATION OF ROUND HITS ON ZERO TARGET. |
| DRIP PANS | 2 PER FIRING VEHICLE |
| SPILL KIT. |  |
| PCC/PCI CHECKLISTS |  |
| RISK ASSESSMENT FORMAT. |  |
| STAFF JOURNAL LOGS-DA FORM 1594 | 2 PER EVERY 24 HR PERIOD |
| DA 2404’S |  |
| SURFACE AREA DANGER DIAGRAM (IF NEEDED) |  |
| WEAPON BLOCKS | BLOCKS INSERTED INTO CREW SERVED WEAPONS ON READY LINE. |
| ENGINEER TAPE |  |
| SIGNS | READY LINE, AAR, FIRING LANES |
| STAKES | READY LINE, AAR, FIRING LANES |
| RADIO MOUNTS W/CABLES | 2 |
| VAAS | 2 |
| RADIOS-RT-1523 | 3 |
| OE-254 ANTENNAS--COMPLETE | 2 |
| POWER SUPPLIES W/CABLES | 2 |
| SPEAKERS LS-671 W/CABLES | 3 |
|  |  |

**Appendix 4 – Dismounted Gunnery**

REFERENCES: DA Pamphlet 350-38 Standards in Weapons Training

TC 7-9 Infantry Live Fire Training

FM 3-20.21 HBCT GUNNERY

FM 3-22.9, M16 Rifle Marksmanship

FM 3-22.60 Squad Automatic Weapons (SAW), M249

FM 23-23, Anti-Personnel Mine M18A1 and M18, Claymore

FM 23-25, Light Antiarmor Weapons

FM 3-23.30, Grenade and Pyrotechnic Signals

FM 3-22.31, 40mm Grenade Launcher, M203

FM 3-22.68, Crew Served, 7.62mm and 5.56mm

STP 7-11B1-SM-TG

1. **Requirements.**
2. A combat-ready CFV/IFV crew requires much more than just a GT VI/X qualified commander/gunner combination. The dismounts in the back of the Bradley must work in tandem with vehicle weapon systems to maximize the delivery of fires in the performance of the overall platoon’s wartime missions.
3. To accomplish this, a three-phase conduct of training will be implemented. The first phase will be preliminary gunnery. The second phase will be Buddy Team and Fire Team device gunnery/live fire. The third phase will be the Rifle Squad Gunnery Tables III-VI. The ultimate goal of this program is to have combat ready teams that can perform their wartime mission in support of the platoon and Troop.
4. This program features a doctrinal training methodology. First, become qualified with assigned weapons. Second, master buddy team and fire teams execute fire and maneuver utilizing MILES, blanks, and live ammunition. Third, move and execute Squad level maneuver in blank and live fire scenarios culminating in platoon exercises.
5. **PHASE 1: ANNUAL WEAPONS QUALIFICATION (See 278th ACR Small Arms Gunnery SOP)**
6. The first step in the gunnery program is to become qualified with assigned weapons. To do this, units must first complete annual weapons qualification. Being qualified with assigned weapons is also a prerequisite for performing any live fire training.
7. Hand Grenade Training: M228 training Grenade: 10 per soldier/ M67 Frag. Grenade: 1 per soldier.
8. AT-4 Training: 9MM Tracer (Day): 20(12 Pract./8 Record) 9MM Tracer (Night): 6
9. Javelin Training: Training conducted utilizing the Javelin Basic Skills Trainer and the Field Tactical Trainer.
10. Claymore Mine: Training conducted utilizing the M18A1 inert training mine w/accessories.
11. **PHASE 2: PRELIMINARY GUNNERY RIFLE SQUAD TABLES I-II**

a. The first step in this phase is to master individual and buddy team fire and maneuver (RT I) utilizing the crawl, walk, run training methodology. First, the crawl phase: This incorporates a walk-through of IMT and drills that are to be performed. Second, the walk phase: where MILES and blanks are incorporated into the training. Third, the run phase: where live bullets are incorporated into the training. AARs will be conducted during and after all training.

