



## Army Reserve Training and Qualification Strategy

TC 3-20.40 *Training and Qualification - Individual Weapons* describes how units can build training plans for training with small arms, providing information needed to plan, prepare, execute, and assess individual weapons training strategies and certifications. AR 140-1 directs Mission, Organization, and Training for the Army Reserve. The training strategies follow a progressive and gated structure to meet and surpass skills needed to complete qualification and to build compliance with regulatory requirements. Organizing in a progressive manner demands a plan to prepare for weapons training and the “how to” to execute and achieve an appropriate level of lethality and proficiency.

As with most Army doctrine and standards, the concepts are written by and for active component personnel but also required to be met by Army Reserve Soldiers. The Army Reserve Training and Qualification Strategy adheres to Army doctrine and standards while presenting a plan to Reserve commanders and units.

### Fundamentals First

Fundamental skills serve as the foundation of the IWTS and must not be overlooked. Note, this is not based on the bromidic and obsolete “Four Fundamentals” model officially replaced by Training Circular doctrine released FY2016, rather, it relates to foundational elements essential to the task. The previous “Four Fundamentals” that has now been formally redacted was essentially a simplified checklist to begin teaching a simplified, basic Shot Process to new shooters instructed by non-experts as typically found in Initial Entry Training. The intent of that doctrine was to build upon that simple model with experience over time, however, Army-led small arms training instead devolved and the progressive, gated approach that had been intended rarely saw fruition. Most Soldiers, including “experienced” NCOs and Drill Sergeants, never progressed beyond the ability to complete the same qualification course presented during basic Initial Entry Training. Soldiers can only achieve a higher level of proficiency by building upon mastery of foundational skills, not by merely re-shooting the exact same qualification and standard annually. An effective training structure needs to expand upon existing qualification events to ensure critical fundamental tasks are trained and improved over time. Without this it is nearly impossible to identify training gaps.

A Fundamentals First approach begins with the realization of what our current doctrine is. Despite a release date in FY2016, **there remains many Army Reserve personnel unaware of these changes.** To assist with learning the new doctrine *Army Reserve Marksman* Newsletter dedicated

its FY2019 issues to covering these changes to serve as “CliffsNotes” on the new doctrine.

### Maximize Virtual Systems

Augmenting live fire training with virtual training is an effective way to improve skills with increased availability at reduced cost. Not every weapon, accessory, or training concept has a simulation or virtual system available. No simulation or virtual system is authorized as a qualification means (only certain anti-tank guided missiles are the rare exception.) Units should strive to accomplish live-fire events with these systems as much as possible. However, simulations and virtual systems are known to be an effective means of improving skill.

The Zero Procedures listed in TC 3-20.40 assumes Soldiers arrive to the zero range having already conducted a thorough train up. The prescribed process does not explicitly include remedial training exercises because units were supposed to detect and address those issues before attempting zero. While Reserve units can not dedicate the same amount of time to this train up before a scheduled range activity, there are a number of ways to conduct this training inexpensively during Battle Assembly.

The first “virtual system” is the oldest, cheapest, and one of the best: Dry Practice. Regular handling of weapons, including working through a complete Shot Process, has been used by National and World Champion shooters for many decades as a critical tool towards success. The prescribed Drills for each weapon (see Appendix D in the appropriate Training Circular) are ideally learned in a dry practice environment. This costs no money and can be conducted during any unit Battle Assembly provided competent leadership interested in improving skills.

Any of the Army’s simulator and virtual system training devices are additionally helpful and units are encouraged to use them. The only significant flaw with any simulator and virtual system used by the Army since the 1980s has been either lack of availability or lack of will in getting Soldiers to use them regularly. The Laser Marksmanship Training System, such as the 460 System which was and is inexpensive enough for every unit to have a set, will still accomplish the goals that the Army Research Institute validated via formal Proof Of Principle analysis. The only significant flaw with any simulator system is the lack of Soldiers bothering to use them. The more diverse Engagement Skills Trainer systems offer even more options to units that have it available and newer versions have become less expensive but any simulator will help.

The main barrier to maximizing virtual systems is a

lack of organization and will. Designate a Unit Small Arms Trainer - an ideal additional duty for a motivated junior NCO - to coordinate and conduct short dry practice and/or simulator/virtual system exercises. Unit personnel at Battle Assembly rotate through a small arms training station during the day as their duties allow with the USAT directing the training and maintaining a training roster of the unit's personnel. These exercises can be structured to last only a few minutes. A reasonable goal is for everyone in the unit to complete a USAT-directed exercise once per quarter, ensuring four training sessions every Fiscal Year prior to qualification.

