

Readiness-Level Progression: Certifying Expertise in Lethality as a Subset of the Armor Standardization and Training Strategy 2030

by LTC Dan Cannon and LTC John Nimmons

Following 20 years of fighting the Global War on Terrorism (GWOT), today's Army finds itself at a familiar transition point. Similar to two decades ago, a trend analysis conducted on our modern Armored Force identified a clear lethality gap.

Relevancy: the 'why'

The publication of the "Lethality Report on the State of the Armored Brigade Combat Team (ABCT)" – or in common parlance, the III Corps Lethality Study – identified more than 38 areas for improvement due to a distinct decline in crew expertise affecting lethality. Trend lines identified in this study were likewise captured in execution of the 2022 Sullivan Cup, increasing validity of the trend analysis identified in the study.

Key focus areas for this study addressed a disparity in unit master-gunner proficiency, a decline in platform-leader competency and gaps within operational training. Supporting data for this trend assessment is drawn from recorded lower gunnery scores, a decline in rotational-training-unit performance across the combat-training centers (CTC), a decline in unit maintenance as measured by operational-readiness (OR) rates and a lack of master-gunner expertise at lower echelons.

This is a shared problem set by and for the operating and generating forces alike. Institutionally, our professional military education (PME) evolved over the past 20 years to meet GWOT demands, and our operational forces' collective training shifted in parallel. The Center for Army Lessons-Learned superseded application of doctrine in combat when our doctrinal publications struggled to keep pace with the ever-evolving asymmetric threat.

A generation of company-grade leaders well remember planning and executing collective-training plans for our units accounting for both deployment and core mission-essential task lists (METLs), and under the same time constraints. The best efforts made in unit-training-plan design often manifested in deployment mission sets that did not match our unit's table of organization and equipment, much less its METL.

As our Army shifts focus back to peer threats in the context of the large-scale combat operations (LSCO) environment, the Armored Force's atrophied core competencies regain relevancy and urgency. In development of our strategy for 2030, the Armor Branch needs a standardized framework for leader development that directly correlates to platform expertise, tactical proficiency in LSCO and fleet readiness. Absence of a standardized system to view the gaps and competencies of our Soldiers means leaders cannot make informed decisions on how to best assess, use and manage talent across the branch. The unclear nature of individualized branch progression creates an opaque system that impacts job satisfaction and retention, prevents the branch from building collective expertise and inhibits talent management.

Design: the 'how'

The Armor Standardization and Training Strategy does not require a retooling of doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTMLPF-P), but bold advancement of certain components will play a supporting role in the strategy's implementation. The threat template has changed; multidomain operations are changing doctrine; our Army equipment is modernizing. This is all occurring as we work to improve Soldier and crew proficiency in shooting, moving, communicating and maintaining platforms under combat conditions.

Our gap in lethality manifested from a decline in execution with systems and processes provided from the last iteration of DOTMLPF-P. For that reason, the focus of this strategy is on how we train.

DOTMLPF-P approach

While the primary focus of the strategy is on training, a holistic approach across the breadth and depth of DOTMLPF-P must be considered for the strategy to be viable and sustainable, and to properly address the problems previously mentioned. To address the decline in lethality, the strategy focuses on three areas across DOTMLPF-P: 1) developing assessments and revising individual and crew certification; 2) standardizing unit-training-plan development and implementation; and 3) adjusting leader-development models to reinforce desired lethality outcomes. Ultimately a framework that unifies unit training and leader development across the Armored Force is needed to produce Soldiers and leaders who are experts on their platform and can employ them effectively in combat.

Doctrine. Developing the right assessments and certifications requires a comprehensive look at how these processes will be managed. Standardization for when and how proficiency tests occur will require additions to documentation within existing doctrine. This will have a direct impact on revising the Integrated Weapons Training Strategy (IWTS) to account for individual certifications such as annual platform-proficiency exams. More training curriculars will be needed to address reporting requirements, unit-training-plan audits and data input into digital systems of record. Further, refined roles for master gunners at company and battalion levels will need to be refined as the strategy progresses. Finally, all additional leader-development requirements must be codified for uniformity in execution.