1. The second step in this phase is to master fire team fire and maneuver (RT II). Again the crawl, walk, run methodology is utilized. First, the crawl phase. The team leader talks through with his team how they will accomplish the drills. Second, the walk phase. MILES and blanks are incorporated into this phase of training. Third, the run phase--a fire team live fire exercise. Fire team training should focus on positions, volume of fire, fire distribution, application of fire, fire control and fire discipline. AARs will be conducted during and after all training.
2. The most efficient way to accomplish this training is to utilize the STX concept. Utilizing STX lanes will enhance the training value.
3. **PHASE 3: BASIC RIFLE SQUAD GUNNERY RIFLE SQUAD TABLES III-VI**
4. These Tables will be trained in the same manner as the Preliminary Tables—utilizing the crawl, walk, and run method. Each Table builds on the previous Tables culminating in the Rifle Table VI Squad Qualification, which is the Gate for Combat Table XII.
5. Rifle Table III, Squad Battle Drill Exercises, trains and evaluates a rifle squad’s ability to exercise Battle Drills in a field setting. Battle Drills identified as platoon battle drills can and should be executed as a platoon in Combat Table X and XI or as a squad as part of a larger element. Tasks evaluated include:
6. Battle Drill 1. Platoon Attack (Dismounted)
7. Battle Drill 1A. Platoon Attack (Mounted)
8. Battle Drill 2. React to Contact (Platoon or Squad) (Dismounted)
9. Battle Drill 2A. React to Contact (Section or Platoon) (Mounted)
10. Battle Drill 3. Break Contact (Platoon or Squad) (Dismounted)
11. Battle Drill 3A. Break Contact (Section or Platoon) (Mounted)
12. Battle Drill 4. React to Ambush (Platoon or Squad) (Dismounted)
13. Battle Drill 4A. React to Ambush (Platoon) (Mounted)
14. Battle Drill 5. Enter Building/Clear Room/Building (Platoon)
15. Battle Drill 6. Enter/Clear a Trench (Platoon)
16. Battle Drill 7. Knock Out Bunkers (Platoon)
17. Battle Drill 8. Conduct Initial Breach of a Mined Wire Obstacle (Platoon)
18. Rifle Table IV, Squad STX, trains and evaluates a squad’s ability to execute collective tasks in a lane-type environment. This is the squad leader’s first opportunity to maneuver both his fire team elements as an evaluated event. Tasks evaluated include, but are not limited to, the ones listed in STP 7-11B1-SM-TG. As in RT III, these collective tasks should be organized as part of a larger element.
19. Rifle Table V, Squad Practice, trains and evaluates a squad’s ability to execute collective tasks in a live-fire environment. This is the squad leader’s first opportunity to maneuver both his fire team elements as an evaluated event. Tasks evaluated include, but are not limited to, the ones listed in STP 7-11B1-SM-TG. As in RT III and IV, these collective tasks should be organized as part of a larger element. This is the building block to Rifle Table VI, Squad Qualification, and should focus on collective tasks identified as firing tasks for subsequent tables.
20. Rifle Table VI, Squad Qualification, is just that—squad qualification—and will encompass an entire operation from troop-leading procedures through consolidation and reorganization. Squads will be evaluated on their ability to move tactically, control organic fires, and report/communicate as a squad and as part of a BFV platoon. Rifle Table VI scenarios will be interactive to force leaders to make clear, quick decisions and multi-echeloned to train platoon leaders to be able to fight both the dismounted and mounted elements.
21. This SOP governs the process of training dismounted squads. Once the squads are proficient, integration of the Bradley Fighting Vehicle and ultimately a GT X and XII can be executed to standard.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Weapons Qualification | | Annually | All individual weapons | | Qualification prior to |
|  |  |  | All crew served weapons | | live fire training |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Buddy Team Training/ | | Annually | All dismounts |  | First step towards |
| Buddy Team Live Fire | |  |  |  | Squad Live Fire |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Fire Team Training/ | | Annually | Dismount fire teams |  | Second step towards |
| Fire Team Live Fire | |  |  |  | Squad Live Fire |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Squad Training/ |  | Annually prior to | Dismount Squads |  | Final step in training |
| Squad Live Fire |  | GT XII |  |  | process |
|  |  |  |  |  |  |

**ANNEX D Tank Gunnery**

REFERENCES: DA Pamphlet 350-38 Standards in Weapons Training

FORSCOM Regulation 350-2 Reserve Component Training October 99

FM 3-20.21 HBCT GUNNERY

1. **Purpose:** To provide planning guidance and standardize the conduct of tank crew and platoon qualification tables (to include Cavalry troop) and establish responsibilities for range operations and support. Tank and Cavalry units will fire gunnery tables IAW current FM 3-20.21. The Squadron Commander will determine when crews achieved prescribed training requirements to conduct intermediate and advanced gunnery IAW current FM 3-20.21 Note: few ranges can accommodate the qualification standards prescribed in FM 3-20.21. Those ranges include Fort Campbell and Camp Shelby ranges.

2. **Standards**: To meet individual and crew qualification standards specified in DA Pam 350-38, Standards in Weapons Training (STRAC) for HBCTs, CH 2/4.

1. Qualify 28 tank crews per squadron (14 tanks crews per Tank Company) on GT VI annually IAW FORSCOM Reg. 350-2 for CH 2/4 units. Gunnery objective is first run qualification at GT VI. Squadron commanders will specify gunnery qualification objectives, for example 85% Q1 etc on GT VI.
2. To qualify all tank platoons on Table XII IAW FORSCOM Reg. 350-2 for CH 2/4 units. Gunnery objective is first run qualification.

3. **Live-Fire Gunnery Training (during IDT and AT**): To ensure standardization with the 278th ACR, the following standards will apply to our tank gunnery tables:

a. Units will fire Table IV or Table V as designed IAW FM 3-20.21.

b. Units may fire Table V as designed, not as a sub-caliber GT VI.

1. Units may fire Table V Mod as designed IAW FM 3-20.21 (IAW the commander’s discretion, if sufficient 120mm is not available, the unit may fire sub caliber or modify/combine the Gunnery Tables to meet training objectives).
2. Table V may be modified by the unit commander to train identified weaknesses. But the crew must achieve standards IAW FM 3-20.21 to progress to GT VI.
3. Table VI is the qualification table and the gate table for advanced gunnery. Table VI will be fired as established IAW FM 3-20.21, and the 278th ACR Training Standards
4. Table XII is the platoon battle run and will be fired as a maneuver exercise under live-fire conditions.
5. **Preliminary Gunnery Requirements**:

Preliminary gunnery training develops individual crewmember skills needed to operate the vehicle and turret weapon systems. Prior to conducting live-fire training, all crewmen combinations must meet the following minimum requirements:

1. All crewmen must take and pass all GST and GT I within 4 months prior to crew live-fire. As stated in the safety annex of this SOP, Crew Evacuation and Rollover Drills will also be tested during the GST.
2. Crewmembers will conduct refresher training in injured crewmember evacuation and emergency fire drill procedures in conjunction with their GST qualification 4 months prior to gunnery.

c. All tank crews must conduct GT II/CPC within 4 months of live fire gunnery.