### Establish Progressive and Gated Events

Gated events are the culminating external evaluations of each strategy that provide an assessment of overall proficiency at echelon using a standardized method. The culminating event(s) establishes the prerequisites that must be completed prior to progressing to the next higher echelon's live-fire events.

Army qualification is a good start but remains extremely limited for further Soldier development as there is no progression or skill gates used beyond passing the same test. To correct this, the Army Reserve Marksmanship Program conducts and promotes events that take Soldiers beyond qualification. Postal Matches are a first step and one that every unit can host during any normal range activity. These events progress to bigger, in-person training and competitions such as Excellence In Competition and Army Reserve Championships. These events practice the Shot Process and Drills needed for qualification but measure and encourage ever-increasing skill and understanding.

### Combined Arms Collective Training Events

Each separate training strategy should build to a culminating collective combined arms live-fire event. This facilitates the "train as you fight" concept and provides the commander with the capability to integrate combined arms assets. Collective, combined arms training events are exemplified in Army Reserve events hosted by our Marksmanship Program. Postal Matches are readily made into a combined arms collective training event by measuring an aggregate of skill for all weapons tested. This is also very common for further events as nearly all of them recognize the best skilled Soldiers based on an aggregate result in using all weapons. The Army Reserve Course of Fire Book contains dozens of small arms training courses and how to combine them into collective training.

### ROE and Decision Making

Weapons training events should reinforce the rules of engagement (ROE) and ethical decision making concerning the application of lethal force. Realistic training must include a decision-making process to challenge critical thinking while employing weapons.

A series of Tables organizes training in a gated, progressive procedure.

### Table I, Preliminary Marksmanship Instruction

We begin the "crawl" phase with Table 1, PMI&E (Preliminary Marksmanship Instruction And Evaluation). This includes instruction to correctly learn Army small arms doctrine. There are many popular myths and misunderstandings. A good example of how unaware many Army personnel are of current doctrine is the large number of personnel still using training procedures, targets, and courses that have been officially out-of-date since FY2015.

The Army Reserve Marksmanship Program provides Training Resources to include complete sets of Preliminary Marksmanship Instruction and Evaluation available for download from our Team website.

Commanders may include additional tasks, skills, or drills to the event that directly relate to their desired training objectives. This includes adding specific drills for Soldiers assigned a weapon type for the first time. Table I needs to culminate with a written test as the gate to progress through to Table II.

### Table II, Preliminary Live-Fire Simulations

Table II, PLFS, is a simulations-based demonstration of the Soldiers' performance while applying the primary capabilities of their weapon in a virtual environment. Table is a replication (simulation) of the weapon use and provides a measured demonstration of the Soldier's performance prior to any live-fire event with the weapon as a "gate to live-fire" event. PLFS maximizes virtual systems and can be organized around dry practice or any Army-available simulator. Listed with the PMI&E Marksmanship TTPs and also available for download is the Army Reserve PLFS-Drills course.

Successful completion of Table II, PLFS, is REQUIRED prior to any live-fire event with the weapon. For units that do not have access to appropriate virtual training systems, commander should add a live-fire training event prior to conducting the zero exercise. An ideal way to do this is to conduct Improved Army Zero Procedures (<http://youtu.be/OsVP04u4wOw>) which is a better way to conduct training for a large group on common Army ranges.

Table II needs a validation exercise, even if simulated, to pass to the next gate.

### Table III, Drills

Table III continues with "walk" phase, conducting Drills using TADSS (Training Aids, Devices, Simulators, and Simulations). This expands on Preliminary Live-Fire Simulations by adding Drills with an emphasis on those listed in Appendix D for each weapons' Training Circular.

Table III, Drills, is hands-on training event using training aids and devices and may include the use of blank ammunition. It is used to train and evaluate the Soldier's ability to execute critical tasks using their assigned weapon

and equipment, during day and night conditions, and when operating in a CBRN environment. This can be simulated as long as a gate is in place to demonstrate proficiency within the Training Circular-prescribed time limit for the Drill.

### Live-Fire Events

The “run” phase begins with basic live fire, conduct of exercises to build a shot process, continues with practice exercises until shooting a full run through the qualification, and culminates with a “real” live-fire training exercise recorded for record. For most Soldiers, this is a qualification. For further development, TC 3-20.40 lists a “fast” run of qualification that is more difficult than the qualification for record. Match courses, such as Postal Matches, Service Conditions (Combat) and Service Rifle and Pistol competition is offer increasing difficulty to master.

To begin, the live-fire events with the individual weapons training strategy are Basic, Practice, and Qualification. This expands to Competition as Soldiers progress. Simple courses such as the Postal Matches are based on current doctrine and designed to serve commanders as a Preliminary Live-Fire Simulation, Basic, and/or Practice course.