Organizations. Part of the strategy addresses enhancing the role of the master gunner at company and battalion levels to ensure adherence to certifications and assessments. The strategy also expands the role of the battalion master gunner in certifying incoming personnel according to the tank and Bradley commander assessments, and emphasizes their role as the senior adviser to the battalion commander on individual and crew proficiency for final certification prior to assuming duties as a tank or Bradley commander.

Training. One of the main outcomes of the strategy is to implement a tank and Bradley certification test for battalion commanders and master gunners to administer before individuals assume their duties. The test functions much like the Army's aviation-commander certification process, where instructor-pilots test incoming personnel to validate their proficiency and expertise levels. For Armor, the test would include a written exam to enforce doctrinal study throughout a career, a physical test of knowledge on respective platforms and a demonstration of functional knowledge inside Advanced Gunnery Training System (AGTS) or Bradley Advanced Training System (BATS). Once administered by the battalion master gunner, a report with scores and a recommendation to the commander for retraining or integration into duty position. This testing process would be universal across the Armor force whereby incoming personnel would have the same requirements regardless of duty station.

Materiel. Primarily to make these ideas work, a universal digital system will be needed to maintain records for Soldiers and leaders as they progress through their careers. Ideally, existing systems of record (like Digital Training Management System) are expanded to include gunnery scores, commander-certification-test scores, AGTS/BATS hours and annual examination scores for everyone. For digital test-taking, classrooms, computers and software overhead will be needed to provide tests that are accessible to the entire branch, regardless of duty location.

Leader development. As Soldiers and leaders progress through this system, the accumulated data will allow leaders to assess the needs of each person and tailor training to address deficiencies or atrophied areas of expertise. It will also allow for the identification of top talent and provide career managers and leaders the ability to advise and help officers and noncommissioned officers throughout their careers.

Personnel. Vital to this strategy is placing an emphasis on ensuring master gunners can fill all positions at the company and battalion levels. This requires an in-depth approach to manning to identify unit master-gunner personnel shortcomings and create a revised system that prevents gaps at the unit level. This aspect directly ties to leader development and training subsets and remains foundational to the success of the Armor Standardization and Training Development Strategy.

The model: an aviation leader-development comparison

Readiness-level (RL) progression is the decisive component of this strategy intended to directly address the training subset of the DOTMLPF-P process and, more importantly, address our atrophy in lethality. RL progression is

designed to give confidence to leaders and Soldiers alike in the competence of the individual crewmember and confidence in their platform-specific weapon systems. Standardization created in the application of this strategy creates universal accountability for what and how we are already training across PME and the operational force. We must break from the “starting at zero” cycle of certifying crews exclusively through a collective-training cycle and begin to train and certify the individual crewmember routinely. RL progression is the starting point.

Implementation of this new strategy is reliant on an interdependence among training, leadership and education. The model is similar to our Aviation Branch counterparts because, simply put, theirs is a proven system that consistently achieves technical proficiency and expertise over time and in adverse conditions across the competence continuum. A brief explanation of the aviation model is necessary here for context.

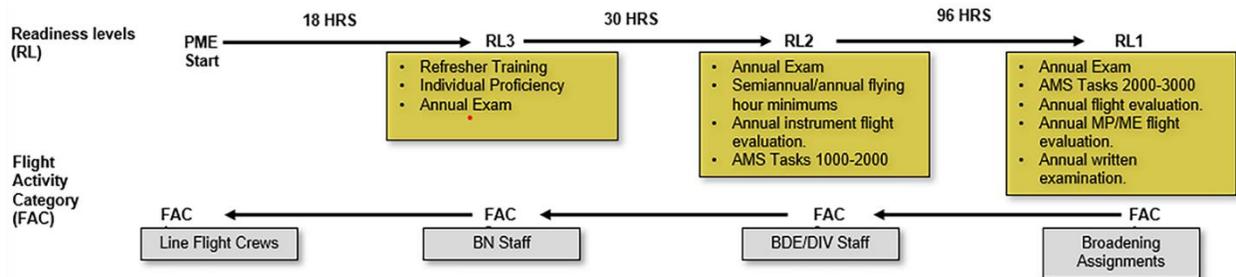


Figure 1. Aviation model.