1. The TC/GNR combinations must advance through the Initial Gunnery Skills Matrix in the C-AGTS, then complete the Basic Pre-Live Fire Matrix and pass the ‘GATE TO LIVE FIRE” exercise at least once. Under special circumstances, crews may be waivered of this requirement after the completion of 16 hours of ALL COFT VARIANTS. The approving authority of this waiver is the Regimental Commander.
2. All crewmen must view the training tape, “Fratricide Awareness and Avoidance and Depleted Uranium” within 180 days of live fire training.
3. **ALL COFT VARIANTS**:
4. Crews will train a minimum of 4 hours every quarter in the ALL COFT VARIANTS
5. The standard for live fire is successful completion of one of the gate to live fire exercises in C-AGTS.
6. In the event a crew cannot pass the gate to live fire exercises the squadron master gunner will put the crew through 5 GT VI COFT exercises. Based on the crews' performance, the squadron commander will decide whether to allow the crew to begin live fire or not. The Regimental Commander may waive these requirements after a crew’s completion of 16 hours of ALL COFT VARIANTS.

6. **Sustainment Training**:

1. Gunner Skills Test (GST) – Trained at Troop level, tested within 4 months of gunnery.
2. Instructor/Operator (I/O) Courses – Conducted as necessary. Each Troop must have 4-6 I/Os trained and certified by the Troop master gunner.
3. Crewmen must be proficient in injured crewmen evacuation, emergency fire drill and rollover drills prior to live-fire. Units conduct this training in conjunction with GST maximum of 6 months prior to gunnery.

7. **Conduct of the range**: To ensure standardization within the 278th ACR, the following apply to all tank gunnery tables:

1. Crewmembers will wear NOMEX during only LFX gunnery training. Crewmembers will wear NOMEX and during hot weather wear Micro-climate vests when conducting live-fire.
2. The AARs will be given to crewmembers after each training event from TT IV through TT XII, IAW FM 25-101. A certified TCE will give a well organized, professionally executed, command sponsored AAR in order to promote the learning process.
3. Standard full-scale targets with TVI thermals found in **FM 17-12-7** will be used for all live-fire training.
4. All tables will be fired IAW FM 3-20.21 and standards met prior to progressing to higher tables.
5. GT V may be modified by the unit commander to train identified weaknesses. But the crew must achieve standards IAW FM 3-20.21 to progress to GT VI. If a modified GT V is used, it must not mirror Table VI.
6. Crews will fire GT V A&B before progressing to GT VI.
7. Table VI is the qualification table and the gate table for advanced gunnery. Table VI will be fired as established IAW FM 3-20.21, and the 278th ACR Training Standards.
8. Table XII is the platoon qualification table and will be fired as a maneuver exercise under live-fire conditions.
9. Wingmen: Units are encouraged to use a wingman IAW FM 3-20.21 when conducting TT IV, V, and VI. Wingman training is critical to the success of the tank section and platoon.
10. **MANDATORY TRAINING EVENTS.**

**Mandatory Tank Gunnery Events Matrix**

|  |  |  |  |
| --- | --- | --- | --- |
| **EVENT** | **FREQUENCY** | **GATE REQUIREMENT** | **REMARKS** |
| **TADSS CERTIFICATION**  **/ TRAINING** | Continuous | None | BCs and gunners will be trained on GEAV-S (if available) prior to gunnery density |
| **PRELIMINARY GUNNERY** | Continuous | None | Crew will attend all the mandatory classes |
| **COFT** | Continuous | Crew will have passed Gate-to-Live-Fire exercise. | Goal Minimum of 4 hours per crew per quarter |
| **GST and GT 1** | Annually/w/in 4 months gunnery | None | Meet standards of FM 3-20.21 |
| **GT II**  **CPC** | Annually/w/in 4 months gunnery | Crew is TADSS trained. | Meet standards of FM 3-20.21. Gate for full caliber live fire. |
| **GT III**  **Basic Machine Gun** | Yearly | Complete GT II  requirement. | Machine Gun Pure. Live fire |
| **GT IV**  **Basic Main Gun** | Yearly | Can be fired in conjunction with GT III | Meet standards of FM 3-20.21. |
| **GT V**  **Crew Practice** | Yearly | Live fire with Main gun and Machine gun | Meet standards of FM 3-20.21. |
| **GT VI**  **Crew Qualification** | Bi-Annually | Pass GST and GT II w/in 4 months. Qualify on GT V. | Meet standards of FM 3-20.21. |
| **GT VII**  **Section Proficiency** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT VIII**  **Section Practice** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT IX**  **Section Qualification** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT X** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months. | Meet standards of FM 3-20.21. |
| **GT XI(1)(2)** | Post MOB | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **GT XII(3)** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |
| **CO TM CALFEX/**  **BN TF FCX** | When RCO directs | GST w/in 4 months. GT VI qualified w/in 6 months | Meet standards of FM 3-20.21. |

NOTES:

1. Squadron Commander approval based upon failure to meet the “live fire prerequisites” in the COFT.
2. Use TADSS to conduct GTXI.
3. GT XII contains tactical exercises

**Appendix 1** **SCREENING TEST**

A. The Screening test consists of firing first sabot, then HEAT ammunition at a screening test target at 1500 Meters. The target must be within + or – 20 Meters of the required range. Below is a Flow chart for Screening Test Procedures. If the tank misses the target then follow all procedures listed in FM 3-20.21 Ch 5 pgs 5-4 thru 5-8.