### Table IV, Basic

This table trains basic skills at a reduced tempo with live ammunition to ensure proficiency of basic weapon employment skills and builds on the first three Tables. Based on available resources, commanders may include additional live fire training events at the completion of Table IV for any individual weapon. Additional live fire training events build additional Soldier confidence in their weapon, optics, ammunition, and instruction.

Zeroing is a part of Table IV. That makes three Training Tables to be performed before attempting zero. Soldiers should have conducted training exercises and remedial training prior to attempting zero. Also, short distance zero (25 meters for rifle and automatic rifle) is NOT a complete zero, it is only a “nearo” and confirmation must be done at full distance. Ideally, this would be done on full-distance targets offering complete feedback, preferably electronic LOMAH targets or secondarily on a Known Distance KD range with pits/target butts. Failing that, set the 300 meter qualification RETS “pop up” targets to “bob mode” and engage with untimed, slow fire. A Soldier with a good zero and Shot Process can successfully hit it four times with five rounds, the same grouping standard as performed at 25 meters but confirming zero at full distance. Soldiers failing to pass this Zero Confirmation can NOT be allowed to attempt qualification until after completing remedial training to address the problem.

### Table V, Practice

Practice is a live fire course reinforcing skills with an increased tempo. Table V is designed to be more difficult than the qualification course of fire to build confidence in the weapon, ammunition, optics, and training.

This table includes execution of critical skills in a live environment under live-fire conditions. Table V prepares the Soldier to employ the weapon against most common threat scenarios using prescribed targetry sequences to a required standard. Although the fast course listed with Table V is NOT REQUIRED, it provides an increased tempo engagement sequence that gives the Soldier additional repetitions with immediate action drills during firing. However, some type of a Practice course with an established pass/fail standard must be completed prior to qualification. Soldiers failing to pass a Practice table can not attempt qualification until successfully completing remedial training. Table V, Practice is specifically designed to train the Soldier on the critical employment skills at a demanding and rigorous pace that prepares them for the qualification record course of fire and identifies Soldiers requiring remedial training. The faster-paced Practice course listed under Table V is also a Postal Match and Soldiers that shoot it are encouraged to submit their scores for record.

### Table VI, Qualification

Qualification is the Army standard record course of fire used to determine the live-fire proficiency of a Soldier employing the weapon. This table includes execution of critical skills and is more thorough than the common qualification the Army had been using since the early 1980s. Qualification builds Soldier experience by tactically employing the weapon against a common although basic threat scenario. Per TC 3-20.0, Soldiers are only allowed ONE record qualification attempt. This does NOT reduce the amount of ammunition allowed for training. Units will continue to receive the same amount of ammunition as before and can conduct as many practice, training, and validation exercises as their time and ammunition allows prior to qualification. However, when the qualification course is conducted for record, only the first attempt is used. Consider this one qualification attempt as a real-world “combat” scenario. Real life does not allow “do overs” and alibis; the first attempt is your only chance.

### Table VII, Competition

Competition builds on the first six Tables and is an ideal continuation of the Army’s progressive and gated training approach. Unit Small Arms Trainers should conduct relevant Postal Matches during unit qualification to introduce Soldiers to courses of fire with more stringent scoring procedures than qualification. Postal Matches also identify the most skilled and motivated. Along with the USAT, these Soldiers are your unit’s best choice as Experienced Coaches and to comprise a unit shooting team. The next progression and gate is to go beyond unit-level training and participate in military and civilian events outside the unit. Participation at such events is authorized in lieu of other unit training at the commander’s discretion. AR 190-11, AR 350-66, and AR 140-1 details the authorization for this. **USARCMF**



# Army Reserve Preliminary Live-Fire Simulations and Drills

The Army Individual Weapon Training Strategy (TC 3-20.40) directs that units are to complete three Tables before conducting going to the qualification range: PMI&E (Preliminary Marksmanship Instruction & Evaluation), PLFS (Preliminary Live-Fire Simulations), and Drills using TADSS (Training Aids, Devices, Simulators, and Simulations).

For Table I, the Army Reserve provides PMI&E instruction materials based on current doctrine. Download:

<https://www.usar.army.mil/Commands/Functional/ARMU/Resources/>

PLFS is simulations-based training, a replication of weapon use that provides a measured demonstration of the Soldier's performance prior to any live-fire event with the weapon as a "gate to live-fire" event. PLFS maximizes virtual systems and can be organized around dry practice or any Army-available simulator.