RLs track individual readiness based on specific criteria that spans throughout a career. Readiness aggregates across individuals throughout an organization to assess qualifications for training and to demonstrate proficiency and expertise. The key factor here is the tracking of individual readiness in addition to collective or crew readiness. These RLs transfer with the individual pilot, and rather than being reliant on a stabilized flight crew for certification, an individual’s certification is maintained throughout his/her career with exams and check-rides upon arrival to a new unit.

The flight-activity categories (FACs) identify which RL an individual needs based on duty position throughout a career. Standards are clearly defined, coupled with commander evaluations that progress or regress individuals based on their performance.

The Armor model replicates these categories, accounting for individual progression tailored to the needs of the Armor Branch. Progression across the RLs (Figure 2) are facilitated by the company and battalion master gunners on behalf of commanders at each echelon and in accordance with prescribed standards and criteria. This system links to iterations of IWTS within a standardized unit training plan.

Strict adherence to individual and collective tasks up to platoon-level training is required to assess competency and expertise of the individual crewmember to progress across RLs. The intent is that this program runs in the background of steady-state operations. For example, a company may only have a third of its crews in each of the three RL categories at any given time.

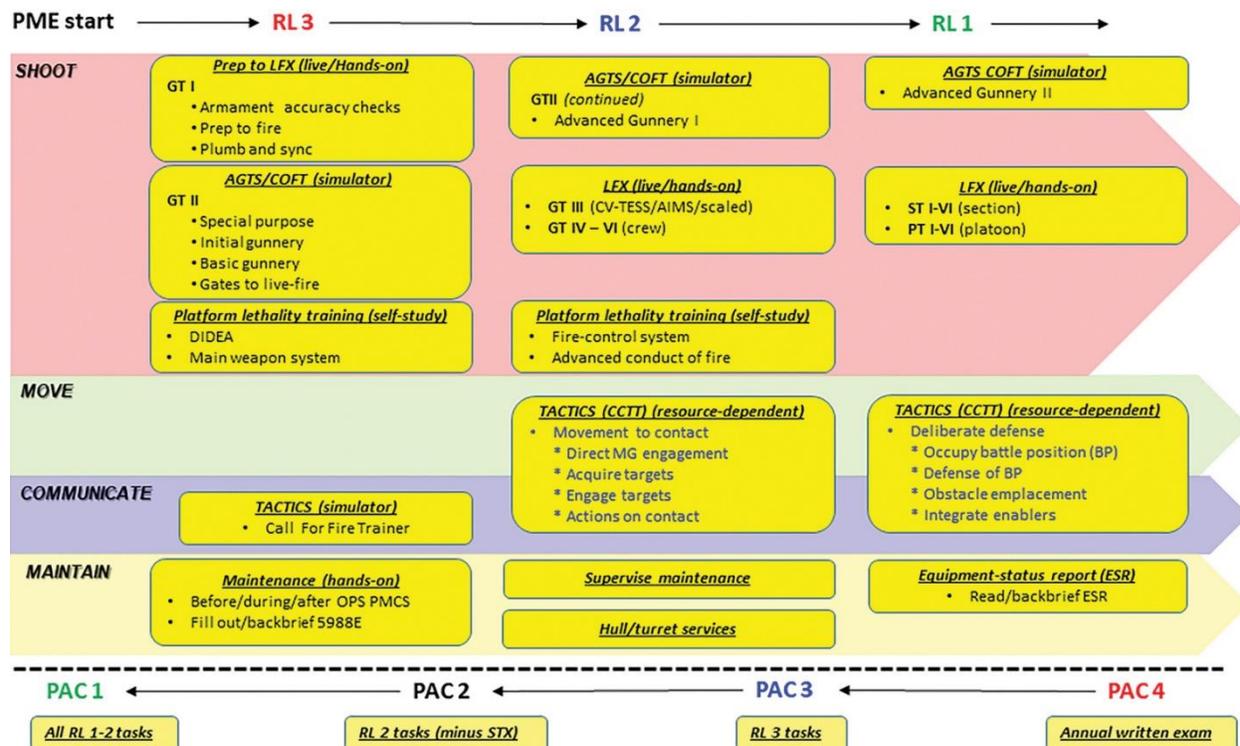


Figure 2. Potential Armor model.

