From the Boresight Line: Recommended Changes to the Squad/Section/Platoon Integrated Weapons Training Strategy Tables

by MAJ Gary M. Klein

The Army's recent Integrated Weapons Training Strategy (IWTS) has successfully standardized the nomenclature and the number of tables used to describe the live-fire training progression for armor, cavalry and infantry units at echelon. However, a number of questions remain:

- How are the six IWTS tables nested with the Army's "crawl-walk-run" training methodology, specifically its "dry-blank-live" live-fire training sequence?
- How does the Army define the terms situational-training exercise (STX) and field-training exercise (FTX)?
- Does the Army's use of the term FTX to describe the IWTS's squad/section/platoon Table IV contribute to shared understanding of the intent of that table?
- How does the Army prioritize external evaluations, combined-arms proficiency and organic lethality at the squad, section and platoon-level?

The Army must address these questions to clarify its priorities and reduce ambiguity in its current training strategy. IWTS has made it easier for leaders to understand and compare different armor, cavalry and infantry units' training progression, but the Army must ensure it is describing its tables in a way that creates shared understanding of the intent for each IWTS table and prioritizes building lethality at echelon.

Nesting platoon IWTS

Crawl-walk-run is the cornerstone of the Army Training Methodology, and the Army's live-fire doctrine generally follows this progression.[1] Two well-established examples exist within infantry live-fire and armored/mounted gunnery training. Infantry live-fire training generally follows a sequential dry-blank-live, live-fire progression at echelon, while armored/mounted crew qualification tables include a dry-fire table followed by progressively more challenging live-fire tables.[2] Interestingly, the Army's most recent IWTS seemed to move away from a crawl-walk-run and dry-blank-live progression at the squad/section/platoon-level.

The most recent armored/mounted section and platoon qualification tables included a three-step live-fire progression, but current IWTS qualification tables do not include a similar progression. The Army's heavy brigade combat team gunnery-qualification tables progressed from a blank Multiple Integrated Laser Engagement System "proficiency" table (Tables VII and X) to an Abrams sub-caliber or Bradley full-caliber "practice" table (Table VIII or XI) and finally a full-caliber qualification table (Table IX or XII).[3]

Current IWTS tables (Table 1 and Table 2's "current description" column, below) progress from an internally evaluated STX (Table III) to an externally evaluated (exeval) FTX (Table IV) to a fire-coordination exercise (Table V) – integrating direct, indirect, attack aviation and other warfighting functions – and finally, a live-fire proficiency gate exeval (Table VI).[4] The IWTS tables seem to focus more on progressing from internal to external evaluations and the integration of combined arms rather than progressive repetitions of direct-fire training (Tables 2 and 3).

*(**Editor's note:** Tables within the body of this article are denoted by Arabic numerals. Training/gunnery tables are denoted by Roman numerals.)*

Commanders must develop unit training plans that progressively integrate combined arms and exevals, but collective live-fire training at the squad, section and platoon-level should focus on synchronizing safe and lethal direct fires. Squads, sections and platoons are the fundamental building blocks that enable lethality, so these leaders must master the principles of direct fire control and direct fire control measures through repetition. Commanders can do this within the existing IWTS by developing dry-blank-live repetitions within each table (for example, platoon Table VI dry-fire live-fire exercise (LFX), Table VI practice LFX and Table VI qualification LFX), but this would create more requirements in an already high-operations-tempo training environment.

Echelon	Table I Prerequisite Crawl	Table II Prerequisite Crawl	Table III Prerequisite Walk	Table IV Collective task proficiency Run	Table V Coordination / rehearsal / practice Run	Table VI Live-fire proficiency gate Run
Battalion	TEWT *Live*	STAFFEX *Blended*	CPX *Live*	FTX *TADSS*	FCX *Blended*	CALFEX *Live-fire*
Company	TEWT *Live*	STX-V *Virtual*	STX *TADSS*	FTX *TADSS*	FCX *Live-fire*	CALFEX *Live-fire*
Platoon Section Squad	Class SOP *Live*	STX-V *Virtual*	STX *TADSS*	FTX *TADSS*	FCX *Live-fire*	LFX *Live-fire*
Mortar formation Crew platform	GST *Live*	STX-V *Virtual*	STX *TADSS*	FTX *TADSS* Basic *Live-fire*	Practice *Live-fire*	Qualification *Live-fire*
Special-purpose weapons Crew-served weapons Individual weapons	PMI&E *Live*	PLFS *Virtual*	Drills *TADSS*	Basic *Live-fire*	Practice *Live-fire*	Qualification *Live-fire*

Table 1. IWTS as summarized in Table 1-1 from Training Circular (TC) 3-20.0.[5]