## Engagement Skills Trainer

The preferred PLFS system is the Engagement Skills



manship training, and decision making/ROE/escalation-of-force exercises. The system provides detailed feedback to the individual and to the fire team/squad covering shot process, fire control, and distribution of fires. EST systems are multilane, supporting 5, 10, or 15 Soldiers simultaneously (depending on facility-specific layout) and simulates most current issue weapons. Many exercises are pre-programmed and help step personnel through.

## Laser Marksmanship Training System

The Laser Marksmanship Training System (LMTS) is a commercial, off-the-shelf trainer. It's ideal for Reserve units, especially in light of EST nonavailability, as it is inexpensive enough to be owned and kept by the unit. LMTS supports training with a soldier's own weapon by using a battery-powered laser transmitter mounted to a mandrel inserted in the barrel or affixed with a mounting bracket along with a variety of laser-sensitive targets that can be used indoors or outside in any open area large enough for 10-25 meter "firing" lanes. Exercises are performed in the same manner as live fire except the "ammunition" is an eye-safe laser beam. The target senses shot locations, which are shown on a laptop screen. USATs (Unit Small Arms Trainers) can establish a unit training process that rotates through all unit personnel each quarter. Soldiers can "test out" and either serve as peer coaches or return to other duties for the quarter. Those struggling with weapons training can work on remedial exercises every Battle Assembly as needed. Unlike the EST, training exercises are not pre-programmed and a knowledgeable trainer (USAT or other) is needed to direct Soldiers in productive, organized training.

For initial skill development, Exercises 1 through 4 should be conducted sequentially. After grouping and zeroing standards, Soldiers validate skills by completing a simulated qualification. Those failing to meet stan-



Trainer (EST) II. Designed to simulate live weapon training events, including training exercises, qualification simulation, individual and small unit collective marks-



dards or are known to have problems during qualification conduct Remedial training, which can be scheduled at every Battle Assembly throughout the Fiscal Year. For everyone passing validation standards and qualifications, sustainment training can be employed throughout the year, integrated as a part of Battle Assembly concurrent training. A quarterly or similar test ensures Soldiers are maintaining sufficient skills prior to unit live fire qualification.

**Exercise 1: Reflective Target Exercise.** Using a laser with a reflective board, Soldiers demonstrate an ability to obtain a sufficiently-stable position and aim. This can be done prone and barricade supported. Exercise 1 is most often used as Remedial training.

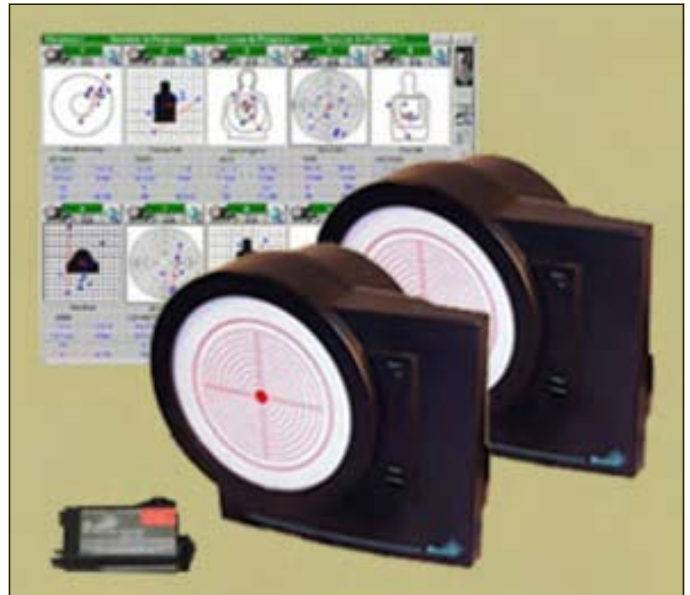
Exercise 1 introduces Soldiers to a basic Shot Process, allowing diagnosing position, aiming, and other errors. A reflective target board and MP400 laser/man-drel provides a simple, visible reference of where the barrel is pointing by reflecting a laser beam calibrated (“spun”) to indicate point of impact. This is a fast way to implement a “Target Box” check of position and aiming and quickly indicate problem shooters needing remedial training. Soldiers meeting current qualification standards with a first-time “Go” in DTMS within the past 12 months can skip this.

**Exercise 2: Interactive Dry Fire.** Shooting at the silhouette of a TR-700 LMTS target, Soldiers must achieve 4 hits out of 5 shots on the scaled 300-meter masked target from the prone supported position. Next, Soldiers need 8 hits out of 10 shots from the barricade supported kneeling (5 shots) and barricaded supported standing (5 shots) on the open face (unmasked) TR-700 at 25 meters. Note, the TR-700 open-face target at 25 meters equals a doublewide E-silhouette target at 300 meters, the same as E-silhouette width at 150 meters. Use an appropriate

mask about 12 MOA wide for distances closer than 25 meters.