Flight-activity categories shift to **platform**-activity categories (PACs) and align across the RLs by duty position. An individual crewmember's access to resources required to maintain and advance along RL categories is assignment-dependent and accounted for by the PAC in the Armor model. Each duty position is tied to an RL category. PACs 1 and 2 denoted in Figure 2 focus on battalion and below, with PAC 3 focused at brigade and PAC 4 above brigade, including broadening assignments.

Regardless of what job a 19-series Soldier holds throughout his career, self-study becomes an individual requirement of professional development and demonstration of expertise over time to counter the loss of perishable skills.

The addition of skill categories is where we depart from the aviation model. These categories represent the skillsets required of a ground-maneuver crewmember. RL progression tasks for the Armor model are arrayed across the four fundamentals of mounted maneuver: shoot, move, communicate and maintain.

Shoot. This category is solely focused on ensuring platform lethality and is predominately focused on the execution of the gates to live-fire and on sustained readiness requirements according to Training Circular 3-20.0, **Integrated Weapons Training Strategy (IWTS)**, dated June 2019. Several preparatory tasks not specified in the strategy are codified in this category to set conditions for successful execution of IWTS. Trend analysis suggests that these tasks are not well practiced, take crews on average longer to complete than prescribed by doctrine and are perishable skills.

Finally, specific technical training is included as a requirement nested with the gates to live-fire that support the proper employment of both the platform and associated weapon systems.

Move. This category is focused on maneuver tactics and doctrine. Constrained to not exceed section-level employment of platforms, tasks in this category are codified by collective tasks and associated battle drills that are fundamental to the Armored Force at the tactical level of platform employment. Collective tasks are cross-walked to associated subtasks and the individual tasks that support them.

The terminal learning objectives for these tasks are focused on the vehicle commander's and crew's ability to plan for and employ their platform nested within higher mission and intent. Focus for assessments in this category

shifts away from lethality to troop-leading procedures and demonstrated ability to fight one's assigned platform. Training and assessment can be resourced and executed either virtually through the Close Combat Tactical Trainer (CCTT) or hands-on, depending on resource constraints.

Communicate. This category assesses a vehicle commander's and crew's ability to communicate from their fighting platform, conduct adjacent unit coordination and employ enablers as part of a combined-arms team. Tasks in this category support collective tasks in the **Move** category and are sequentially trained and assessed to enable the gated strategy inherent in the RL-progression model. Training and assessment can be resourced and executed either virtually through simulation or hands-on, depending on resource constraints.

Maintain. Tasks in this category enable all other required tasks. Trend analysis demonstrates a lack of operator familiarity with both maintenance tasks at requisite skill level(s) and processes, specifically with fire-control-system troubleshooting and fault identification. Tasks include application of sustainment systems, tools and processes.

Operator/crew field maintenance tasks are assessed to the **Apply** level while higher field-maintenance tasks are assessed at the **Remember** and **Understand** levels as defined by Bloom's taxonomy (Figure 3). Intent for familiarization of higher field-maintenance tasks is like **Move** tasks in that understanding how to maintain one's assigned platform in the context of higher sustainment systems enables crew-level maintenance tasks.

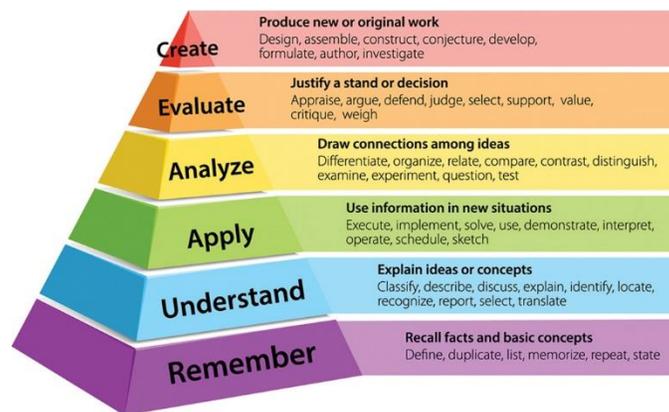


Figure 3. Bloom's taxonomy.