	Platoon Qualification Tables	
	Current description	Proposed description
Table III	"[L]ive environment, hands-on training event [using] training aids and devices (laser-based devices), and includes the use of blank ammunition, pyrotechnics and battle-effects simulators. Training and evaluation of the element is the responsibility of their platoon sergeant and platoon leader."	"[L]ive environment, hands-on training event [using] training aids and devices (laser-based devices), and includes the use of blank ammunition, pyrotechnics and battle-effects simulators. Commanders determine if the training and evaluation of the element is done by the platoon, company or exeval."
Table IV	"[L]ive-environment training event where platoons conduct an externally evaluated FTX. The exeval [uses] the training and evaluation outlines. … The training scenarios use blank ammunition, pyrotechnics and battle-effects simulators, as well as an appropriately trained and equipped opposing force."	"[L]ive-environment training event where platoons conduct a dry-fire specifically geared toward preparing for the upcoming live-fire exercise (Table VI). Commanders determine whether this training is full-force or reduced-force, and whether this training event is on the same, similar or dissimilar terrain as Table VI. The training scenario does not require any ammunition or the integration of indirect fire, attack aviation or other warfighting functions, but the commander can elect to add those elements."
Table V	"[L]ive-fire event that trains commanders and key leaders in planning and integrating direct fires, indirect fires, attack aviation, close air support and other warfighting functions, to support maneuver. It may be a reduced-force exercise. … Full-caliber munitions may be substituted with sub-caliber ammunition and devices."	"[L]ive-fire training event where platoons conduct a practice live-fire/full-dress rehearsal specifically geared toward preparing for the upcoming live-fire exercise (Table VI). Commanders determine whether this training event is on the same, similar or dissimilar terrain as Table VI. The training scenario includes the use of live ammunition, pyrotechnics and battle-effects simulators. Similar to Table IV, commanders may elect to integrate indirect fire, attack aviation or other warfighting functions."

Table VI	"[A]n externally evaluated live-fire event that measures a unit's proficiency in executing a series of supporting collective tasks. … Table VI uses full-caliber training ammunition on an authorized live-fire facility or safety-certified training area. Table VI is the platoon's externally evaluated live-fire proficiency gate."	"[A]n externally evaluated live-fire event that measures a unit's proficiency in executing a series of supporting collective tasks. … Table VI uses full-caliber training ammunition on an authorized live-fire facility or safety-certified training area. Table VI is the platoon's externally evaluated live-fire proficiency gate."

Table 2. Left/current description: The current description of the IWTS platoon qualification tables. The red text highlights the key aspects of each table.[6] Right/proposed description: The proposed IWTS platoon qualification tables. The red text highlights the changes suggested by the author.

Another way to create progressive repetitions is for the IWTS tables to progress from STX training (Table III) to a basic dry-fire table (Table IV) to a practice live-fire table (Table V) and finally a qualification live-fire table (Table VI) (Table 2, "proposed description" column below, and Table 3). This proposal does not prescribe how or when to integrate combined arms, nor does it remove exevals from STX or live-fire training at echelon. Rather, commanders should determine how to integrate combined arms and exevals into their unique unit training plans.

	Table I	Table II	Table III	Table IV	Table V	Table VI
Crew platform (current)	GST *Live*	STX-V *Virtual*	STX *TADSS*	Basic *Live-fire*	Practice *Live-fire*	Qualification *Live-fire*
Platoon (proposed)	Class SOP *Live*	STX-V *Virtual*	STX *TADSS*	Basic *Dry-fire*	Practice *Live-fire*	Qualification *Live-fire*
Platoon (current)	Class SOP *Live*	STX-V *Virtual*	STX *TADSS*	FTX *TADSS*	FCX *Live-fire*	LFX *Live-fire*

Table 3. The current crew (top row), current platoon (bottom row) and proposed (middle row) IWTS platoon qualification tables. The red text highlights the proposed changes to the IWTS tables.

Comparing the current squad/section/platoon IWTS tables to the proposed tables (Tables 2 and 3) reveals options to continue focusing on the standardization of integrating combined arms and exevals or to prioritize additional collective-level direct fire training. Given this option, the Army should standardize the expectation that squads, sections and platoons conduct more repetitions of collective direct-fire engagements to improve safety and lethality. This is particularly pertinent at the squad, section and platoon level since many of these leaders are maneuvering multiple vehicles or subunits for the first time. The emphasis on combined-arms integration is better suited at the company or battalion level where leaders have more experience to focus on synchronizing these different assets.