Appendix 2 **BORESIGHTING**

A. Boresighting is the key to tank main gun accuracy. For survival and success on the battlefield, tank crews must train as they will fight. Boresighting, if not the most critical skill for tank crews, is certainly one of the most important.

B. For proper boresighting, follow procedures listed in FM 3-20.21 Ch 2 or appropriate TM 9-2350-264-10-1-2

**Appendix 3—Abrams Prep to Fire Checks**

|  |  |  |  |
| --- | --- | --- | --- |
| **Station** | **Check** | **Go** | **NGo** |
| **Driver** | Power up Driver’s Station IAW TM -10 |  |  |
| Check CBRN Mask and microphone |  |  |
| **Loader** | Power up Loader’s Station IAW TM -10 |  |  |
| Check CBRN Mask and microphone |  |  |
| Ensure communication system is powered up:   * Radio frequencies set * Intercom operational * Perform jump radio check |  |  |
| Perform function check on Loader’s M240   * Clear weapon * Check weapon * Check mount * Secure ready ammunition |  |  |
| Conduct breechblock function check |  |  |
| Check ready ammunition door operation |  |  |
| Check ammunition storage |  |  |
| Check coax ammunition ready box and feed chute |  |  |
| **TC** | Power up TC station IAW TM -10 |  |  |
|  | Check CBRN mask and microphone |  |  |
|  | Establish digital communications |  |  |
|  | Prepare CWS for operation:   * Mount weapon and check equilibrator * Set headspace and timing * Conduct function check * Boresight CWS * Secure ready ammunition |  |  |
| **Gunner** | Power up Gunner’s Station IAW TM -10   * Main accumulator pressure check * Exercise turret hydraulics * Perform TIS checkout * Null drift * Perform computer self-test/FCS test * Conduct firing circuit check * Conduct computer data check |  |  |
|  | Boresight the tank |  |  |
|  | Conduct function check on coaxial M240 machine gun   * Clear coaxial M240 * Conduct function check using electrical triggers * Check spent ammunition can * Check feed chute |  |  |
|  | Check CBRN mask and microphone |  |  |

**Appendix 4 TANK RANGE Packing List**

|  |  |
| --- | --- |
| FLAG SET | 1 PER FIRING VEHICLE |
| CONE LIGHTS | 3 PER FIRING VEHICLE |
| CHEMLIGHTS | RED/YELLOW/GREEN |
| JUMP CABLES | 1 PER FIRING VEHICLE AND SPARES |
| BII | 1 COMPLETE SET |
| CVC HELMENTS/W CORDS | 4 EACH |
| TM’s for VEHICLES/WPN SYSTEMS | HULL, TURRET, WPNS FIRING |
| CREW GUNNERY FOLDERS | GST, CPC, GT III-V SCORESHEETS ON EACH CREW. |
| Gunnery FM. And Firing Tables |  |
| BATTERIES D, AA, NVG |  |
| RADIOS, HAND HELD WITH CHARGERS |  |
| CARPENTERS TOOL KIT |  |
| CLS BAG/COMPLETE |  |
| SMOKE, RED |  |
| 1:50,000 MAP OF RANGE OR TNG AREA. |  |
| GUNNER’S QUADRANT |  |
| LENSATIC COMPASS |  |
| BINO’S | 2 EACH |
| SCOPE , SPOTTER | USED TO DETERMINE LOCATION OF ROUND HITS ON SCREENING TARGET. |
| DRIP PANS | 2 PER FIRING VEHICLE |
| SPILL KIT. |  |
| PCC/PCI CHECKLISTS |  |
| RISK ASSESSMENT FORMAT. |  |
| STAFF JOURNAL LOGS-DA FORM 1594 | 2 PER 24 HR PERIOD |
| DA 2404’S |  |
| SURFACE AREA DANGER DIAGRAM (IF NEEDED) |  |
| WEAPON BLOCKS | BLOCKS INSERTED INTO CREW SERVED WEAPONS ON READY LINE. |
| ENGINEER TAPE |  |
| SIGNS | READY LINE, AAR, FIRING LANES |
| STAKES | READY LINE, AAR, FIRING LANES |
| RADIO MOUNTS W/CABLES | 2 |
| VAAS | 2 |
| RADIOS-RT-1523 | 3 |
| OE-254 ANTENNAS--COMPLETE | 2 |
| POWER SUPPLIES W/CABLES | 2 |
| SPEAKERS LS-671 W/CABLES | 3 |
| MBD’s | 2 EACH 120MM, 2 EACH .50 cal) |
|  |  |

**ANNEX E --- Vehicle Crew Evaluators**

REFERENCES: DA Pam 350-38, Standards in Weapons Training (STRAC)

FM 3-20.21, HBCT GUNNERY MANUAL

1. **Purpose**: To establish procedures for the training of Bradley, Tank, and Scout crew evaluators, and to reinforce TCE, BCE, and VCE support relationships. The VCEs will be used for the evaluation of all Tank and Bradley, and Scout crews on the qualification tables.