Efficiencies gained: Sustainable Readiness Model

One of the problems this strategy seeks to solve is the disparity in training regimens. While good standards exist in doctrine, they are not universally followed. From inadequate master-gunner manning at company and battalion levels, to changing operational-tempo requirements and to differences in how units interpret existing training standards, the current system has not produced the expertise needed to maintain high levels of readiness. Also, as opposed to the Army Forces Generation model, the loss of trained personnel and influx of new personnel for permanent-change-of-station cycles during unit rotational-training progressions creates gaps in knowledge and training, requiring more training for units.

Most commonly, this can be seen with sustainment gunneries conducted prior to CTC or regionally aligned forces missions to account for the changeover in personnel. These additional requirements place an unnecessary burden on units as they prepare to deploy and often conflict with fleet-maintenance needs necessary for OR requirements before a deployment. Going forward, this strategy seeks to provide a solution for units that modifies requirements, enforces existing standards and operates in tandem with Sustainable Readiness Model (SRM) manning functions.

RL progression is intended to minimize both time and population of individual crewmembers who require certification on individual tasks and who are immediately prepared to conduct collective training. In context of the SRM, RL progression will maximize commanders' situational awareness on the training and readiness level of each Soldier in their unit, enabling prioritization of people, resources and training time required to meet unit readiness levels C4 to C2. This manifests in giving collective training time back to the unit.

With the RL progression program constantly operating in the backdrop of day-to-day activities, Soldiers complete individual certification/training and, most notably, individual certifications are codified and tracked for each Soldier via a Digital Job Book. This produces flexibility for outside collective training/certification events. Commanders certify training of their units and manage risk. RL progression will assist them in doing both.

For example:

- Better informs commanders of individual crewmember certifications across the gates to live-fire according to ITWS. This in turn allows commanders to make informed decisions in managing risk when addressing turbulent crews.
- Will reduce the population of crews requiring sustainment gunnery.
- Supports leader-development programs by ensuring Soldiers are certified on foundational tasks and are prepared to execute collective training.
- Minimizes time and tasks for newly arrived Soldiers to integrate into collective training as they arrive with a codified RL level from their last duty station.
- Sets conditions for a master-gunner mentorship program at the unit level that can assist in identifying candidates who have an aptitude and higher potential for the master-gunner glidepath.

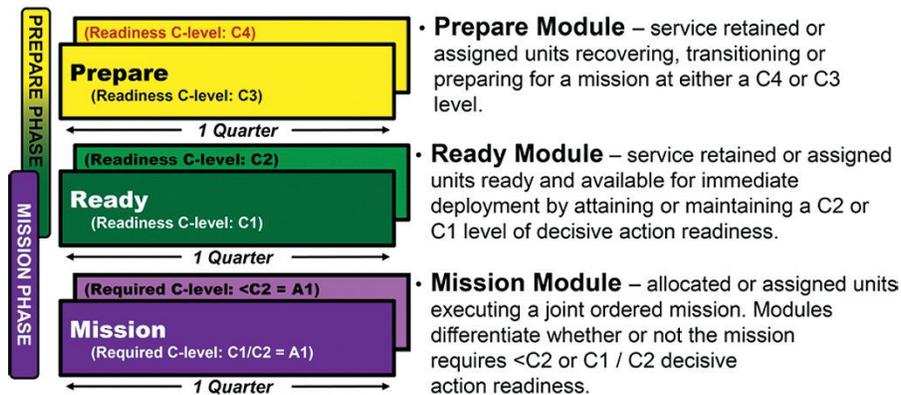


Figure 4. SRMs from Army Regulation 525-29, *Force Generation – Sustainable Readiness*. (Adapted from Figure 4-1)

The pilot: Maneuver Center of Excellence and III Corps

The pilot is underway as of Aug. 1, 2022, with the first written exams released to more than 100 Armor Soldiers from across the Maneuver Center of Excellence. Data gathered from this initial pilot will feed refinement of deliverables for the III Corps pilot scheduled for the third quarter of Fiscal Year 2023. Feedback is both warranted and needed from across the force, so don't wait for implementation to be part of the discussion.