Platoon IWTS Table IV

The Army's existing squad/section/platoon-level IWTS tables include an FTX (Table IV), but does this term carry the same meaning across organizations? The Army's capstone training doctrine Army Doctrine Publication (ADP) 7-0, *Training*, does not use the terms or describe the FTX or STX. Field Manual (FM) 1-02.1, *Operational Terms*, spells out the FTX acronym, but it does not specifically define the FTX or STX.[7] FM 7-0, *Train to Win in a Complex World*, defines an STX as "a mission-related, limited exercise. This short, scenario-driven exercise trains a group of related tasks or battle drills through practice. An STX usually contains multiple collective tasks linked to form a realistic scenario of a military operation, sometimes incorporating free play."[8]

Spelling out the FTX acronym as a field-training exercise leads us no closer to the Army's intent of the IWTS Table IV, so we must read the in-depth description of this table in the IWTS manual. Unfortunately, after reading and comparing the in-depth descriptions of Table III (STX) and IV (FTX) (Table 2), readers might be left with the impression that the only difference between the STX and the FTX is that the FTX includes external evaluators. If this is the intent, then the Army might be better off changing the titles of Tables III and IV from "STX, training aids, devices, simulations and simulators" (TADSS) and "FTX, TADSS" to "STX, TADSS" and "STX, TADSS, exeval." However, instead of this minor update, the Army should retitle and redefine Tables IV and V so that Table IV is a "crawl" basic dry-fire table and Table V is a "walk" practice live-fire table (Tables 2 and 3), thereby increasing repetitions to increase lethality in its Table VI "run" qualification live-fire table.[9]

Defining STX and FTX

To reiterate, Army doctrine does not specifically define an FTX, which is problematic when doctrine uses the term FTX to describe IWTS Table IVs. The Army's unique language of terms and acronyms enables efficient and effective communication, but in this case, the lack of a definition hinders communication. To enable future communication, the author proposes that doctrine define an FTX as "a training event in which a unit deploys to and operates out of the field over a period of time to conduct training, often including a series of STX or LFX training iterations or lanes."

For example, a battalion FTX is a training event where a battalion deploys to the field to enable itself and its subordinate units to cycle through various STX and LFX training lanes. Also, although current doctrine does not make this distinction, one of the easiest ways to distinguish between a STX and a LFX is that a STX often includes some form of live force-on-force, including an opposing force (opfor) and roleplayers, whereas a LFX uses some form of targetry.

Conclusion

The Army should update its squad/section/platoon IWTS tables to prioritize a crawl-walk-run progression from a basic dry-fire to a practice live-fire table and, finally, a qualification live-fire table. This progression would enable the safe transition from individual and crew qualifications to small-unit collective live-fires where leaders must control subordinate elements for the first time while simultaneously increasing lethality through repetition. The Army must build combined-arms proficiency and seek objective exevals, but it should not do so at the expense of additional small-unit live-fire repetitions that will enhance small unit lethality.

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Notes

[1] Department of the Army, ADP 7-0, **Training**, Washington, DC: Government Printing Office, 2019.
[2] Department of the Army, TC 7-9, **Infantry Live-Fire Training**, Washington, DC: Government Printing Office, 1993; Department of the Army, FM 3-20.21, **Heavy Brigade Combat Team (HBCT) Gunnery**, Washington, DC: Government Printing Office, 2009; Department of the Army, TC 3-20.0, **Integrated Weapons Training Strategy (IWTS)**, Washington, DC: Government Printing Office, 2019.
[3] FM-20.21, Chapter 18.
[4] TC 3-20.0, Chapters 8-10.
[5] Ibid.
[6] Ibid.
[7] ADP 7-0; Department of the Army, FM 1-02.1, **Operational Terms**, Washington, DC: Government Printing Office, 2019.
[8] Department of the Army, FM 7-0, **Train to Win in a Complex World**, Washington, DC: Government Printing Office, 2016.
[9] CPT Gary M. Klein, "Doctrine: Our Professional Language and Observations from the Joint Readiness Training Center," **ARMOR**, Spring 2015 edition.

Acronym Quick-Scan

ADP – Army doctrine publication
CALFEX – combined-arms live-fire exercise
CPX – command-post exercise
Exeval – externally evaluated
FCX – fire-coordination exercise

FM – field manual
FTX – field-training exercise
GST – gunnery-skills test
LFX – live-fire exercise
IWTS – Integrated Weapons Training Strategy
MCCC – Maneuver Captain's Career Course
PLFS – preliminary live-fire simulations
PMI&E – preliminary marksmanship instruction and evaluation
SOP – standard operating procedure
STAFFEX – staff exercise
STX – situational-training exercise
TADSS – training aids, devices, simulations and simulators
TC – training circular
TEWT – tactical exercise without troops
V – virtual (training environment)