2. **Objectives**:

1. Establish and maintain a Regimental standard of qualification for our VCEs. Where practical, units provide own VCEs during IDT. All Crew Evaluators from external sources must meet the following criteria from 3-20.21 CH 15

b. Squadron master gunners ensure VCEs recertify annually. The goal is to have 8-10 VCEs per company/troop level unit in order to self support on preliminary gunnery tables

c. Utilize VCEs during COFT OPERATIONS.

3. **Requirements**:

a. The Regimental Master Gunners will:

1. Monitor all scheduled VCE training courses.
2. Review Regimental VCE certified personnel annually;
3. The Squadrons will:
4. Plan and schedule VCE training and notify Regimental Master Gunners of the planned training NLT six weeks prior to the course class date.
5. Ensure that NCOs notified for attendance to the VCE courses have read appropriate chapters in their gunnery manuals prior to the first day of the course.
6. Plan and schedule VCE re-certification.
7. Provide information on their own VCE certified personnel semiannually.
8. Maintain records of training and personnel trained.
9. Will certify each VCE to include After Action Review procedures.

**ANNEX F --- Engineer Gunnery**

REFERENCES: DA Pamphlet 350-38 Standards in Weapons Training

FM 5-250, Explosives and Demolition

TC 5-150 Engineer Qualification Tables

1. **PURPOSE**: To provide guidance for the conduct of Engineer Qualification Tables (EQT). This guidance covers the requirements for individuals, crew/teams and leaders and applies to all engineer units that are assigned, attached or OPCON to the 278th ACR. The EQT are designed to train engineer soldiers and units sequentially. They begin at the individual/crew level by qualifying all unit members on their weapons. They then qualify the unit leaders on the demolition and mine tasks they will be required to evaluate. The unit leaders then train and evaluate their soldiers on demolitions and mines.

2.  **EXECUTION**:

1. Tables 1 through 4 are designed to train all members of an engineer platoon on individual/crew weapons, demolitions, and mines. The tables should be executed using standard weapons or demolition ranges according to the appropriate field manual (FM) or range standing operating procedure (SOP).
2. Tables 5 through 12 are designed to train all members of an engineer squad and platoon on the drills and skills required to fight and win as engineers.

3. **RESPONSIBILITIES**:

1. The intent is to qualify all engineers in accordance with (IAW) TC 5-150.
2. Qualification is a chain of command responsibility. Leaders at all levels must ensure qualification procedures are met to standard during all phases of each training exercise.
3. The unit must maintain a current memorandum of all qualified personnel. A copy of the memorandum must be submitted through the S3 to the commander whenever there is a change to unit qualification status
4. The S3 will maintain a copy of all memorandums for those qualified personnel.

4. **AFTER-ACTION REVIEW**: An AAR will be conducted for all tables. At a minimum, it should establish what happened, determine what was right or wrong with what happened, and determine how the task should be done differently the next time. Unsatisfactory performance by any individual or unit should be noted.

**ANNEX G --- Safety**

REFERENCES: AR 350-40, Range Operations, Procedures, and Policies, 1 July 1993.

AR 385-10, Army Safety Program

AR 385-64, Ammunition and Explosive Safety Standard

DA Pamphlet 350-38 Standards in Weapons Training (STRAC)

1. **General**
2. This chapter provides safety procedures, restrictions, and requirements for conducting training at all ranges. Commanders of units using range and training facilities are responsible for complying with applicable safety requirements specified in AR 385‑62 and AR 385‑63. Officers and noncommissioned officers will be familiar with AR 385‑62, AR 385‑63, applicable post regulations and policies, and this GUNSOP before using any range training facilities.
3. All ranges are considered dangerous 24 hours a day. Personnel or units will not enter training areas (TAs) or ranges without oGTaining clearance from range control. Units are encouraged to conduct a joint inspection with range control personnel to detect safety issues (UXO, etc.) and preclude unexpected clearance requirements (e.g., the police of another unit's trash). Units that leave training areas in an untidy condition will be required to redeploy to clean those areas.