LTC Dan Cannon commands 3-16 Cavalry Squadron at Fort Benning, GA. Previous assignments include instructor, Joint Combined Warfighting School, National Defense University, Norfolk, VA; executive officer, 3rd Cavalry Regiment, Fort Hood, TX; observer/coach/trainer (O/C/T), Cobra Team "Best in the Desert," National Training Center, Fort Irwin, CA; commander/writer/instructor, Armor Basic Officer Leader's Course, Fort Knox, KY; and combined-arms company commander, Company C, 1-64 Armor Battalion, Fort Stewart, GA. His military education includes Joint Combined Warfighting School, Air Command and Staff College and Joint Firepower Control Course. LTC Cannon holds a bachelor's of arts degree in psychology from The Military College of South Carolina (The Citadel) and a master's of arts degree in military operational art and science from Air University. His awards and honors include the Bronze Star Medal with Valor Device, Bronze Star with four oak-leaf clusters (OLCs), Defense Meritorious Service Medal with two OLCs and Meritorious Service Medal with three OLCs.

The 3-16 Cavalry Squadron is home to all U.S. Army Armor School functional training courses, including Master Gunner Common Core; all platform master-gunner courses for Abrams, Bradley and Stryker; Maneuver Leader Maintenance Course; Scout Leader's Course; Cavalry Leader's Course; operational new-equipment training for Stryker and Abrams; and field-maintenance new-equipment training for Bradley and Abrams.

LTC John Nimmons is chief of tactics at the Maneuver Captain's Career Course (MCCC), Fort Benning, GA. Previous assignments include chief of the Commandant's Initiative Group, Headquarters U.S. Army Armor School, where he worked on initial concept development for the Armor Standardization and Training Development Strategy; brigade executive officer, 3rd ABCT, 1st Armored Division, Fort Bliss, TX; squadron S-3, 2nd Squadron, 13th U.S. Cavalry, 3rd ABCT, 1st Armored Division, Fort Bliss; division G-5 Plans officer, 1st Armored Division, Fort Bliss; small-group leader, MCCC, Fort Benning; company/team O/C/T at Joint Multinational Readiness Center, Hohenfels, Germany, with the Warthog Team; commander, Headquarters and Headquarters Troop, 1st Squadron, 9th U.S. Cavalry, 4th ABCT, 1st Cavalry Division, Fort Hood, TX, during Operation Iraqi Freedom (OIF); troop commander, 1st Squadron, 9th Cavalry, 4th ABCT, 1st Cavalry Division, Fort Hood (OIF); and tank-platoon leader and troop executive officer, 3rd Squadron, 3rd Armored Cavalry Regiment, Fort Hood (OIF). LTC Nimmons' military schools include Armor Basic Officer Course, Airborne School, MCCC, Cavalry Leader's Course, Command and General Staff College and School of Advanced Military Studies (SAMS). He holds a bachelor's of arts degree in history from Presbyterian College, a master's in business administration and project management from Norwich University and a master's in military operations from SAMS. His awards and honors include two Bronze Star Medals, Project Warrior Fellowship, Order of St. George bronze medallion and Order of the Iron Pen.

Acronym Quick-Scan

ABCT – armored brigade combat team

AGTS – Advanced Gunnery Training System

BATS – Bradley Advanced Training System

BDE – brigade

BN – battalion

BP – battle position

CCTT – Close Combat Tactical Trainer

COFT – Conduct-of-Fire Trainer

CTC – combat-training center

CV-TESS – Combat Vehicle Tactical Engagement Simulation System

DIDEA – detect, identify, decide, engage and assess

DIV – division

DOTMLPF-P – doctrine, organization, training, materiel, leadership and education, personnel and facilities

ESR – equipment-status report

FAC – flight-activity category

GT – gunnery table

GWOT – Global War on Terrorism

IWTS – Integrated Weapons Training Strategy

LFX – live-fire exercise

LSCO – large-scale combat operations

MCCC – Maneuver Captain's Career Course

METL – mission-essential task list

MG – master gunner

PAC – platform activity category

PMCS – preventive-maintenance checks and services

PME – professional military education

O/C/T – observer/coach/trainer

OIF – Operation Iraqi Freedom

OLC – oak-leaf cluster

OR – operational readiness

RL – readiness level

SAMS – School of Advanced Military Studies

SRM – Sustainable Readiness Model

STX – situational-training exercise