**Exercise 3: Grouping and Zero.** Using the TR-900 Target System with 300 meter E-type silhouette mask from a prone supported firing position.

Grouping: Dry fire up to 25 shots or less in five-round shot groups and achieve a five-round shot group within 6 MOA or less (4-centimeter circle at 25 meters, 2.4-centimeter circle at 15 meters, or 1.6-centimeter circle at 10



meters). 4 MOA is ideal.

Zero: Adjust the sights so that four out of five rounds in a single five-round group strike within a 6 MOA zeroing circle in the silhouette on the zeroing target or less. 4 MOA is ideal

**Exercise 4: LMTS Pre-qualification/Validation.** Engage 10-, 15-, or 25-meter scaled silhouettes with an M16/M4-series weapon. Without assistance, the soldier engages 10 target silhouettes and must achieve a minimum of 30 hits out of 40 shots (20 prone, 10 barricade kneeling, 10 barricade standing) When available, the LMTS mini-RETS range should set to simulate the four phases of the current qualification. A simulated barricade needs to be used for the barricade supported kneeling and standing positions. Alternatively, the Alt C target can be used. Practice reloading while going from prone, barricade kneeling, and barricade standing (Fight Up).

### Improved Zero Range Procedure

Successful completion of a PLFS exercise is REQUIRED prior to any live-fire event with the weapon. For units that do not have access to appropriate virtual training systems, commanders can add a live-fire training event prior to conducting the zero exercise An ideal way to do this is to conduct Improved Army Zero Procedures

(<http://youtu.be/OsVP04u4wOw>) which is a better way to conduct training for a large group on common Army ranges.

Break the unit down into buddy teams and put two shooters on each available firing point. Keep the total relays as small as the range will allow. Staple up as many zero targets as will fit on the backers. The more the better. Number them so they can be readily identified. Explain to all shooters that both they and their partner must successfully group, zero, and pass a scored validation exercise before going to the RETS/ARF “pop up targets” for qualification. This motivates good peer coaching.

The range is conducted in 10-15 minute block times. The line is cleared and personnel go down range only to replace used targets as needed, preferably no more than four times an hour.

Shoot groups as normal, with peer coaches watching their shooters. Check the target as needed with optics. At 25 meters even cheap compact binoculars can see strikes. A quarter-inch bullet hole is one minute of angle at this distance and can often be seen with naked vision. Using an optic to do the walking instead of stopping the line every 3-5 rounds makes this range efficient.

Peer teams can talk as needed or ask for an experienced coach without disrupting anyone else. Practice and dry fire, or letting the peer coach and shooter switch can be done without stopping the line.

When a target has too many holes to discern group location (after every three or four groups or so) the shooter switches to a clean one. Purchased in bulk, paper targets are pennies each. One round of ball ammunition is around \$0.27. Trying to conserve targets is false economy!

When the shooter is confident their zero is good, it should be confirmed on a fresh target with no bullet holes. Zero should be also be confirmed with slow and sustained fire groups from unsupported prone, kneeling, and any other useful position based on time and ammunition availability.

All PLFS Table II exercises require a validation exercise, even if simulated, to pass on to the next gate.

## Drills

Table III continues with the “walk” phase and conducting Drills using TADSS (Training Aids, Devices, Simulators, and Simulations). This expands on Preliminary Live-Fire Simulations by adding Drills with an emphasis on those listed in Appendix D for each weapons’ Training Circular.

Table III, Drills, is hands-on training event using training aids and devices and may include the use of blank ammunition. It is used to train and evaluate the Soldier’s ability to execute critical tasks using their assigned weapon and equipment, during day and night

conditions, and when operating in a CBRN environment. This can be simulated as long as a gate is in place to demonstrate proficiency within the Training Circular-prescribed time limit for the Drill.

A dry practice plan is covered in current Army Training Circulars for small arms training. Appendix Delta covers these dry-fire drills.

Having covered principles, what drills should we use? While skilled shooters already have and regularly use useful dry practice drills (that’s how they became skilled) most Soldiers do not. Appendix D of all current small arms Training Circulars lists eleven recommended drills to get started. The A through K Drills are common to all small arms, modified as appropriate for each particular weapon and its intended role and application.

Drills Alpha through Charlie are the basic functional tasks that it takes to operate a weapon. These reinforce that the Soldier is the weapon’s safety.

**Drill A** the Weapon Check, an accountability check and visual inspection that it’s clear, conducting a functions check, location of the rail, data and zero dope, magazines, and noting all serial numbers. The weapon check is a visual inspection of the weapon by the Soldier, verifying at a minimum that the weapon is clear, serial numbers (weapon and devices) and attachments, Functions Check, and serviceability. This is initiated when first receiving the weapon from the arms room, storage facility, or stacked/grounded location.