2. **Planning**

1. Range safety begins with designing safe range Scenarios that meet the commander's training objectives. The two primary tools for designing safe ranges are the "shot sheet" and the Surface Danger Area Diagram (SDAD). The SDAD must be posted on a map in the tower of all live-fire ranges.
2. The "shot sheet" provides a written picture of each engagement that will be fired. It describes the weapon system, targets, timing, location of weapon/target, and ammunition. It provides the range OIC/Safety and Range Control safety officer the information necessary to confirm that each planned engagement can be safely fired and is within the capabilities of weapons, ammunition, and targetry.
3. The SDAD is an overlay that demonstrates that each engagement can be fired safely. The SDAD includes a safety fan for each weapon system, by ammunition type, from each firing point, line, or box, and includes every target. The SDAD provides the range OIC/Safety Officer and Range Control Safety the information necessary to confirm that each planned engagement can be fired safely.
4. The Regimental chain of command will approve the shot sheet and SDAD prior to sending the packet to range control for approval. The Regimental RS3 will staff all qualification Scenarios (GT VI, GT X, and TT XII). Submissions must be made by G‑45 to ensure they are approved in time for scheduled execution. The alternative is to use an-off-the shelf Scenario, which is current and already approved by post Range Control. Advice on approved Scenarios can be oGTained from the Regimental master gunners, or at range control. If new Scenarios are written, the Scenario shot sheets and SDAD must be reviewed and briefed at the G‑360 brief to the RCO and RS3.
5. Squadron commanders will approve shot sheets and SDAD for all ranges.
6. Squadron commanders will review shot sheets and SDAD for all collective ranges beyond crew qualification i.e., section, platoon, and FCXs.
7. OICs, RSOs, and safety officers will review and understand the SDAD before the range is placed in a "hot status."
8. The CG is the final approving authority for M1A1 and CFV /IFV/BFV Scenarios, shot sheets, and SDAD, for qualification tables (T/TGT VI, GT X TT XII). The RCO and RS3 is the executive agent for conduct of gunnery, virtual and live. Once briefed and approved at the G‑360/ pre AT Brief, the RCO and RS3 must approve all changes (changes will be submitted to the Regimental Master Gunner).
9. The RS3 provides direct oversight for the 278th ACR in all matters regarding range safety. Squadron/Troop commanders have command oversight on the conduct of all ranges for safety. Particular areas of emphasis are range operations and the proofing of all Scenarios involving more than one firing vehicle and/or dismounted maneuver. Squadrons are responsible for scheduling a time when the RS3 and the firing-unit chain of command can conduct a range walk to safety the Scenario. Furthermore, because the RS3 and Regimental Master Gunner see so many different Scenarios, he is available to lend his experience to assist commanders on any range safety or operations issues.
10. All tables must be risk assessed by range control before final approval. Units are required to brief Deputy Range Control Officer or Range Safety Officer on their Scenarios to ensure the risk assessment meets all safety requirements. Range control will specify the number of safety personnel required based on their risk assessment.

**3. COMMUNICATIONS.**  Communication between units and range control is essential to ensure safe operations within training areas/ranges.

1. When occupying ranges, units must maintain direct FM communications with range control. When in training areas, units must maintain a radio on the range control frequency or maintain communications with a headquarters that is continuously monitoring range control. Range control must be able to contact units in the event of emergencies, weather warnings, or safety issues.
2. Range control operates the Range Safety Net 24 hours a day for controlling direct and indirect weapons firing. Units will use the range name or firing point number as a call sign when contacting range control.
3. Units will use SOI frequencies and call signs for internal communications on ranges.
4. All communications will be conducted IAW prescribed RTO and post procedures. The following transmissions are required during range operations on any installation.

(1) Permission to "Occupy" a scheduled facility.

(2) Permission to go "Wet" on a facility.

(3) Permission to go to a "Dry" status.

(4) Permission to "Clear" a facility.

(5) Permission to "Enter Down Range Area" of a range.

(6) Permission to go to a "Guard" status.

**4. Crew Evacuation Drills** -- In addition to the prescribed tasks, add Crew Rollover Drill and Crew Evacuation Drill for CFV /IFV/BFV and Tank for the GST and GST respectively.

**5.** **Privately Owned Vehicles** (POVs). POVs are not allowed on ranges or in training areas unless a special pass has been issued by range control.

**6.** **Limit Markers and Flak Jackets**.

1. NTC Stakes. Vehicle or section stakes (NTC Stakes) are required at all deliberate defensive firing positions. A deliberate position is one where the crew is given the time to establish the defense. Defensive engagements on GT VI, GT X and TT XII are considered hasty positions; therefore, NTC stakes are not required. If during the conduct of a GT X or GT XII the platoon is given time to prepare the defense (e.g., left on the course to prepare an initial defensive position during the transition from XIIA to XIIB) NTC stakes will be emplaced.
2. Limit Markers and TRPs. Range limit markers (range fans) are recommended but not required. If they are used they are required for each firing position and firing box. The most outside targets that can be fired, given the ammunition being used, can be designated range limit markers. If outside targets are used, limit panels will replace silhouettes. The decision to use range limit markers resides with the Squadron commander.
3. Flak jackets are mandatory for all soldiers who conduct dismounted live‑fire move out operations on ranges.

**7**. **Accident/Incident Reporting**.

1. Any person observing or involved in an accident/incident will report it immediately, by radio or telephone, to the Range OIC and RSO. Reportable accident/incidents include, but are not limited to, the following.

(1) Death or injury to any military or civilian personnel.

(2) Significant property damage (exceeding $10,000).

(3) Any accident or incident reducing combat capability or security (lost weapon, SOI or night vision device).

(4) Any occurrence which might result in adverse media coverage.

(5) Fires or arson (tank fires require a DA Form 285 regardless of damage).

(6) Missing aircraft.

(7) Suicide attempt.

(8) Round out of impact.

(9) Discharge of weapon in field or post area.

(10) Unauthorized aircraft/vehicle/personnel in danger areas.

(11) Accidents/incidents involving radioactive material, such as Tank Muzzle Reference System (MRS), M8A1 Alarm System, depleted uranium rounds, etc.

b. Reports should include.

(1) Name, grade, location and unit of person calling.

(2) Type of accident/incident and location.

(3) Persons injured and extent of injuries, if any.

(4) Time and type of burst (i.e., air or ground), number of rounds observed and estimated caliber, coordinates of burst (only for rounds out of the impact area).

(5) Description of unauthorized aircraft/ vehicle/ personnel in danger areas.

c. Initial Reports. Units involved in/associated with an accident/incident will immediately furnish an oral initial report to 278th ACR HQ. Reports will include:

(1) Unit, date, and location of accident/incident.

(2) Summary of circumstances/cause, if known.

(3) Extent of injuries/damage.

1. **Fratricide Awareness and Avoidance Training.** This subject is an integral part of regimental training, and will be included in both maneuver and gunnery training environments. All crews are to view the Fratricide Awareness and Avoidance Training film before they participate in live-fire training.

**Appendix 1** (Safety Brief Format) **to Annex G Safety**

**RECOMMENDED BRIEFING**

D-1. The first priority on any range is training, but safety must be at the forefront of the training program. The safety program prescribes the safety precautions necessary to minimize accidents when firing and using ammunition during training and range operations. The safety program should identify—

* Surface danger zones (SDZs), as described in AR 385-63.
* The location of medical personnel.
* Left and right limits of the range. Firers never fire outside of these limits.
* The designated smoking area (if applicable).

D-2. Further, the safety program should include the following information:

* Inspect for objects located near the weapon's muzzle before firing, especially during unassisted night fire.
* When not on the firing line, ensure that the weapon's selector lever is on SAFE and the bolt is locked to the rear.
* Ensure that firers enter and exit the firing line at the entry or exit point.
* Before occupying a firing position, inspect it for wildlife or obstructions.
* Always keep the weapon's muzzle pointed downrange when on the firing line, and keep the finger outside of the trigger housing area.
* Never touch a weapon while personnel are downrange or in front of the firing line.
* Load the weapon only on command from the tower or control point.
* Never fire without using hearing protection.
* Ensure that left-handed firers attach left-handed brass deflectors to their weapon before firing.
* When entering or exiting the firing line, clear the weapon with a cleaning rod.
* Consider the rifle loaded at all times, even in break areas. Never point the weapon at anyone.
* Anyone observing an unsafe act will immediately call “CEASE FIRE,” place the weapon on SAFE, place it in the V-notched stake or lay it on the sandbags, and give the verbal and visual command of cease fire.
* Once cleared off of the firing line, firers report to the ammunition point and turn in all brass and ammunition.
* No one will leave the range until they have been inspected for live ammunition and brass.
* In case of an electrical storm, personnel will be directed to lock and clear all weapons, ground their equipment (except wet weather gear), and disperse into a predetermined area.
* Eating and drinking are not permitted on the firing line unless the tower operator permits drinking from the canteen.

**NOTE:** Drink water often to prevent heat injuries

**ANNEX H -- Medical Evacuation**

REFERENCES: AR 350-40, Range Operations, Procedures, and Policies, 1 July 1993.

DA Pamphlet 350-38 Standards in Weapons Training (STRAC)

FM 4-25.11, First-Aid for Soldiers

1. **Purpose**. This appendix identifies the minimum requirements for medical evacuation support on ranges where 278th ACR Regimental soldiers are training.

2. **Evacuation Support**.

* 1. Each range where weapons larger than a .50 cal machine gun are fired must be supported by a qualified and properly equipped medic and a dedicated, marked, medical evacuation vehicle. The marking must be a 24-inch square depicting a red cross on a white background; this may be a removable placard when non-organic medical vehicles are used. The vehicle selected must be covered and capable of safely transporting a litter patient.
  2. On ranges where no weapon larger than .50 cal is fired, a combat lifesaver and a dedicated medical evacuation vehicle with driver constitutes the minimum medical support required.
  3. Coordinate air evacuation through range control or the MEDEVAC Frequency. Post both these frequencies prominently in the tower of all ranges. Each range will have at least one 9-Line Call for Medevac GTA or form present

3. **Medical Evacuation Procedures.** Unit medics diagnose a patient's condition and determine the extent of injuries. The following subparagraphs outline the procedures for ground and air evacuation. Notify Range Control and the ECC of any situation requiring medical evacuation, ground or air.

a. Medical Evacuation Precedence.

(1) URGENT. Require evacuation to save life, limb, or eyesight.

(2) PRIORITY. Require evacuation within a maximum of 4 hours after which time become URGENT cases.

(3) ROUTINE. Require evacuation within 24 hours that are not expected to deteriorate significantly.

b. Decision to Evacuate by Ground or Air.

(1) The decision to evacuate and whether to evacuate by ground or air is made by the senior medical person at the scene. If no medical person is present the senior ranking person present makes the determination.

2) The following is a guide to determining the method of evacuation:

(a) Ground evacuate all routine or priority patients.

(b) Air evacuate all urgent patients more than 15 minutes drive from installation medical facility.

(c) If doubt exists use aero medical evacuation procedures.

c. Ground Evacuation Procedures. If the casualty warrants immediate attention by a physician, range control should be notified so they can alert the installation hospital that a patient is enroute by ambulance or air evacuation. If the injuries do not merit immediate attention by a physician, the patient will be transported to the unit's aid station. Range Control must be notified immediately when an individual is evacuated. All operators of dedicated medical evacuation vehicles must have a sketch map of the route from the training site to the installation hospital. If the medic and vehicle are dispatched with a casualty, live-fire training will not proceed until these resources have returned or been replaced.

d. Aero Medical Evacuation Procedures.

(1) If in the opinion of the medic, or senior officer present, evacuation with a physician in attendance is required contact Range Control and request Aero Medical evacuation.

(2) Provide the following information in the request for Aero Medical evacuation:

(a) Requesters name, unit, telephone number.

(b) Unit call sign.