**Drill B** is place weapon in action. With rifles and automatic rifles, this is Sling/Unsling, pistols is Draw/Holster, and crew-served machine guns it is the crew drill of mounting and emplacement. This tests the ability to change the location of the weapon on demand.

**Drill C** is an equipment check, a pre-combat check that the system is ready for action. This Pre-Combat Check ensures the aiming devices, equipment, and accessories are prepared. This includes any batteries are installed, that everything is secured correctly, that equipment does not interfere with tactical movement, and the basic load of magazines are stowed properly.

This builds in some redundancy from Drill A to ensure everything is ready to go. Note, this requires organizing and repurposing the issue Pogie Bait pouches and MRE holsters, otherwise known as “magazine pouches.” This provides a place to carry those spring-loaded bullet boxes, otherwise known as “magazines.”

Drills D and E are the basic functional tasks for handling the weapon in a combat environment.

**Drill D** is an ‘administrative’ load, done after Drill C as the weapon is placed into Amber or Red status. For pistols, Drill D is Draw and Present

**Drill E** is the Carry 5/3 which goes through five methods of carry three times. Five carry methods include Hang, Safe hang, Collapsed low ready, Low ready, High



ready or Ready up). Moving through these as appropriate for your weapon on at least three times show proficiency at basic handling skills.

A leader will announce the appropriate carry term to initiate the drill. Each carry method should be executed in a random order a minimum of three times.

The next drills cover moving into and out of useful positions.

**Drill F** is Fight Down, moving effectively and efficiently downward into lower firing postures. Starting from the standing position, on command the shooter moves into the next lower position as announced. This typically goes from Standing, Kneeling or Squatting, Sitting, then Prone in order. Variations of each position as appropriate to the weapon and conditions are encouraged.

Start standing. “Kneeling” (move and settle). “Sitting” (move and settle). “Prone” (move and settle.)

**Drill G** is Fight Up and is the same idea but done moving into higher positions.

**Drill H** is Go-To-Prone, which is the ability to drop from a standing or crouching position to prone. This should also be done from a walk and a forward sprint. Standard time is below two seconds. This is time to drop, not to fire a hit if done with live ammunition or simulator.

The focus needs to be on natural point of aim and wobble zone so the position can be shot from accurately. These drills should not be done for time initially, as the Soldier needs to be able to self-assess their positions. Begin by announcing each position and allowing plenty of time to assume it. As shooters improve, increase the tempo of the drill to assume positions faster. This can be incorporated while walking and rushing. Add variations to the call and use irregular intervals.

**Drill I** is Reload. Executed from load-bearing equipment, working on quickly and reliably reloading from various positions, such as standing, kneeling, and prone. Soldiers must be encouraged to adjust ammunition pouches to facilitate this. There will be variations between personnel. Uniformity should not be considered, only performance. For machine guns, this also includes a barrel change as appropriate.

The first step is to organize the ammunition pouches and magazines so they can be reached from various positions as done in Drill C. To conduct a reload, sweep from center to the next ammunition pouch.

If a reload is needed and there’s no magazine in the pouch, then sweep until the next available magazine in your load-bearing equipment is found. It’s important to set this up so the reload is efficient. Uniformity among Soldiers should not be considered, only performance.

**Drill J** is Clear Malfunction. The best approach is doing whatever is required to make the weapon functional. This requires understanding the cycle of function and

knowing what to do with it. Overly-simple approaches that previously attempted to avoid learning this have been found to be ineffective. Any reference to a game played with a ball is wrong because no single response can address every possible malfunction type.

The problem with an overly-simple, stepped mechanical fix is that no single procedure or approach can fix every possible cause. The better solution is to understand the cycle of function and then do the simplest, fastest thing possible.

The most common malfunction is a failure to fire and the most common symptom is a tell-tale click when a bang is expected. The fastest means to reduce this problem is the best approach here. Let’s say our shooter here has a failure to fire. He attempts to shoot by applying smooth trigger pressure straight to the rear and gets a click. To reduce this stoppage, the fastest thing is likely to ensure the magazine is seated and run the bolt.

Another form of immediate action is to transition to a secondary weapon.

If immediate action fails and no secondary is available, remedial action is likely best served by clearing the weapon to find the problem. Perform an Unload/Show Clear. This also happens to be Drill K.

**Drill K** is Unload/Show Clear. This is another ‘administrative’ drill, but important. The Soldier needs the instilled habit of making their weapon safe and clear, both to an instructor and for their own situational awareness.