(c) Number of patients, litter or ambulatory.

(d) Patients precedence i.e., Urgent or Priority.

(e) Extent of injuries.

(f) Special medical equipment required.

(g) Pick up site grid or distance and direction from prominent terrain features or built up areas.

(h) Pick up site markings i.e., smoke, T, headlights, etc.

(3) Once a request for Aero Medical evacuation has been initiated, units will take the following actions:

(a) Transport the patient to the pick up site or, if it is considered safer to have the physician see the patient before moving him/her, station a guide at the pick up point.

(b) Clear the pick up site of obstructions.

(c) When directed by range control, establish communications with the MEDEVAC helicopter and be prepared to brief the attending physician.

(d) Identify the pick up site with the appropriate markings as reported to Range Control.

(e) Do not transport TA‑50, weapons and ammunition with the patient. Security of weapons and ammunition is the responsibility of the range safety officer and the unit commander.

**ANNEX I – Quarterly Commander’s Briefing to the 278th Armored Cavalry Regiment Commander**

1. **The Quarterly Commander’s brief** allows squadron/separate unit commanders the opportunity to inform the Regimental Command Group of their gunnery training plan. This briefing will be part of the YTB to avoid having an entirely separate briefing. The briefing also serves as a snapshot of the unit’s current training level. It is an opportunity to highlight issues that may affect the conduct of gunnery. The minimum requirements are the assessment of last gunnery, 8 step training model, Training objectives. Additional requirements are provided below. The unit may add other topics, such as commander’s goal/intent for his unit’s gunnery. A copy of example slides for the G-360 brief is in Appendix 4 to this Annex.

1. Gunnery Matrix: Display unit’s tables/range progression as of the date of the brief. Each range entry should include the dates of occupation, firing, and clearance.
2. Pre-gunnery Training: At a minimum, provide status of the following pre-gunnery training requirements. Include dates conducted or planned.

(1) Turret maintenance/CFV/BFV TOW verification

1. GST/GTI
2. VCE Training.
3. COFT VARIANTS Gate Position: Brief the number of crews by unit and position. The commander will brief his plan or highlight issues in meeting required pre-live-fire standards.
4. Combat Crew Manning: Brief the number of crews, by unit, at their current manning level. All Bradley infantry companies will brief the following additional items:

(1) Dismounts authorized/assigned.

(2) Crew manning.

(3) Number of 11Bs in non-MOS positions.

1. Be prepared to brief personnel not firing (name, rank, unit, position, and reason for each MOS specific crewmember not firing).
2. Commander/Gunner Stability Projection: Brief the number of crews that will remain a qualified commander/gunner combination after gunnery. (Gunnery ENDEX +30/60/90 days).
3. Ammo Management: Brief the regiment’s forecasted ammunition status. An “expanded” last gunnery column should justify resources allocated for this gunnery.
4. Support Issues: List support requirements that the commander wants to highlight to the Command Group.

Commander’s Issues: Brief any other issues that the commander wants to highlight

**ANNEX J Facility Request Form**

See the following link for Volunteer Training Site command facilities:

<https://home.tn.ngb.army.mil/tsc/default.aspx>

For scheduling Active Duty FORSCOM installation facilities, units coordinate with the Installation G3, DPOT, Reserve Components Training Division

**ANNEX K --- Incentive Award Program**

1. **Band of Excellence**. Unit commanders will establish an award incentive program within their unit that recognizes those crews/platoons/companies that score within a “Band of Excellence.”
2. **CFV/BFV Gunnery Awards**

a. “Band of Excellence.”

1. All Bradley crews that score “Distinguished” (70 points minimum on 9 of 10 engagements plus 900 points overall) on GT VI (Regimental Award).
2. All Bradley platoons that receive a 100% first-run qualification on GT VI, with four vehicles firing (Regimental Award).
3. CFV /IFV/BFV troops/batteries that achieve a 100% first-run (Q1) qualification on GT VI (Regimental Award).
4. Squadrons are responsible for the UCOFT certification awards program.
5. “Top Gun”
   * 1. Squadron Top Gun crews will earn Army Achievement Medals for their efforts if they also meet the “Band of Excellence” criteria.
     2. Regimental “Top Gun” crews will earn Army Commendation Medals for their efforts if they also meet the “Band of Excellence” criteria.
6. Units are encouraged to coordinate through the SGS for a member of the Command Group to be present at the unit’s award ceremony, when crews/platoons/companies/batteries achieve “Band Of Excellence” awards.
7. **Tank Gunnery Awards**:
8. “Band of Excellence” is:
9. All tank crews that score “Distinguished” (70 points minimum on 9 of 10 engagements plus 900 points overall) on GT VI (Regimental Award).
10. All tank platoons that score 100% Q1 first-run qualification on TTVIII, with all four vehicles firing (Regimental Award).
11. Tank companies that achieve a 100% Q1 first-run qualification standard (Regimental Award).
12. Squadrons are responsible for the UCOFT certification awards program.
13. “Top Gun”
    * 1. Squadron Top Gun crews will earn Army Achievement Medals for their efforts if they also meet the “Band of Excellence” criteria.
      2. Regimental “Top Gun” crews will earn Army Commendation Medals for their efforts if they also meet the “Band of Excellence” criteria.
14. Units are encouraged to coordinate through the SGS for a member of the Command Group to be present at the unit’s award ceremony, when crews/platoons/companies achieve “Band of Excellence” awards.