These drills only work if they’re done regularly. It’s recommended that active duty and mobilized personnel should be doing these at least once a week. That won’t be enough for a high level of skill but it will create solid familiarity. Done dry or with a simulator, they cost nothing and can be done right outside of the arms room, or at home with personally-owned firearms. As with the ACFT, scoring 600 points is not possible without on-going work. The same goes for weapons mastery. **USARMCMP**

# Army Reserve New Standards After Action Review

## 337th MI BN Range Report by Sgt. 1st Class Jake Probst

Sgt. 1st Class Jake Probst, 337th MI BN and Army Reserve Marksmanship Program, conducted a qualification for his Battalion using the new TC 3-20.0 and TC 3-20.40. Here's his report.

My Battalion (337th MI BN) conducted qualification and we nailed it. Last year, only 33 of 320 Soldiers qualified. This year, 252 out of 254 Soldiers qualified with 94.4% earning a passing qualification score on their first attempt.

	Alpha	Bravo	Charlie	HHD	Other	Total
<b>Toal Qualified</b>	65	52	43	55	37	252
<b>First Time Goes (FTG)</b>	60	47	42	52	37	238
<b>% FTG</b>	92.3%	90.4%	97.7%	94.5%	100.0%	94.4%

There were several hurdles to overcome. Despite multiple conference calls, emails, and text messages to company and battalion leadership, very little training was conducted prior to the range, despite current Weapon Training Strategy directing that units are supposed to complete Tables I-III prior to any range. A large amount of "four fundamentals" language and references to obsolete doctrine that has been officially redacted since FY2016 is still being used by many Soldiers, including leadership throughout the Army Reserve.

Results of the PMI Quiz I sent showed that engagement was low with less than half the Soldiers taking it. However, the Soldiers who took the assessment found it helpful. To overcome the obstacle of so few Soldiers taking the assessment or completing the prescribed training Tables, I set up a station at the zero range. When Soldiers signed in, they were cross checked against the list of names of Soldiers who took the assessment online. If they had not taken it or not passed it, they had to re-take it on paper in the classroom. Many Soldiers needed multiple attempts since they

had never received a quality PMI or any other training. It took eight hours of near continuous printing in order to have enough copies for the entire Battalion.

For those that used it, the PMI online helped with the access of information, along with the study guides I provided to study up on. Communication to BN leadership and other companies about the progress of PMI assessment and resources along with hands-on weapon training the Battle Assembly prior to the range helped tremendously.

I anticipated most of the things that could go wrong and built controls as part of range operations. When Soldiers arrived at the zero range, they worked through a series of stations which were manned by Soldiers I selected as being knowledgeable. Gradually, we worked others in after the standard/ procedure was clear. The stations were:

Station 1: Draw weapon & Optic

Station 2: Sign in and have name cross-checked for passing PMI assessment. No Soldiers move on until they pass the assessment for their weapon and optic.

Station 3: Boresight (if the weapon hadn't been boresighted or zeroed by a previous Soldier) and dry fire opportunity for Soldiers who wanted some last minute coaching.

Station 4: Draw magazines and ammo. Soldiers load their own magazines - a huge win.

Station 5: Tower Baseline: Up next to group and zero.

Station 6: Grouping and zeroing.

Video showing the layout of these stations at our range: [https://www.youtube.com/watch?v=h7GMw8GOJ\\_o](https://www.youtube.com/watch?v=h7GMw8GOJ_o)

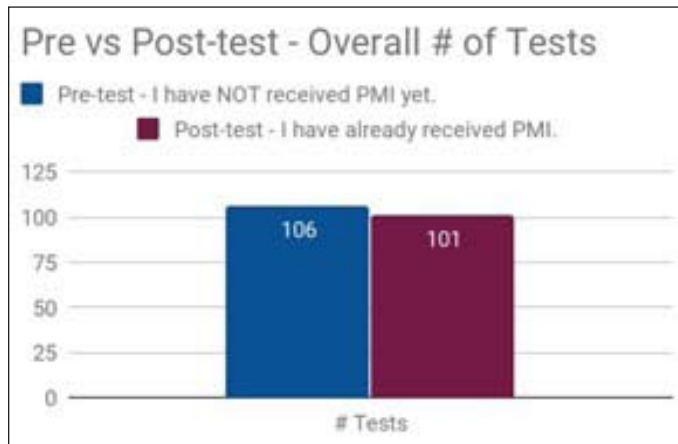
Prior to the range, I created and distributed range binders/SOPs to all the Soldiers involved in both in physical form and digital form. I personally coached all the lane safeties to reduce the amount of bad and wrong information typically put out on Army ranges and by Drill Sergeants. During the range activity, I did not take on any official role and helped ensure that roles and responsibilities were identified and demonstrated the execution of tasks for anyone who needed help. Then I backed off and let them take responsibility. Many Soldiers innovated and improved upon the initial processes I had established. By the end, NCOs and high-speed Specialists were rotating through different roles while ensuring knowledge was transferred.

### What went well:

PMI online and on Google docs helped with the access of information, along with the study guides provided to study up on.

Hands-on weapon training the drill prior to range (for the few that used it) helped tremendously. This is why Tables I-III need to be used!

Range binders with SOPs for key range personnel helped ensure everyone was on the same page.





Multiple redundancies were established, which provided a cushion when last minute changes occurred.

Having Soldiers fill their own magazines. Many junior enlisted (finally!) learned how to do this correctly and efficiently.

Having the paper assessment available helped ensure that Soldiers went to the zero and qual range with at least a basic level of understanding, even when their leadership failed to provide PMI.

Bore sighting allowed for improved zeroing speed and Soldier moral. Soldiers did not need to worry about getting on paper. This can be done prior to range day.

As a firer completed zeroing, they came off the range and were replaced by a new Soldier, this sped things up considerably rather than waiting by chalk.

Allowing Soldiers an extra 10 rounds (40 total instead of 30) allowed for Soldiers to learn how to shoot better without reducing standards much. This seemed to be the right amount to ensure Soldiers didn't stay on the firing line too long before being sent back for remedial training but gave them the additional training/ experience to complete the task. Additional training (drills, simulators/EST, dry firing with a coach) should still be planned for future ranges.

Allowing Soldiers to walk from one range to another sped up the qualification process. Eliminate excessive range commands and babysitting.

Once Soldiers were done qualifying they practiced advanced marksmanship skills with excess ammo and time.

Putting targets in bob mode allowed for Soldiers to confirm zeros at distance. This is how Table IV is supposed to be done.

### Things to do better:

Leadership needs to know what needs to be done for training and take it upon themselves to train their Soldiers. Read the Training Circulars!

Most Soldiers never received PMI (Table I) or any other pre-range Table.

Each company needs to have trained Unit Small Arms Trainers. Tables I-III should not just be "winging it". Almost none of these Tables were conducted prior to our range.

For confirming zero at distance, as required in Table IV, have all targets up to allow Soldiers to ensure they can hit targets they struggle with.

When lane safeties/ coaches were used from other companies, many commented on "breathing" and other shooting myths. They clearly lacked foundational knowledge and the skills/awareness to coach. Coaches should receive additional training and the position should be opened to Soldiers of all rank. Observation skills are more essential than rank.

Some Soldiers were allowed to attempt qualification despite not demonstrating the ability to group and zero. They also had not taken the PMI assessment, which helps to verify that all firers know how to safely handle and operate the weapon. This is not only a poor practice but mitigates controls identified in the risk assessment.

Acquire wind meter and make wind calls as appropriate before each firing order. This will allow Soldiers to get used to adjusting for wind conditions.

Bore obstruction check took too long. Have Soldiers remove the bolt carrier themselves so the range cadre can quickly perform a visual check. Stop rodding on/off ranges as it is a useless practice that can damage weapons.

ID struggling Soldiers prior to the range so additional time can be spent doing EST and drills, as per Tables I-III.

Go beyond qualification. The next step (unofficially, Table VII) is to have Soldiers compete. This can be done easily at the unit level with Postal Matches, which also serve as Validation exercises to facilitate progress through the gates of Table IV and V. A good next step is to organize an Excellence in Competition which can be done at the host unit or as a reward to fund attendance at an event for the best shooters and instructors in the unit.

A lack of knowledge of current Army doctrine remains the biggest problem with implementing these new standards. Soldiers running ranges need to demonstrate knowledge of the official source documents and should not be allowed to conduct anything if not. This problem is perpetrated by weak leadership uninterested in educating themselves and continuing with made-up rules (often under the false guise of "safety") or falling into the comfort of the wrong ways they've always done things. We cannot lower the standards because of past mistakes. Plan better, train harder, understand more, in order to execute to standard. Judge performance on results rather than trying to micromanage details like whether Soldiers will fill their own magazines. Trust the knowledgeable NCO that says something can/should be done a certain way and use Disciplined Disobedience to call out those that clearly do not understand. Don't perpetuate low standards and expectations because it's in our comfort zone instead of pushing leadership to meet the expectations. Mentor to help them understand and plan to meet them.

There is a mentality at my battalion (and, likely, in many other units throughout the entire Army Reserve) to rely more on past experiences to establish "what right looks like" and establish standards. This limits our ability to adapt and adjust to new standards or even to merely be aware of what the current standards are. **USARPMP**